Bioinformatics and Computational Biology: A Compendium of Research Publications from India (2002-2010)

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Published by:
BTIS Bioinformatics Centre
CSIR-Central Drug Research Institute
Lucknow
and
Department of Biotechnology
Ministry of Science and Technology, Govt. of India, New Delhi

FOREWORD
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FOREWORD
Chairman, Task Force

India has a distinguished tradition in computational biology and what we now describe as bioinformatics, thanks mainly to the efforts of G.N. Ramachandran and his colleagues in the fifties and the sixties of the last century. These efforts were carried forward by stalwarts like V. Sasisekaran, V.S.R. Rao, R. Srinivasan and C. Ramakrishnan. Subsequently the work in the area entered a trough primarily for two reasons. The area became highly computer intensive and Indians were denied access to state of the art computers on account of different sanctions. Secondly, the work in the area became increasingly dependent on experimental data, particularly on three-dimensional structures of proteins. India was yet to develop activity in such data generation and therefore the appropriate ambience was missing in the country. Both these problems eventually got solved. The rapid advance in computer technology meant that we had access to modern computers almost as much as anywhere else in the world. Furthermore, macromolecular crystallographic studies, which came of age in India in the nineties, led to the creation of an ambience in which experimentalists and bioinformaticists worked side by side. The availability of genome sequences added a new dimension to the computational efforts in biology. All these factors together led to the resurgence of computational biology and bioinformatics in the country, particularly fueled by the bioinformatics division of the Department of Biotechnology. The compendium of publications presented here represents this resurgence. Suman Malik, Debasisa Mohanty, K. Sekar, Ravishankar Ramachandran, Venkatesh Pratap and, indeed, Madhan Mohan have done a splendid job in producing this compendium.

M. Vijayan

FOREWORD

Director, CSIR-CDRI

Over the recent years, computational biology and bioinformatics have made a significant contribution in drug research. Though computational biology always played a significant role in drug development process, more and more in- silico studies are being carried out now in order to identify newer molecules and effective targets with the help of ever emerging bioinformatics tools and techniques. Modern biological research largely depends on the bioinformatics which has successfully been able to develop and implement very effective tools to manage and interpret the vast quantity of biological data that is being generated. Bioinformatics, started as a tool for supporting biological research, has developed into a fully recognised discipline where lots of original research work is in progress. There has been significant progress in the development of new algorithms and statistics to assess relationships among members of large data sets, such as methods to locate a gene within a sequence, predict protein structure and/or function, and cluster protein sequences into families of related sequences. Major research efforts in the field include sequence alignment, gene finding, genome assembly, drug design, drug discovery, protein structure alignment, protein structure prediction, prediction of gene expression and proteinprotein interactions, genome-wide association studies and the modelling of evolution.

Though bioinformatics started a bit late in India due to non-availability of high end computers as a result of scientific embargo of west, Indian scientists have made noteworthy contribution in this area. A large number of tools have been developed in Indian research institutions which are being used by larger biomedical, agricultural and other related researchers. Bioinformatics tools, software, databases etc. have been developed which may result into development of effective therapies for ailments including tropical diseases such as malaria, leishmaniasis , Filariasis etc

As in any other area, a regular evaluation of output of research efforts must be carried out in bioinformatics too. A stock taking of the output in the form of publication is required so as to assess whether the financial and manpower efforts made till date have been fruitful. I am happy that the Department of Biotechnology, which has been spearheading research work in bioinformatics through its BTIS programme, entrusted the compilation of Indian publications in this area to CSIR-CDRI. The compendium on research publications in computational biology and bioinformatics is the result of the work entrusted to CDRI's BTIS Centre. I hope that the publication will be useful to the researchers in this area as well as to the DBT for assessing the tangible output of its endeavour.

Dr T K Chakraborty
Director
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PREFACE

Adviser, DBT

PREFACE
Editor

It all started in the coordinators' annual meeting held in CSRTI, Mysore in 2008. During the inaugural session, Prof. M Vijayan, the Chairman of the Bioinformatics and Computational Biology Task Force, while delivering his key note address, lamented how bad we, in India, keep our records. Many times, even a great achievement remains wholly unnoticed as we do not make proper documentation of our work. Though, he was quite sure that Indian scientists had made remarkable contributions in terms of publication of research papers in the area, there was no comprehensive data that could corroborate the believe. Prof Vijayan informed how he had compiled a list of publications in this area from 2002-2007 and that list could possibly be the basis of his argument that India does not lag behind.

During the same meeting, while all the coordinators and delegates were in the Vrindavan Gardens waiting for the musical Fountain to start, Dr Madhan Mohan asked me if CDRI Centre could compile a list of all the publications from India in Bioinformatics and Computational Biology which I readily accepted.

The basic compilation had already been done by the Chairman, Prof Vijayan as referred above. What we did was to take that as a base and compile publications from all the BTIS Centres, COEs and BIFs that were presented during the annual meetings. Since the Proceedings of the coordinators meetings contained only selected publications, complete list of all the Centres were solicited.

While I compiled the list of publications of BTIS Centres from the lists provided by the coordinators, the publications from the non-BTIS institutions were collected from online resources such as Pubmed, web of Science, Scirus etc. I was advised by the Task Force Committee to collect the papers from the non-BTIS Centres directly instead of compiling from online databases. A letter from Dr Madhan Maohan was sent to the principal Investigators of all DBT funded projects. A large number of papers were received from many Investigators. Prof Vijayan suggested names of some prominent scientists who might not be having any funding from the DBT. A letter on behalf of Prof. Vijayan was sent to such identified scientists. Quite a few of them responded with their lists. In case of non receipt their publication lists were downloaded from internet.

The list was huge and on the very first look many non-bioinformatics papers could be seen. As decided by the Task Force, a group of four scientists, Drs D Mohanty, S Sekar, JV Pratap and R Ravishankar were requested to scan through the list to identify and delete all non-bioinformatics papers.

The major Criteria set by the committee were: A paper having at least fifty percent component of bioinformatics or computational biology could be included as a bioinformatics publication. Similarly the papers published in non-SCI journals were omitted out of the list.

The list that we are presenting in this compilation will possibly be the basis of a database that is planned to be uploaded on BTIS website. It will be in a searchable format. I am sure there are many papers which have not found place in this compilation. The major reason is the poor response that we got from the coordinators. Even those who sent the papers were not as per the criteria set up by the task Force. We invite response from everyone to make our compilation a comprehensive one. We will include all additions in the database and might as well publish an addendum to this publication.

I am extremely thankful to Prof. Vijayan and all the members of the task force for their encouragement. I am grateful to Dr Madhan Mohan for showing faith and confidence in me. My sincere salute and appreciation to the four scientists, Dr Mohanty, Dr Sekar, Dr Pratap and Dr Ravishankar for taking time out of their scientific responsibilities and for all the pains they took to carry out the work in a shortest possible time. I thankfully acknowledge the support of my colleagues in CDRI Knowledge Centre. I specifically thank my colleagues, Sahil, Anjali, Gunjan, Akansha, Ankita, Divya and Avantika for helping me out during the compilation. I am grateful to Kausar Saheb for everything. I would like to thank my Director, Dr T K Chakraborty for encouraging and supporting me to carry out the work.

Suman K Mallik
CSIR-CDRI, Lucknow

Content

2002

1. Bhattacharyya R, Pal D and Chakrabarti P. (**2002**) Secondary structures at polypeptide-chain termini and their features. **Acta Crystallographica: Section D-Biological Crystallography** D58, 1793-1802

2. Hussain ASZ, Shanthi V, Sheik SS, Jeyakanthan J, Selvarani P and Sekar K. (**2002**) PDB Goodies - a web-based GUI to manipulate the Protein Data Bank file. **Acta Crystallographica: Section D-Biological Crystallography** D58, 1385-1386

3. Pal D, Suhnel J and Weiss MS. (**2002**) New principles of protein structure: nests, eggs--and what next? **Angew Chem. Int. Ed** 41, 4663-4665

4. De S and Singh RK and Buchaiah G. (**2002**) MHC-DRB exon 2 allele polymorphism in Indian River buffalo (*Bubalus bubalis*). **Animal Genetics** 33, 215–219

5. Kirthi N, Shubha PM, Murthy MRN and Savithri HS. (**2002**) Evidence for recombination among the tomato leaf curl virus strains/species from Bangalore, India. **Archives of Virology** 147, 255-272

6. Kant S, Bagaria A and Ramakumar S. (**2002**) Putative homeodomain proteins identified in prokaryotes based on pattern and sequence similarity. **Biochemical & Biophysical Research Communications** 299, 229-232

7. Sehrawat S, Srinivasan N and Gopinathan KP. (**2002**) Functional characterization and structural modeling of late gene expression factor 4 from *Bombyx mori* nucleopolyhedrovirus. **Biochemical Journal** 368, 159-169

8. Chakravarty S, and Varadarajan R. (**2002**) Elucidation of factors responsible for enhanced thermal stability of proteins: a structural genomics based study. **Biochemistry** 41, 8152-61

9. Swaminathan GJ, Holloway DE, Veluraja K and Acharya KR. (**2002**) Atomic Resolution (0.98A) Structure of Eosinophil Derived Neurotoxin. **Biochemistry** 41, 3341-3352

10. Babu MM and Sankaran K. (**2002**) DOLOP - database of bacterial lipoproteins. **Bioinformatics** 18, 641-643

11. Bhalla US. (**2002**) The chemical organization of signaling interactions. **Bioinformatics** 18, 855-863

12. Issac B, Singh H, Kaur H and Raghava GPS. (**2002**) Locating probable genes using fourier transform. **Bioinformatics** 18, 196-197

13. Kaur H and Raghava GPS. (**2002**) BetaTPred: Prediction of Beta-turns in a protein using statistical algorithms. **Bioinformatics** 18, 498-499

14. Kaur H and Raghavan GPS. (**2002**) An Evaluation of Beta-Turn Prediction Methods. **Bioinformatics** 18, 1508-1514

15. Sakharkar MK, Kangueane P, Petrov DA, Kolaskar AS and Subbiah S. (**2002**) SEGE: A database on 'intron less/single exonic' genes from eukaryotes. **Bioinformatics** 18, 1266-1267

16. Sheik SS, Sundararajan P, Hussain ASZ and Sekar K. (**2002**) Ramachandran plot on the web. **Bioinformatics** 18, 1548-1549

17. Babu MA, Shakya N, Prathipati P, Kaskhedikar SG and Saxena AK. (**2002**)

Development of 3D-QSAR models for 5-Lipoxygenase antagonists: Chalcones. **Bioorganic & Medicinal Chemistry** 10, 4035-4041

18. Gupta, NK, Mishra, P, Prathipati, P and Saxena AK. (**2002**) 2D- QSAR in hydroxamis acid erivatives as peptide deformylase inhibitors and antibacterial agents. **Bioorganic & Medicinal Chemistry** 10, 3713-3716

19. Kalate RN, Kulkarni BD and Nagaraja V. (**2002**) Analysis of DNA curvature distribution in mycobacterial promoters using theoretical models. **Biophysical Chemistry** 99, 77-97

20. Premraj BJ, Raja S and Yathindra N. (**2002**) Structural basis for the unusual properties of 2', 5' nucleic acids and their complexes with RNA and DNA. **Biophysical Chemistry** 95, 253-272

21. Bhalla US. (**2002**) Mechanisms for temporal tuning and filtering by postsynaptic signalling pathways. **Biophysical Journal** 83, 740-752

22. Mishra J and Bhalla US. (**2002**) Simulations of inositol phosphate metabolism and its interaction with InsP3 mediated calcium release. **Biophysical Journal** 83, 1298-1316

23. Pal D and Chakrabarti P. (**2002**) On residues in the disallowed region of the Ramachandran map. **Biopolymers** 63, 195-206

24. Vasudevan SV and Balaji PV. (**2002**) Molecular dynamics simulation of alpha2-8-linked disialoside: conformational flexibility and implications for binding to proteins. **Biopolymers** 63, 168-180

25. Issac B and Raghava GPS. (**2002**) GWFASTA: A server for FASTA search in Eukaryotic and Microbial genomes. **Biotechniques,** 33, 548-556

26. Cheema JJ, Sankpal NV, Tambe SS and Kulkarni BD. (**2002**) Genetic programming assisted stochastic optimization strategies for optimization of glucose to gluconic acid fermentation. **Biotechnol. Prog** 18, 1356-1365

27. Srivastava PK, Desai DK, Nandi S and Lynn AM. (**2002**) HMM-ModE - Improved classification using profile hidden Markov models by optimising the discrimination threshold and modifying emission probabilities with negative training sequences. **BMC Bioinformatics** 8, 104

28. Sharmila A, Pennathur G and Ramesh A. (**2002**) Tripeptide Analysis of Protein Structures. **BMC Structural Biology** 2, 9

29. Chakraborty A, Otta SK, Joseph B, Sanath KH, Shahadat H, Md Karunasagar I, Venugopal MN and Karunasagar I. (**2002**) Prevalence of white spot syndrome virus (WSSV) in wild crustaceans along the coast of India. **Current Science** 82, 1392-1397

30. Manivannan S, Otta SK, Karunasagar I and Karunasagar I. (**2002**) Multiple viral infections in *Penaeus monodon* shrimp postlarvae in an Indian hatchery. **DAO** 48, 233-236

31. Majumdar M, Bharadwaj A, Ghosh I, Ramachandran S and Datta K. (**2002**) Evidence for the presence of HABP1 pseudogene in multiple locations of mammalian genome. **DNA & Cell Biology** 21, 727-735

32. Ramalingam J, Basharat HS and Zhang G. (**2002**) STS and microsatellite marker-assisted selection for bacterial blight resistance and waxy genes in rice,

Oryza sativa L. **Euphytica** 127, 255-260

33. Chattopadhyay S, Kanner WA and Chakrabarti J. (**2002**) DNA nucleotides: A case study of evolution. **European Physical Journal** B 26, 393-398

34. Sanjeev BS and Vishveshwara S. (**2002**) Essential dynamics and side chain hydrogen bond cluster studies in eosinophil cationinc protein. **European Physical Journal** D20, 601-608

35. Babu MM, Kamalakkannan S, Subrahmanyam Y and Krishnan SK. (**2002**) *Shigella apyrase*, a novel variant of bacterial acid phosphatases. **FEBS Letters** 512, 8-12

36. Ramakrishnan M, Kenoth R, Kamlekar RK, Chandra MS, Radhakrishnan TP, Swamy MJ. (**2002**) N-Myristoylethanolamine-cholesterol (1:1) complex: first evidence from differential scanning calorimetry, fast-atom-bombardment mass spectrometry and computational modelling. **FEBS Letters** 531, 343-7

37. Suguna C and Somdatta S. (**2002**) Cellular Dynamics in Noisy Environment. **Fluctuation and Noise Letters** 2, L313-326

38. D'Onofrio G, Ghosh TC and Bernardi G. (**2002**) The base composition of the human genes is correlated with the secondary structures of the encoded proteins. **Gene** 300, 179-187

39. Krupa A and Srinivasan N. (**2002**) Repertoire of protein kinases encoded in the draft version of the human genome: Atypical variations and uncommon domain combinations. **Genome Biology** 3(12)

40. Bai J, Pennill LA, Ning J, Lee SW, Ramalingam J, Webb CR, Zhao B, Sun Q, Nelson JC, Leach JE and Hulbert SH. (**2002**) Diversity in *Nucleotide* Binding Site-Leucine-Rich Repeat Genes in Cereals. **Genome Research** 12, 1871-1884

41. Roy PK, Kozman R and Majumder DD. (**2002**) Neurocomputation model and algorithm for phase transition and instability. **IEEE Trans. Evol. Comput** 5, 1-14

42. Gupta SK, Bhattacharyya TK and Ghosh TC. (**2002**) Compositional correlation and codon usagestudies in *Buchnera aphidicola*. **Indian Journal of Biochemistry & Biophysics** 39, 35-48

43. Vasanthi G and Krishnaswamy S. (**2002**) Dipole moment analysis of membrane proteins suggests role in orientation in the membrane. **Indian Journal of Biochemistry & Biophysics** 39, 93-100

44. Vasudevan SV and Balaji PV. (**2002**) Conformation, orientation and dynamics of dodecylphosphocholine in micellar aggregate: a 3.2 ns molecular dynamics simulation study. **Indian Journal of Biochemistry & Biophysics** 39, 87-92

45. Tyagi JS and Sharma D. (**2002**) Genomic study of *Mycobacterium tuberculosis* and its clinical applications. **Indian Journal of Pediatrics** 69, S29-S38

46. Chakravarty S, Bhinge A, and Varadarajan R. (**2002**) A procedure for detection and quantitation of cavity volumes proteins. Application to measure the strength of the hydrophobic driving force in protein folding. **Journal of Biological Chemistry** 277, 31345-53

47. Joshi RR and Bhuvaneswaran N. (**2002**) Prediction and Analysis of Vaccination Possibilities in Autoimmune Diseases – An Application of Artificial Immune

System. **Journal of Biological Systems** 10, 107-126

48. Bandyopadhyay D and Bhattacharyya D. (**2002**) Effect of flanking residues on CA and AA dinucleotides: Some rationale. **Journal of Biomolecular Structure and Dynamics** 19, 659-667

49. Roy D and Mukhopadhyay C. (**2002**) Molecular Dynamics Simulation of GM1 in Phospholipid Bilayer. **Journal of Biomolecular Structure and Dynamics** 19, 1121-1132

50. Aggarwal G and Ramaswamy R. (**2002**) *Ab initio* gene identification: prokaryote genome annotation with GeneScan and GLIMMER. **Journal of Biosciences** 27(1 Suppl 1):7-14

51. Chaudhuri P and Das S. (**2002**) SWORDS: a statistical tool for analysing large DNA sequences. **Journal of Biosciences** 27, 1-6

52. Nandi T, Rao C and Ramachandran S. (**2002**) Comparative genomics using data mining tools. **Journal of Biosciences** 27, 15-25

53. Shenoy AR, Srinivasan N and Visweswariah SS. (**2002**) The ascent of *nucleotide* cyclases: conservation and evolution of a theme. **Journal of Biosciences** 27, 85-91

54. Modak JM, Bandopadhyay K, Das D and Maiti BR. (**2002**) Mathematical model for evaluation of mass transfer limitations in phenol biodegradation by immobilized *Pseudomonas putida*. **Journal of Biotechnology** 87, 211-223

55. Soma Das, Sen A, Uma G, Varghese V, Chaudhuri S, Bhattacharya SK, Krishnan T, Dutta P, Dutta D, Bhattacharya MK, Mitra U, Kobayashi N and Naik TN. (**2002**) Genomic diversity of Group A rotavirus strains infecting humans in Eastern India. **Journal of Clinical Microbiology** 40, 146-149

56. Jayaram B, Mcconnell K, Dixit SB and Beveridge DL. (**2002**) Free energy componenet analysis of 40 protein-DNA complexes: A consensus view on the thermodynamics of binding at the molecular level. **Journal of Computational Chemistry** 23, 1-14

57. Bhalla US. (**2002**) Temporal pattern decoding by synaptic signaling pathways. **Journal of Computational Neuroscience** 13, 49-62

58. Bhattacharya S, Bakre A and Bhattacharya A. (**2002**) Mobile genetic elements in protozoan parasites. **Journal of Genetics** 81, 73-86

59. Nair DT, Singh K, Siddiqui Z, Nayak BP, Rao KVS and Salunke DM. (**2002**) Epitope Recognition by diverse antibodies suggests conformational convergence in an antibody response. **Journal of Immunology** 168, 2371-2382

60. Kamal A, Laxman N, Ramesh G, Ramulu P, Srinivas O, Neelima K, Kondapi AK, Sreenu VB and Nagarajaram HA. (**2002**) Design, synthesis, and evaluation of new non-cross linking pyrrolobenzodiazepine dimers with efficient DNA-binding ability and potent antitumour activity. **Journal of Medicinal Chemistry** 45, 4679-4688

61. Joshi RR and Jyothi S. (**2002**) *Ab-initio* Structure of Human Seminal Plasma Prostatic Inhibin gives Significant Insight into its Biological Functions. **Journal of Molecular Modeling** 8, 50-57

62. Sardana S and Madan AK. (**2002**) Predicting anti-HIV activity of TIBO

derivatives: a computational approach using a novel topological descriptor. **Journal of Molecular Modeling** 8, 258-65

63. Vishveshwara S, Brinda KV and Kannan N. (**2002**) Protein structure: Insights from graph theory. **Journal of Theoretical and Computational Chemistry** 1, 187-211

64. Sharma DC. (**2002**) Software forecasts tropical diseases. **Lancet Infectious Diseases** 2, 66

65. Bhalla US. (**2002**) Use of Kinetikit and GENESIS for modeling signaling pathways. **Methods in Enzymology** 345, 3-23

66. Nagaraju J, Kathirvel M, Subbaiah EV, Muthulakshmi M and Kumar LD. (**2002**) FISSR-PCR: a simple and sensitive assay for highthroughput genotyping and genetic mapping. **Molecular and Cellular Probes** 16, 67-72

67. Prasad MD, Nurminsky DL and Nagaraju J. (**2002**) Characterization and molecular phylogenetic analysis of mariner elements from wild and domesticated species of silkmoths. **Molecular Phylogenetics and Evolution** 25, 210-217

68. Kombo DC, Jayaram B, McConnell KJ, and Beveridge DL. (**2002**) Calculation of the affinity of the λ repressor-operator complex based on free energy component analysis. **Molecular Simulations** 28, 187-211

69. Kanagavalli J, Subbaiah RK, Eswari P, Krishnaswamy S and Periasamy S. (**2002**) Evaluation and understanding of myocilin mutations in Indian primary open angle glaucoma patients. **Molecular Vision** 9, 606-614

70. Mukhopadhyay A, Gupta A, Mukherjee S, Chaudhuri K and Ray K. (**2002**) Did myocilin evolve from two different primordial proteins?. **Molecular Vision** 8, 271-279

71. Kissinger JC, Brunk B, Crabtree J, Fraunholz M, Gajria B, Milgram AJ, Pearson DS, Schug J, Bahl A, Diskin SJ, Ginsburg H, Grant GR, Gupta D, Labo P, Li L, Mailman MD, McWeeney SK, Whetzel P, Stoeckert Cj Jr. and Roos DS. (**2002**) The *Plasmodium* genome database. Designing and mining a eukaryotic genomic resource. **Nature** 419, 490-492

72. Bhaumik B and Garg AR. (**2002**) Direction-selective simple cells in cat striate cortex: a developmental mode. **Neural Network** 1, 778 –783

73. Bahl A, Brunk B, Coppel RL, Crabtree J, Diskin SJ, Fraunholz MJ, Grant GR, Gupta D, Huestis RL, Kissinger JC, Labo P, Li L, McWeeney SK, Milgram AJ, Roos DS, Schug J and Stoeckert CJ Jr. (**2002**) PlasmoDB: the *Plasmodium* genome resource. An integrated database providing tools for accessing, analyzing and mapping expression and sequence data (both finished and unfinished). **Nucleic Acids Research** 30, 87-90

74. Mallika V, Bhaduri A and Sowdhamini R. (**2002**) PASS2: A semi-automated database of protein alignments organised as structural superfamilies. **Nucleic Acids Research** 30, 284-280

75. Pandit SB, Gosar D, Abhiman S, Sujatha S, Dixit SS, Mhatre NS, Sowdhamini R and Srinivasan N. (**2002**) SUPFAM - A database of potential protein superfamily relationships derived by comparing sequence-based and structure-based families: Implications for structural genomics and function annotation in genomes. **Nucleic Acids Research** 30, 289-293

76. Unniraman S, Prakash R and Nagaraja V. (**2002**) Conserved economics of transcription terminators in eubacteria. **Nucleic Acids Research** 30, 675-684

77. Kamala CR, Ayappa KG and Yashonath S. (**2002**) Mutual diffusion in a binary Ar-Kr mixture confined within zeolite NaY. **Phys Rev E Stat Nonlin Soft Matter Phys** 65, 061202

78. Azad RK, Pernola-Galvan P, Ramaswamy R and Subba Rao J. (**2002**) Segmentation of Genomic DNA through entropic divergenceL Power laws and Scaling. **Physical Review** E65, 051909

79. Azad RK, Subba Rao J, Li W and Ramaswamy R. (**2002**) Simplifying the mosaic description of DNA sequence. **Physical Review** E66, 031913

80. Nita P and Somdatta S. (**2002**) Controlling Dynamics in Spatially Extended Systems. **Physical Review** 65, 0362271 – 0362279

81. Chen C, Presting G, Barbazuk WB, Goicoehea JL, Blackmon B, Fang G, Kim H, Frisch D, Yu Y, Higingbottom S, Phimphilai J, Phimphilai D, Thurmond S, Gaudette B, Li P, Lin J, Hartfield J, Main D, Sun S, Farrar K, Henderson C, Barnett L, Costa R, Williams B, Walser S, Atkins M, Hall C, Bancroft I, Salse J, Regad F, Mohpatra T, Singh NK, Tyagi AK, Soderlund C, Dean RA and Wing RA. (**2002**) An integrated physical and genetic map of the rice genome. **Plant Cell** 14, 537-545

82. Bhattacharyya R, Samanta U and Chakrabarti P. (**2002**) Aromatic-aromatic interactions in and around α-helices. **Protein Engineering, Design, and Selection** 15, 91-100

83. Brinda KV, Kannan N and Vishveshwara S. (**2002**) Analysis of homodimeric protein interfaces by graph spectral methods. **Protein Engineering, Design, and Selection** 15, 265-277

84. Gupta S, Pandit SB, Srinivasan N and Chatterji D . (**2002**) Proteomics analysis of carbon starved *Mycobacterium smegmatis*: Induction of DPS like protein. **Protein Engineering, Design, and Selection** 15, 503-511

85. Jain RR, Dani V, Mitra A, Srivastava S, Sarma SP, Varadarajan R and Ramakumar S. (**2002**) Structural consequences of replacement of an alpha-helical Pro residue in *Escherichia coli thioredoxin*. **Protein Engineering, Design, and Selection** 15, 627-633

86. Qamra R Taneja B and Mande SC. (**2002**) Identification of conserved residue patterns in small ß barrel proteins. **Protein Engineering, Design, and Selection** 15, 967- 977

87. Ramagopal UA, Ramakumar S, Mathur P, Joshi R and Chauhan VS. (**2002**) Dehydrophenylalanine zippers: strong helix-helix clamping through a network of weak interactions. **Protein Engineering, Design, and Selection** 15, 331-5

88. Ramakrishnan C, Dani VS and Ramasarma T. (**2002**) A conformational analysis of Walker motif A [GXXXXGKT (S)] in nucleotide-binding and other proteins. **Protein Engineering, Design, and Selection** 15, 783-98

89. Chakraborty S, Chakraborty N, Jain D, Salunke DM and Datta A. (**2002**) Active site geometry of oxalate decarboxylase from *Flammulina velutipes*: Role of histidine coordinated manganese in substrate recognition. **Protein Science** 11, 2138

90. Krupa A and Srinivasan N. (**2002**) Lipopolysaccharide phosphorylating enzymes encoded in the genomes of Gram-negative bacteria are related to the eukaryotic protein kinases. **Protein Science** 11, 1580-1584

91. Nagpal S, Kaur KJ, Jain D and Salunke DM. (**2002**) Plasticity in structure and interactions is critical for the action of indolicidin, an antibacterial peptide of innate immune origin. **Protein Science** 11, 2158-2167

92. Chakrabarti P and Janin J. (**2002**) Dissecting protein-protein recognition sites. **Proteins: Structure, Function and Bioinformatics** 47, 334-343

93. Pal L, Basu G and Chakrabarti P. (**2002**) Variants of 310-helices in proteins. **Proteins: Structure, Function and Bioinformatics** 48, 571-579

94. Tripathi AK, Verma SC, Ron EZ and TripathiP. (**2002**) Molecular characterization of a salt-tolerant bacterial community in the rice rhizosphere. **Research in Microbiology** 153, 579-584

95. Bhaduri A, Mallika V and Sowdhamini R. (**2002**) Genome Analysis of PASS2 a Semi Automated Database of Protein Alignments Organised as Structural Superfamilies. **Science World Journal** 2, 9-10

96. Murty USN. (**2002**) Database on Filariasis, (Websites of interest). **Trends in Parasitology** 18, 436

2003

97. Ghosh A and Bansal M. (**2003**) A glossary of DNA structures from A to Z. **Acta Crystallographica: Section D-Biological Crystallography** D59, 620-626

98. Sreenu VB, Ranjitkumar G, Swaminathan S, Priya S, Bose B, Pavan MN, Geetha T, Nagaraju J and Nagarajaram HA. (**2003**) MICAS, A fully automated web server for microsatellite extraction and analysis from prokaryote and viral genomic sequences. **Applied Bioinformatics** 2, 165-168

99. Badireenath K and Chandra NR. (**2003**) Determinants of histamine recognition: Implications for the design of antihistamines. **Biochemical & Biophysical Research Communications** 309, 425-431

100. Das AK, Mitra D, Harboe M, Nandi B, Harkness RE, Das D and Wiker HG. (**2003**) Predicted molecular structure of the mammalian cell entry protein Mce1A of *Mycobacterium tuberculosis*. **Biochemical & Biophysical Research Communications** 302, 442-447

101. Gupta SK and Ghosh TC. (**2003**) Reinvestigation on the causes of genomic GC variation between the orthologous genes of *Mycobacterium tuberculosis* and *Mycobacterium leprae*. **Biochemical & Biophysical Research Communications** 303, 65-68

102. Jha S, Karnani N, Lynn AM and Prasad R. (**2003**) Covalent modification of cysteine 193 impairs ATPase function of nucleotide-binding domain of a Candida drug efflux pump. **Biochemical & Biophysical Research Communications** 310, 869-875

103. Mishra S, Mazumdar PA, Dey J and Das AK. (**2003**) Molecular modeling of RecX reveals its mode of interaction with RecA. **Biochemical & Biophysical Research Communications** 312,615-622

104. Mondal S, Jaishankar, SP and Ramakumar S. (**2003**) Role of context in the relationship between form and function: structural plasticity of some PROSITE patterns. **Biochemical & Biophysical Research Communications** 305, 1078-1084

105. Roy D, Ghosh D and Gupta-Bhattacharya S. (**2003**) Homology modeling of allergenic cyclophilins: IgE-binding site and structural basis of cross-reactivity. **Biochemical & Biophysical Research Communications** 307, 422-429

106. Praseeda M, Pradeep KK, Krupa A, Sri Krishna S, Leena S, Rajeev Kumar R, Cheriyan J, Mayadevi M, Srinivasan N and Omkumar RV. (**2003**) Influence of a mutation in the ATP-binding region of Calcium/Calmodulin dependent protein kinase II on its interaction with peptide substrates. **Biochemical Journal** 378, 391-397

107. Rahaman A, Srinivasan N, Shamala N and Shaila MS. (**2003**) Fusion Core Complex of Peste des Petits Ruminants Virus is a Six-Helix Bundle Assembly. **Biochemistry** 42, 922-931

108. Bhasin M, Singh H and Raghava GPS. (**2003**) MHCBN: A comprehensive database of MHC binding and non-binding peptides. **Bioinformatics** 19, 665-666

109. Prasad T, Prathima MN & Chandra N. (**2003**) Detection of hydrogen-bond signature patterns in protein families. **Bioinformatics** 19, 167-168

110. Sheik SS, Sundararajan P, Shanthi V and Sekar K. (**2003**) CAP: Conformation Angles Package -Displaying the conformation angles of side chains in proteins. **Bioinformatics** 19, 1043-1044

111. Shevade SK and Keerthi SS. (**2003**) A simple and efficient algorithm for gene selection using sparse logistic regression. **Bioinformatics** 19, 2246-53

112. Singh H and Raghava GPS . (**2003**) ProPred1: Prediction of promiscuous MHC class-I binding sites. **Bioinformatics** 19, 1009-1014

113. Sivakumaran S, Hariharaputran S, Mishra J, Bhalla US. (**2003**) The Database of Quantitative Cellular Signaling: management and analysis of chemical kinetic models of signaling networks. **Bioinformatics** 19, 408-415

114. Subramanian S, Madgula VM, George R, Mishra RK, Pandit MW, Kumar CS, Singh L. (**2003**) Triplet repeats in human genome: distribution and their association with genes and other genomic regions. **Bioinformatics** 19, 549-552

115. Subramanian S, Mishra RK and Singh L. (**2003**) Genome-wide analysis of BKM sequences (GATA repeats): predominant association with sex chromosomes and potential role in higher order chromatin organization and function. **Bioinformatics** 19, 681-5

116. Vinayagam A, Shi J, Pugalenthi G, Meenakshi B, Blundell TL and Sowdhamini R. (**2003**) DDBASE2.0: updated domain database with improved identification of structural domains. **Bioinformatics** 19, 1760-4

117. Saxena AK, Ram S, Saxena, M Singh N, Prathipati P, Jain PC, Singh HK and Anand N. (**2003**) QSAR studies in substituted 1,2,3,4,6,7,12,12a-octahydro-pyrazinop[2',1':6,1]pyrido[3,4-b]indoles- A potent class of neuroleptics. **Bioorganic & Medicinal Chemistry** 11, 2085-2090

118. Yadav Arpita and Singh SK. (**2003**) Pharmacophoric Features of Nucleosidic HIV-1RT Inhibitors. **Bioorganic & Medicinal Chemistry** 11, 1801-1807

119. Kashaw SK, Rathi L, Mishra P and Saxena AK. (**2003**) Development of 3D-QSAR models in cyclic ureidobenzenesulfonamides: human beta3-adrenergic receptor agonist. **Bioorganic & Medicinal Chemistry Letters** 13, 2481-2484

120. Brinda KV and Vishveshwara S. (**2003**) A Network Representation of Protein Structures: Implications for Protein Stability. **Biophysical Journal** 89, 4159-4170

121. Madhumalar A. and Bansal M. (**2003**) Structural insights into effect of hydration and ions on Atract DNA – A molecular Dynamics Study. **Biophysical Journal** 85, 1805-1816

122. Vengadesan K and Gautham N. (**2003**) Enhanced sampling of the molecular potential energy surface using mutually orthogonal Latin squares: application to peptide structures. **Biophysical Journal** 84, 2897-2906

123. Mohanraja K, Dhanasekaran M, Kundu B and Durani S. (**2003**) Mechanism-based protein design: attempted "nucleation-condensation" approach to a possible minimal helix-bundle protein. **Biopolymers** 70, 355-363

124. Phadwal K and Singh PK. (**2003**) Effect of nutrient depletion on beta-carotene and glycerol accumulation in two strains of Dunaliella sp. **Bioresource Technology** 90, 55-8

125. Deb K and Raji Reddy A. (**2003**) Reliable classification of two-class cancer data using evolutionary algorithms. **Biosystems** 72, 111-29

126. Sureshkumar SV, Phale PS, Durani S & Wangikar PP. (**2003**) Combined sequence and structure analysis of the fungal laccase family. **Biotechnology and Bioengineering** 83, 386-394

127. Raghava GPS, Searle SM, Audley PC, Barber JD and Barton GJ. (**2003**) OXBench: Evaluation of protein multiple sequence alignment. **BMC Bioinformatics** 4, 47

128. Rekha N and Srinivasan N. (**2003**) Structural basis of regulation and substrate specificity of protein kinase CK2 deduced from the modeling of protein-protein interactions. **BMC Structure Biology** 3, 4

129. Chattopadhyay S, SahooS, Kanner, WA and Chakrabarti J. (**2003**) Pressures in Archaeal Protein Coding Genes: A Comparative Study. **Comparative and Functional Genomics** 4, 56-65

130. Shenoy A, Sivakumar K, Krupa A, Srinivasan N and Visweswariah SS. (**2003**) A survey of *nucleotide* cyclases in Actinobacteria: unique domain organization and expansion of the class III cyclase family in *Mycobacterium tuberculosis*. **Comparative and Functional Genomics** 5, 17-38

131. Subramanian S, Madugula VM, George R, Satishkumar, Pandit MW and Singh L. (**2003**) SSRD: simple sequence repeat database for human genome. **Comparative and Functional Genomics** 4, 342-345

132. Joshi RR and Jyothi S. (**2003**) *Ab-initio* Prediction and Reliability of Protein Structural Genomics by PROPAINOR. **Computational Biology and Chemistry** 27, 241-252

133. Kalate RN, Tambe SS and Kulkarni BD. (**2003**) Artificial neural networks for prediction of mycobacterial promoter

sequences. **Computational Biology and Chemistry** 27, 555-564

134. Dutt, DN, Krishnan, SM. and Srinivasan N. (**2003**) A dynamic nonlinear time domain model for reconstruction and compression of cardiovascular signals with application to telemedicine. **Computers in Biology and Medicine** 33, 45-63

135. Kumar H, Malhotra D, Goswami S and Bamezai RN. (**2003**) How far have we reached in tuberculosis vaccine development. **Critical Reviews in Microbiology** 29, 297-312

136. Ishu S, Vijay VG, Soma D, Sekar K. and Guru TNR. (**2003**) C-halogen...pi Interactions in Proteins: A Database Study. **Crystal Engineering** 6, 69-77

137. Bansal M. (**2003**) DNA structure: Revisiting the Watson-Crick double helix. **Current Science** 85, 1556-1563

138. Chavan V and Krishnan S. (**2003**) Natural history collections: a call for national information infrastructure. **Current Science** 84, 34-42

139. Chavan V,Watve AV and Krishnan S. (**2003**) Electronic catalogue of known Indian fauna. **Current Science** 85, 1515

140. Dhanashree B, Otta SK and Karunasagar I and Karunasagar I. (**2003**) Protein profile analysis of *Listeria monocytogenes* strains from tropics. **Current Science** 84, 628-630

141. Shabaana AK, Shanker Narayan NP and Dharmalingam K. (**2003**) M leprae 18-kDa Heat shock protein gene is polymorphic. **Current Science** 84, 64-70

142. Purohit HJ, Raje DV, Kapley A, Padmanabhan P and Singh RN. (**2003**) Genomics tools in environmental impact assessment. **Environmental Science & Technology** 37, 356A-363A

143. Shukla S, Saini P, Smriti, Jha S, Ambudkar SV and Prasad R. (**2003**) Functional characterization of *Candida albicans* ABC transporter Cdr1p. **Eukaryotic Cell** 2, 1361-75

144. Bhartiya S, Rawool S and Venkatesh KV. (**2003**) Dynamic Model of *Escherichia coli* Tryptophan Operon Shows an Optimal Structural Design. **European Journal of Biochemistry** 270, 2644-2651

145. Som A, Sahoo S, Mukhopadhyay I, Chakrabarti J and Chaudhury R. (**2003**) Scaling violations in coding DNA. **Europhysics Letters** 62, 271-277

146. Sandhya S, Kishore S, Sowdhamini R and Srinivasan N. (**2003**) Effective detection of remote homologues by searching in sequence dataset of a protein domain fold. **FEBS Letters** 552, 225-230

147. Shenoy AR, Srinivasan N, Subramaniam M and Visweswariah SS. (**2003**) Mutational analysis of Mycobacterium tubercolosis Rv1625c adenylyl cyclase: Residues that confer *nucleotide* specificity contribute to dimerization. **FEBS Letters** 545, 253-259

148. Sopory S, Balaji S, Srinivasan N and Visweswariah SS. (**2003**) Modeling and mutational analysis of the GAF domain of the cGMP-binding, cGMP-specific phosphodiesterase PDE5. **FEBS Letters** 539, 161-166

149. Dhanashree B, Otta SK, Karunasagar I, Goebel W and Karunasagar I. (**2003**) Incidence of Listeria spp. in clinical and food samples in Mangalore India. **Food Microbiology** 20, 447-453

150. Ali S and Hasnain SE. (**2003**) Genomics of the human Y-chromosome. 1. Association with male infertility. **Gene** 321, 25-37

151. Thakur JK, Malik MR, Bhatt V, Reddy MK, Sopory SK, Tyagi AK. and Khurana JP. (**2003**) A polycomb group gene of rice (*Oryza sativa L.* subsp. Indica), OsiEZ1, codes for a nuclearlocalized protein expressed preferentially in young seedlings and during reproductive development. **Gene** 314, 1-13

152. Basu A, Mukherjee N, Roy S, Sengupta S, Banerjee S, Chakraborty M, Dey B, Roy M, Roy B, Bhattacharyya NP, Roychoudhury S and Majumder PP. (**2003**) Ethnic India: a genomic view, with special reference to peopling and structure. **Genome Research** 13, 2277-90

153. Watkins WS, Rogers AR, Ostler CT, Wooding S, Bamshad MJ, Brassington AM, Carroll ML, Nguyen SV, Walker JA, Prasad BV, Reddy PG, Das PK, Batzer MA and Jorde LB. (**2003**) Genetic variation among world populations: inferences from 100 Alu insertion polymorphisms. **Genome Research** 13, 1607-18

154. Ramachandraiah G, Chandra NR, Surolia A and Vijayan M. (**2003**) Computational analysis of multivalency in lectins: structures of garlic lectin-oligosaccharide complexes and their aggregates. **Glycobiology** 13, 765-75

155. Janaki C and Joshi RR. (**2003**) Accelerating comparative genomics using parallel computing. ***In silico* Biology** 3, 429-440

156. Nandel FS and K Harpreet . (**2003**) Effect of terminal achiral and chiral residues on the conformational behaviour of poly Dz Phe and analysis of various interactions. **Indian Journal of Biochemistry & Biophysics** 40, 265-273

157. Vasanthi G and Krishnaswamy S. (**2003**) Dipole moment in TIM alpha/beta fold proteins. **Indian Journal of Biochemistry & Biophysics** 40, 194-202

158. Upadhyay RK. (**2003**) Computational analysis of evolutionary divergence of scorpion toxins. **Indian Journal of Biochemistry and Biophysics** 40, 51-58

159. Bashyam MD and Hasnain SE. (**2003**) The human genome sequence: impact on health care. **Indian Journal of Medical Research** 117, 43-65

160. Dhanashree B, Otta SK, and Karunasagar I. (**2003**) Typing of *Listeria monocytogenes* isolates by random amplification of polymorphic DNA. **Indian Journal of Medical Research** 117, 19-24

161. Satish S, Bakre AA, Bhattacharya S and Bhattacharya A. (**2003**) Stress-dependent expression of a polymorphic, charged antigen in the protozoan parasite *Entamoeba histolytica*. **Infection and Immunity** 71, 4472-4486

162. Srikanta B, Haritsa J and Sen U. (**2003**) The Building of BODHI, a Bio-diversity Database System. **Information Systems** 28, 347-367

163. Bhaduri N, Ray Chaudhuri S, Chaudhuri K and Mukhopadhyay K. (**2003**) Evolutionary changes in the dopamine beta hydroxylase and dopamine transporter, two important proteins controlling action of dopamine. **International Archives of Bioscience** 1122-1128,

164. Guruprasad K and Kumari K. (**2003**) Three-dimensional models corresponding to the C-terminal domain of human alphaA and alphaB crystallins based on the crystal structure of the small heatshock protein HSP16.9 from wheat. **International Journal of Biological Macromolecules** 33, 107-112

165. Eapen BR. (**2003**) A new insight into the pathogenesis of Reiter's syndrome using bioinformatics tools. **International Journal of Dermatology** 42, 242-3

166. Bhaumik B, Agarwal A and Manohar M. (**2003**) Receptive Field Properties of Near Neighbour Orientation Selective Neurons in the Visual Cortex: A Modelling Study. **International Journal of Neural Systems** 15, 31-40

167. Roy P. (**2003**) Cognitive Processing: An Analysis using Stochastic Activation. **J. Inst. Elect.Telecom. Eng** 49, 183-195

168. Shanthi V, Rajesh CK, Jayalakshmi J, Vijay VG and Sekar K. (**2003**) WAP: water analysis package - a Web-based package to calculate geometrical parameters between water oxygen and protein atoms. **Journal of Applied Crystallography** 36, 167-168

169. Karunasagar I, Rivera B, Joseph B, Kennedy VR, Shetty A, Huq I, Karunasagar I and Colwell RR. (**2003**) OmpU genes in nontoxigenic *Vibrio cholerae* associated with aquaculture. **Journal of Applied Microbiology** 95, 338-343

170. Kaur H and Raghava GPS. (**2003**) BTEVAL: A server for evaluation of beta-turn prediction methods. **Journal of Bioinformatics and Computational Biology** 1, 495-504

171. Mutalik VK, Shah P and Venkatesh KV. (**2003**) Allosteric Interactions and Bifunctionality Make the Response of Glutamine Synthetase Cascade System of *Escherichia coli* Robust and Ultrasensitive. **Journal of Biological Chemistry** 278, 26327-26332

172. Pudi R, Abhiman S, Srinivasan N and Das S. (**2003**) Hepatitis C virus Internal Ribosome Entry Site-mediated translation is stimulated by specific interaction of independent regions of human La autoantigen. **Journal of Biological Chemistry** 278, 12231-1224

173. Sampath V, Rekha N, Srinivasan N and Sadhale PP. (**2003**) The conserved and non-conserved regions of Rpb4 are involved in multiple phenotypes in *Saccharomyces cerevisiae*. **Journal of Biological Chemistry** 278, 51566-51576

174. Santra MK and Panda D. (**2003**) Detection of an intermediate during unfolding of bacterial cell division protein FtsZ: loss of functional properties precedes the global unfolding of FtsZ. **Journal of Biological Chemistry** 278, 21336-21343

175. Saxena P, Yadav G, Mohanty D and Gokhale RS. (**2003**) A new family of type III polyketide synthases in *Mycobacterium tuberculosis*. **Journal of Biological Chemistry** 278, 44780-44790

176. Verma M, Bhat PV and Venkatesh KV. (**2003**) Quantitative analysis of GAL genetic switch of *Saccharomyces cerevisiae* reveals that nucleocytoplasmic shuttling of Gal80p results in a highly sensitive response to galactose. **Journal of Biological Chemistry** 278, 48764-48769

177. Bandyopadhyay D and Bhattacharyya D. (**2003**) Different Modes of Interaction between hydrated magnesium ion and DNA functional groups: Database

analysis and *Ab initio* studies. **Journal of Biomolecular Structure and Dynamics** 21, 447-458

178. Muralidharan J, Suguna K, Surolia A and Surolia N. (**2003**) Exploring the interaction energies for the binding of hydroxydiphenyl ethers to enoyl-acyl carrier protein reductases. **Journal of Biomolecular Structure and Dynamics** 20, 589-594

179. Nandi T, Dash D, Ghai R, B-Rao C, Kannan K, Brahmachari SK, Ramakrishnan C and Ramachandran S. (**2003**) A novel complexity measure for comparative analysis of protein sequences from complete genomes. **Journal of Biomolecular Structure and Dynamics** 20, 657-68

180. Jyoti BD, Suresh AK and Venkatesh KV. (**2003**) An optimal model to represent the kinetics of growth and product formation by *Lactobacillus rhamnosus* on multiple substrates. **Journal of Bioscience and Bioengineering** 96, 481-486

181. Adindla S and Guruprasad L. (**2003**) Sequence analysis corresponding to the PPE and PE proteins in *Mycobacterium tuberculosis* and other genomes. **Journal of Biosciences** 28, 169-179

182. Bhalla US. (**2003**) Temporal computation by synaptic signaling pathways. **Journal of Chemical Neuroanatomy** 26, 81-86

183. Das Soma, Varghese V, Chaudhury S, Barman P, Mahapatra S, Kojima K, Bhattacharya SK, Krishnan T, Ratho RK, Chhotray GP, Phukan AC, Kobayashi N and Naik TN. (**2003**) Emergence of novel human Group A rotavirus G12 strains in India. **Journal of Clinical Microbiology** 41, 2760-2762

184. Chattopadhyay S and Chakrabarti J. (**2003**) Temporal changes in phosphoglycerate kinase coding sequences: a quantitative measure. **Journal of Computational Biology** 10, 83-93

185. Bhaumik B and Mathur M. (**2003**) A Cooperation and Competition Based Simple Cell Receptive Field Model and Study of Feed-Forward Linear and Nonlinear Contributions to Orientation Selectivity. **Journal of Computational Neuroscience** 14, 211-227

186. Awasthi A, Mathur R, Khan A, Joshi BN, Jain N, Sawant S. Ramanamurthy B, Mitr D and Saha B. (**2003**) CD40 Signaling is Impaired in L. major-infected Macrophages and is rescued by a p38MAPK Activator Establishing a Host-protective Memory T Cell Response. **Journal of Experimental Medicine** 197, 1037-1043

187. Bas A and Majumder PP. (**2003**) A comparison of two popular statistical methods for estimating the time to most recent common ancestor (TMRCA) from a sample of DNA. **Journal of Genetics** 82, 7-12

188. Nair DT, Kaur KJ, Singh K, Mukherjee P, Rajagopal D, George A, Bal V, Rath S, Rao KVS and Salunke DM. (**2003**) Mimicry of native peptide antigens by the corresponding retroinverso analogs is dependent on their intrinsic structure and interaction propensities. **Journal of Immunology** 170, 1362-1373

189. Basu S, Burma DP and Chaudhuri P. (**2003**) Words in DNA sequences: some case studies based on their frequency statistics. **Journal of Mathematical Biology** 46, 479-503

190. Banerjee R, Sen M, Bhattacharya D and Saha P. (**2003**) The Jigsaw Puzzle Model: Search for Conformational

Specificity in Protein Interiors. **Journal of Molecular Biology** 333, 211-226

191. Bhattacharyya R and Chakrabarti P. (**2003**) Stereospecific interactions of proline residues in protein structures and complexes. **Journal of Molecular Biology** 331, 925-940

192. Jeyaprakash AA, Katiyar S, Swaminathan CP, Sekar K, Surolia A and Vijayan M. (**2003**) Structural Basis of the Carbohydrate Specificities of Jacalin: An X-ray and Modeling Study. **Journal of Molecular Biology** 332, 217-228

193. Pal L, Chakrabarti P and Basu G. (**2003**) Sequence and structure patterns in proteins from an analysis of the shortest helices: implications for helix nucleation. **Journal of Molecular Biology** 326, 273-291

194. Sekar K, Vaijayanthi Mala S, Yogavel M, Velmurugan D, Poi MJ, Vishwanath BS, Gowda TV, Jeyaprakash AA and Tsai MD. (**2003**) Crystal structures of the free and anisic acid bound triple mutant of phospholipase A2. **Journal of Molecular Biology** 333, 367-76

195. Tendulkar AV, Wangikar PP, Sohoni MA, Samant VV and Mone CY. (**2003**) Parameterization and Classification of Protein Universe via Geometric Techniques. **Journal of Molecular Biology** 334, 157-172

196. Wangikar PP, Tendulkar AV, Ramya S, Mali D and Sarawagi S. (**2003**) Functional Sites in Protein Families uncovered via an Automated and Objective Graph Theoretic Approach. **Journal of Molecular Biology** 326, 955-978

197. Yadav G, Gokhale RS and Mohanty D. (**2003**) Computational approach for prediction of domain organization and substrate specificity of modular polyketide synthases. **Journal of Molecular Biology** 328, 335-363

198. Bhaduri A, Krishnaswamy L, Ullal GR, Panicker MM and Sowdhamini R. (**2003**) Fold prediction and comparative modeling of Bdm1: a probable a/b hydrolase associated with hot water epilepsy. **Journal of Molecular Modelling** 9, 3-8

199. Maji SK, Haldar D, Bhattacharyya D and Banerjee A. (**2003**) Conformational heterogeneity of a turn mimetic pseudo-peptide: comparison of crystal state, solution and theoretically derived structures. **Journal of Molecular Structure** 646, 111-123

200. Guruprasad K and Shukla S. (**2003**) Prediction of beta-turns from amino acid sequences using the residue-coupled model. **Journal of Peptide Research** 61, 159-162

201. Guruprasad K, Rao MJ, Adindla S and Guruprasad L. (**2003**) Combinations of turns in proteins. **Journal of Peptide Research** 62, 167-174

202. Guruprasad K, Shukla S, Adindla S and Guruprasad L. (**2003**) Prediction of gamma-turns from amino acid sequences. **Journal of Peptide Research** 61, 243-251

203. Shobini J, Mishra AK and Chandra N. (**2003**) Conformation of gramicidin-A in CTAB micellar media. **Journal of Photochemistry and Photobiology B** 70, 117-124

204. Bhattacharyya R, Saha R, Samanta U and Chakrabarti P. (**2003**) Geometry of interaction of histidine ring with other planar and basic residues. **Journal of Proteome Research** 2, 255-263

205. Chattopadhya R and Ghosh K. (**2003**) A comparative three-dimensional model of the carboxy-terminal domain of the lambda repressor and its use to build intact repressor tetramer models bound to adjacent operator sites. **Journal of Structural Biology** 141, 103-114

206. Ramya Bhargavi G, Sheik SS, Velmurugan D and Sekar K. (**2003**) Side-chain conformation angles of amino acids: effect of temperature factor cut-off. **Journal of Structural Biology** 143, 181-184

207. Xavier SM and Veluraja K. (**2003**) Conformations of terminal sialyloligosaccharide fragments – A molecular dynamics study. **Journal of Theoretical Biology** 222, 389-402

208. Gupta PK, Rustgi S, Sharma S, Singh R, Kumar N and Balyan HS. (**2003**) Transferable ESTSSR markers for the study of polymorphism and genetic diversity in bread wheat. **Molecular Genetics & Genomics** 270, 315-323

209. Ramalingam J, Vera Cruz CM., Kukreja K, Chittoor JM, Wu J-L, Lee SW, Baraoidan M, George ML, Cohen MB, Hulbert SH, Leach JE and Leung H. (**2003**) Candidate defense genes from rice, barley, and maize and their association with qualitative and quantitative resistance in rice. **Molecular Plant Microbe Interactions** 16, 14-24

210. Kalia VC, Chauhan A, Bhattacharyya G and Rashmi. (**2003**) Genomic databases yield novel bioplastic producers. **Nature Biotechnology** 21, 845-846

211. Truccolo W, Rangarajan G, Chen Y and Ding M. (**2003**) Analyzing stability of equilibrium points in neural networks: A general approach. **Neural Network** 16, 1453-1460

212. Bhalla US. (**2003**) Managing models of signaling networks. **Neurocomputing** 52-54, 215-220

213. Bahl A, Brunk B, Crabtree J, Fraunholz M, Gajria B, Grant GR, Ginsburg H, Gupta D, Kissinger JC, Labo P, Li L, Mailman MD, Milgram AJ, Pearson DS, Roos DS, Schug J, Stoeckert CJ Jr and Whetzel P. (**2003**) PlasmoDB: The *Plasmodium* genome resource. A database integrating experimental and computational data. **Nucleic Acids Research** 31, 212-215

214. Bharath MM, Chandra NR and Rao MRS. (**2003**) Molecular modeling of the chromatosome particle. **Nucleic Acids Research** 31, 4264-4274

215. Gowri VS, Pandit SB, Karthik PS, Srinivasan N and Balaji S. (**2003**) Integration of related sequences with protein three-dimensional structural families in an updated version of PALI database. **Nucleic Acids Research** 31, 486-488

216. Hussain ASZ, Kiran Ch K, Rajesh CK, Sheik SS and Sekar K. (**2003**) SEM: Symmetry Equivalent Molecules - A web based GUI to generate and visualize the Macromolecules. **Nucleic Acids Research** 31, 3356-3358

217. Kanhere A and Bansal M. (**2003**) An assessment of three di*nucleotide* parameters to predict DNA curvature by quantitative comparison to experimental data. **Nucleic Acids Research** 31, 2647-2658

218. Shanthi V, Selvarani P, Kiran Ch. K, Mohire CS and Sekar K. (**2003**) SSEP: Secondary Structural Elements of Proteins. **Nucleic Acids Research** 31, 3404-3405

219. Sheik SS, Ananthalakshmi P, Ramya GB and Sekar K. (**2003**) CADB:

Conformational Angles DataBase of proteins. **Nucleic Acids Research** 31, 448-451

220. Sreenu VB, Vishwanath A, Nagaraju J and Nagarajaram HA. (**2003**) MICdb, Database of Prokaryotic Microsatellites. **Nucleic Acids Research** 31, 106-108

221. Yadav G, Gokhale RS and Mohanty D. (**2003**) SEARCHPKS: A program for detection and analysis of polyketide synthase domains. **Nucleic Acids Research** 31, 3654-3658

222. Nita P and Somdatta S. (**2003**) Controllability of Spatiotemporal Systems Using Constant Pinnings. **Physica A** 318, 200-212

223. Bose I And Karmakar R. (**2003**) Simple models of plant learning and memory. **Physica Scripta** T106, 9-12

224. Ramaswamy R and Azad RK. (**2003**) Analysis of DNA sequences through segmentation: Exploring the mosaic via statistical measures. **Physica Scripta** T106, 21–25

225. Tauro S, Coutinho E and Srivastava S. (**2003**) An antiparallel beta-sheet and a beta-turn characterize the structure of antiviral HIV-1 peptide T140, as revealed by 2D NMR and MD Simulations. **Protein and Peptide Letters** 10, 346-60

226. Bhaduri A and Sowdhamini R. (**2003**) A Genome-wide Survey of Human Tyrosine Phosphatases. **Protein Engineering, Design, and Selection** 16, 881-888

227. Chakrabarti S, Venkataramanan K and Sowdhamini R. (**2003**) A database of Structural Motifs of Superfamilies. **Protein Engineering, Design, and Selection** 16, 791-793

228. Dani VS, Ramakrishnan C and Varadarajan R. (**2003**) MODIP revisited: re-evaluation and refinement of an automated procedure for modeling of disulfide bonds in proteins. **Protein Engineering, Design, and Selection** 16, 187-93

229. Dasgupta J, Sen U and Dattagupta JK. (**2003**) *In silico* mutations and molecular dynamics studies on a winged bean chymotrypsin inhibitor protein. **Protein Engineering, Design, and Selection** 16, 489-496

230. Eswar N, Ramakrishnan C and Srinivasan N. (**2003**) Stranded in isolation: Structural role of isolated extended-strands in proteins. **Protein Engineering, Design, and Selection** 16, 331-339

231. Jayasunder JJ, Baddireddy SL, Venkateshamoorthy R, Madhuranthagam JA, Pandjassarame K and Gautam P. (**2003**) Insights from Molecular Dynamics Simulation into pH Dependent Enantio-Selective Hydrolysis of Esters by *Candida rugosa* Lipase. **Protein Engineering, Design, and Selection** 16,1017-1024

232. Kaur H and Raghava GPS. (**2003**) A neural network based method for prediction of gama-turns in proteins from multiple sequence alignment. **Protein Science** 12, 923-929

233. Kaur H and Raghava GPS. (**2003**) Prediction of Beta-turns in proteins from multiple alignment using neural network. **Protein Science** 12, 627-634

234. Sarin J, Raghava GPS and Chakraborti PK. (**2003**) Intrinsic contributions of polar amino acid residues towards thermal stability of an ABC-ATPase of mesophilic origin. **Protein Science** 12, 2118- 2120

235. Bahadur RP, Chakrabarti P, Rodier F and Janin J. (**2003**) Dissecting subunit interfaces in homodimeric proteins. **Proteins: Structure, Function and Bioinformatics** 53, 708-719

236. Datta S, Ganesh N, Chandra NR, Muniyappa K and Vijayan M. (**2003**) Structural studies on MtRecA-*nucleotide* complexes: insights into DNA and *nucleotide* binding and the structural signature of NTP recognition. **Proteins: Structure, Function and Bioinformatics** 50, 474-485

237. Pal M and Dasgupta S. (**2003**) The nature of the turn in omega loops of proteins. **Proteins: Structure, Function and Bioinformatics** 51, 591-606

238. Paul BD, Kanhere A, Chakraborty A, Bansal M and Nagaraja V. (**2003**) Identification of the Domains for DNA Binding and Transactivation Function of C Protein from Bacteriophage Mu. **Proteins-Structure Function and Genetics** 52, 272-282

239. Saxena AK and Prathipati P. (**2003**) Comparison of MLR, PLS and GA-MLR in QSAR analysis. **SAR and QSAR in Environmental Research** 14, 433-445

240. Bhattacharyya C, Grate LR, Rizki A, Radisky D, Molina FJ, Jordan MI, Bissell MJ and Mian IS. (**2003**) Simultaneous relevant feature identification and classification in high-dimensional spaces: Application to molecular profiling data. **Signal Processing** 83, 729-743

241. Krupa A, Sandhya K, Srinivasan N and Jonnalagadda S. (**2003**) A conserved domain in the prokaryotic bifunctional FAD synthetases can potentially catalyze *nucleotide* transfer. **Trends in Biochemical Sciences** 28, 10-13

242. Raghothama C and Pandey A. (**2003**) Absolute systems biology-measuring dynamics of protein modifications. **Trends in Biotechnology** 21, 467-70

243. Kalate RN, Tambe SS and Kulkarni BD. (**2003**) Optimizing transcription efficiency in eukaryotic systems using a hybrid approach involving an Artificial Neural Network and Genetic Algorithm: a case study of beta globin gene. **WWW. J. Biol** 8, 82-98

2004

244. Samaya KM, Soma D, Chockalingam C, Shanthi V and Sekar K. (**2004**) LySDB: Lysozyme Structural Database. **Acta Crystallographica: Section D-Biological Crystallography** D60, 597-600

245. Mathur PP. (**2004**) Bioinformatics: From Pre-Genomic to Post-Genomic Era. **Advanced Biotech** 3, 27-31

246. Shelokar PS, Jayaraman VK and Kulkarni BD. (**2004**) An ant colony approach for clustering. **Analytical Chimica Acta** 509, 187-195

247. Sinha D, Bhalla US and Shivashankar GV. (**2004**) Kinetic measurement of ribosome motor stalling force. **Applied Physics Letters** 85, 4789-4791

248. Shaikh SA, Ahmed SR and Jayaram B. (**2004**) A molecular thermodynamic view of DNA-drug interaction: A case study of 25 minor groove binders. **Archives of Biochemistry and Biophysics** 429, 81-99

249. Bakshi R, Prakash T, Dash D and Brahmachari V . (**2004**) *In silico* characterization of the INO80 subfamily of SWI2/SNF2 chromatin remodeling proteins. **Biochemical & Biophysical**

Research Communications 320, 197-204

250. Bharanidharn D, Bhargavi GR, Uthanumallin K and Gautham N. (**2004**) Correlations between *nucleotide* frequencies and amino acid composition in 115 bacterial species. **Biochemical & Biophysical Research Communications** 315, 1097-1103

251. Bindu PH, Sastry GM, Murty USN and Sastry GN. (**2004**) Structural and conformational changes concomitant with the E1-E2 transition in H(+)K(+)-ATPase: a comparative protein modelling study. **Biochemical & Biophysical Research Communications** 319, 312-320

252. Roy D and Lohia A. (**2004**) Sequence divergence of *Entamoeba histolytica* tubulin is responsible for its altered tertiary structure. **Biochemical & Biophysical Research Communications** 319, 1010-1016

253. Vengadesan K, Anbupalam T and Gautham N. (**2004**) An application of experimental design using mutually orthogonal Latin squares in conformational studies of peptides. **Biochemical & Biophysical Research Communications** 316, 731-737

254. Vengadesan K, Anbupalam T and Gautham N. (**2004**) Application of experimental design using mutually orthogonal Latin squares in conformational studies of peptides. **Biochemical and Biophysical Research Communications** 316, 731-737

255. Sen R and SwaminathanT. (**2004**) Response surface modeling and optimization to elucidate the effects of inoculum age and size on Surfactin production. **Biochemical Engineering Journal** 21, 141–148

256. Sen U, Dasgupta J, Choudhury D, Datta P, Chakrabarti A, Chakrabarty SB, Chakrabarty A and Dattagupta JK. (**2004**) Crystal structures of HbA2 and HbE and modeling of Hemoglobin d4: interpretations of the thermal stability and the antisickling effect of HbA2. **Biochemistry** 43, 12477-12488

257. Tuteja R and Tuteja N. (**2004**) Serial analysis of gene expression (SAGE): unraveling the bioinformatics tools. **Bioessays** 26, 916-22

258. Bhasin M. and Raghava GPS. (**2004**) SVM based method for predicting HLA-DRB1*0401 binding peptides in an antigen sequence. **Bioinformatics** 12, 421-423

259. Grover D, Mukerji M, Bhatnagar P, Kannan K and Brahmachari SK. (**2004**) Alu repeat analysis in the complete human genome: trends and variations with respect to genomic composition. **Bioinformatics** 20, 813-7

260. Kaur H and Raghava GPS. (**2004**) A neural network method for prediction of beta-turn types in proteins using evolutionary information. **Bioinformatics** 20, 2751-2758

261. Majeed AA, Ahmed N, Rao KR, Ghousunnissa S, Kausar F, Bose B, Nagarajaram HA, Katoch VM, Cousins DV, Sechi LA, Gilman RH and Hasnain SE. (**2004**) AmpliBASE MTTM, A *Mycobacterium tuberculosis* diversity knowledgebase. **Bioinformatics** 20, 989-992

262. Pandey N, Ganapathi M, Kumar K, Dasgupta D, Das Sutar SK and Dash D. (**2004**) Comparative analysis of protein unfoldedness in human housekeeping and non-housekeeping proteins. **Bioinformatics** 20, 2904-2910

263. Prakash T, Khandelwal M, Dasgupta D, Dash D and Brahmachari SK. (**2004**) CoPS: Comprehensive Peptide Signature database. **Bioinformatics** 20, 2886-2888

264. Sharma D, Issac B, Raghava GP and Ramaswamy R. (**2004**) Spectral repeat finder (SRF): identification of repetitive sequences using Fourier transformation. **Bioinformatics** 20, 1405-1412

265. Sharma R, Maheshwari JK, Prakash T, Dash, D and Brahmachari SK. (**2004**) Recognition and analysis of protein-coding genes in severe acute respiratory syndrome associated coronavirus. **Bioinformatics** 20, 1074-1080

266. Vasudeva K and Bhalla US. (**2004**) Adaptive stochastic - deterministic chemical kinetic simulations. **Bioinformatics** 20, 78-84

267. Ahmed K, Ramesh G, Srinivas O, Ramulu P, Laxman N, Tasneem R, Deepak M, Achary MS and Nagarajaram HA. (**2004**) Design, Synthesis, and Evaluation of Mixed Imine-Amine Pyrrolobenzodiazepine Dimers with Efficient DNA-Binding Affinity and Potent Cytotoxicity. **Bioorganic & Medicinal Chemistry** 12, 5427-5436

268. Dixit A, Kashaw SK, Gaur S and Saxena AK. (**2004**) Development of CoMFA, advance CoMFA and CoMSIA models in pyrroloquinazolines as thrombin receptor antagonist. **Bioorganic & Medicinal Chemistry** 12, 3591-3598

269. Parthasarathi R, Subramanian V, Roy DR and Chattaraj PK. (**2004**) Electrophilicity index as a possible descriptor of biological activity. **Bioorganic & Medicinal Chemistry** 12, 5533-43

270. Rathi L, Kashaw SK, Dixit A, Pandey G and Saxena AK. (**2004**) Pharmacophore identification and 3D-QSAR studies in N-(2-benzoyl phenyl)-L- tyrosines as PPAR agonists. **Bioorganic & Medicinal Chemistry** 12, 63-69

271. Ghoshal, N. and Mukherjee P K. (**2004**) 3-D-QSAR of N-substituted 4-amino-3,3-dialkyl-2(3H)-furanone GABA receptor modulators using molecular field analysis and receptor surface modelling study. **Bioorganic & Medicinal Chemistry Letters** 14, 103-109

272. Yadav A and Singh SK. (**2004**) Threshold interaction energy of NRTI's (2'-deoxy 3'-substituted nucleosidic analogs of Reverse transcriptase) to undergo competitive inhibition. **Bioorganic & Medicinal Chemistry Letters** 14, 2677-2680

273. Arumugam, M., and M. Bansal. (**2004**) The Role of Bii Nucleotides in C Form DNA. **Biophysical Journal** 86, 416A-416A

274. Bhalla US. (**2004**) Signaling in small subcellular volumes I. Stochastic and diffusion effects on individual pathways. **Biophysical Journal** 87, 733-744

275. Bhalla US. (**2004**) Signaling in small subcellular volumes. II. Stochastic and diffusion effects on synaptic network properties. **Biophysical Journal** 87, 745-753

276. Mathur P, Ramakumar S and Chauhan VS. (**2004**) Peptide design using alpha, beta-dehydro amino acids: from beta-turns to helical hairpins. **Biopolymers** 76, 150-161

277. Mukherjee S and Bhattacharyya D. (**2004**) Effect of Phosphorothioate Chirality on the Grooves of DNA Double Helices: A Molecular Dynamics Study. **Biopolymers** 73, 269-282

278. Vengadesan K and Gautham N. (**2004**) Conformational studies on enkephalins using the MOLS technique. **Biopolymers** 74, 476-494

279. Mutalik VK and Venkatesh KV. (**2004**) Effect of the MAPK cascade structure, nuclear translocation and regulation of transcription factors on gene expression. **BioSystems** 85, 144-157

280. Verma M, Bhat P J and Venkatesh KV. (**2004**) Expression of GAL genes in a mutant strain of *Saccharomyces cerevisiae* lacking GAL80: Quantitative Model and Experimental Verification. **Biotechnology and Applied Biochemistry** 39, 89-97

281. Poolman MG, Venkatesh KV, Pidcock MK and Fell DA. (**2004**) A Method for the Determination of Flux in Elementary Modes, and its Application to *Lactobacillus rhamnosus*. **Biotechnology and Bioengineering** 88, 601-612

282. Anuradha V, Sharmila A and Gautam P. (**2004**) Functionally Specified Protein Signatures for Individual Blue Copper Proteins and for a Combination of Blue and Green and Blue and Purple Copper Proteins. **BMC Bioinformatics** 5, 127

283. Bhaduri A, Pugalenthi G and Sowdhamini R. (**2004**) PASS2: an automated database of protein alignments organised as structural superfamilies. **BMC Bioinformatics** 5, 35

284. Chakrabarti S, Bhardwaj N, Anand P and Sowdhamini R. (**2004**) Improvement of alignment accuracy utilizing sequentially conserved motifs. **BMC Bioinformatics** 5, 167

285. Pandit SB, Bhadra R, Gowri V S, Balaji S, Anand B and Srinivasan N. (**2004**) SUPFAM: A database of sequence superfamilies of protein domains. **BMC Bioinformatics** 5, 28-35

286. Sharma A, Srivastava GP, Sharma VK and Ramachandran S. (**2004**) ArrayD: a general purpose software for microarray design. **BMC Bioinformatics** 5, 142

287. Sabarinadh C, Subramanian S, Tripathi A and Mishra RK. (**2004**) Extreme conservation of noncoding DNA near HoxD complex of vertebrates. **BMC Genomics** 5, 75

288. Preeti M, Casjens S and Krishnaswamy S. (**2004**) Analysis of the lambdoid prophage element e14 in the *E.coli* K-12 genome. **BMC Microbiolgy** 4, 4

289. Srividhya KV & Krishnaswamy S. (**2004**) A simulation model of *Escherichia coli* osmoregulatory switch using E-CELL system. **BMC Microbiolgy** 4, 44

290. Yellaboina S, Ranjan S, Chakhaiyar P, Hasnain SE and Ranjan A. (**2004**) Prediction of DtxR regulon, Identification of binding sites and operons controlled by Diphtheria toxin repressor in *Corynebacterium diphtheriae*. **BMC Microbiolgy** 4, 38

291. Verma SC, Paulchowdhury S and Tripathi AK. (**2004**) Phylogeny based on 16S rDNA and nifH sequences of *Ralstonia taiwanensis* strains isolated from nitrogen fixing nodules of *Mimosa pudica* in India. **Canadian Journal of Microbiology** 50, 312-322

292. Mutalik, VK, Singh AP, Edwards JS and Venkatesh KV. (**2004**) Equilibrium analysis of allosteric interactions shows zero order effects. **Cell Biochemistry and Biophysics** 41, 179-192

293. Vayttaden SJ, Ajay SM and Bhalla US. (**2004**) A spectrum of models of

signaling pathways. **Chembiochem** 5, 1365-74

294. Rana S, Kundu B and Durani S. (**2004**) Stereospecific peptide folds. A rationally designed molecular bracelet. **Chemical Communications** 2004, 2462-2463

295. Kalyan SC, Sanjeev BS and Vishveshwara S. (**2004**) Stability and Dynamics of the Domain Swapped Bovine-Seminal Ribonuclease . **Chemistry & Biodiversity** 1, 802-818

296. Adindla S, Inampudi KK, Guruprasad K and Guruprasad L. (**2004**) Identification and analysis of novel tandem repeats in the cell surface proteins of Archaeal and Bacterial genomes using computational tools. **Comparative and Functional Genomics** 5, 2-16

297. Bhalla US. (**2004**) Models of cell signaling pathways. **Current Opinion in Genetics & Development** 14, 375-381

298. Arockiasam A, Kumar PD, Baalaji N Sundara, Rukmini MR and Krishnaswamy S. (**2004**) Folding and structural stability of OmpC from *Salmonella typhi*: Role of LPS and environment. **Current Science** 87, 197-202

299. Chavan V, Watve AV, Londhe MS, Rane NS, Pandit AT and Krishnan S. (**2004**) Cataloguing Indian biota: the electronic catalogue of known Indian fauna. **Current Science** 87, 749-763

300. Singh AN, Gupta D and Jameel S. (**2004**) Bioinformatic analysis of the SARS virus X1 protein shows it to be a calcium-binding protein. **Current Science** 86, 842-844

301. Subramaniyam V, Gupta SK and Ghosh TC. (**2004**) Shannon's uncertainty principle and gene expression levels. **Current Science** 86, 1142-1147

302. Tyagi JS and Sharma D. (**2004**) Signal transduction systems of mycobacteria with special reference to *M. tuberculosis*. **Current Science** 86, 93-102

303. Watve AV, Gaikwad, J and Vishwas C. (**2004**) Accessing biological collections data of Indian origin. **Current Science** 86, 8

304. Bapat SA and Mishra GC. (**2004**) Stem cell pharmacogenomics. **Current Topics in Medicinal Chemistry** 4, 1371-1383

305. Sengupta A, Ghosh I, Mallick J, Thakur AR and Datta K. (**2004**) Presence of a human Hyaluronan binding protein 1 (HABP1) pseudogene-like sequence in *Methanosarcina barkeri* suggests its linkage in evolution. **DNA and Cell Biology** 23, 301-10

306. Patel, S, Venkatesh KV and Edwards JS. (**2004**) An integrated mechanistic model for transcription-coupled *nucleotide* excision repair. **DNA Repair** 3, 343-348

307. Brajendra K Singh, J Subba Rao, R Ramaswamy, Somdatta Sinha. (**2004**) The role of heterogeneity on the spatiotemporal dynamics of host–parasite metapopulation. **Ecological Modelling** 180, 435–43

308. Mandal PK., Bagchi A, Bhattacharya A and Bhattacharya, S. (**2004**) An *Entamoeba histolytica* LINE/SINE pair inserts at common target sites cleaved by the restriction enzyme-like LINE-encoded endonuclease. **Eukaryotic Cell** 3, 170-179

309. Verma M, Bhat PJ, Bhartiya S and Venkatesh KV. (**2004**) A Steady State

Modeling Approach to Validate *in vivo* Mechanism of GAL Regulatory Network in Saccahromyces cerevisiae. **European Journal of Biochemistry** 271, 4064-4074

310. Ajay, SM and Bhalla US. (**2004**) A role for ERKII in synaptic pattern selectivity on the time-scale of minutes. **European Journal of Neuroscience** 20, 2671-2680

311. Majumdar S, Foster G and Sikdar SK. (**2004**) Induction of pseudo-periodic oscillation in voltagegated sodium channel properties is dependent on the duration of prolonged depolarization. **European Journal of Neuroscience** 20, 127-143

312. Chakrabarti S and Sowdhamini R. (**2004**) Regions of minimal structural variation among members of protein domain superfamilies: Application to remote homology detection and modelling using distant relationships. **FEBS Letters** 569, 31-36

313. Kaur H and Raghava GPS. (**2004**) Role of evolutionary information in prediction of aromaticbackbone NH interactions in proteins. **FEBS Letters** 564, 47-57

314. Luthra-Guptasarma M and Singh B. (**2004**) HLA-B27 lacking associated beta2-microglobulin rearranges to auto-display or cross-display residues 169-181: A novel molecular mechanism for spondyloarthropathies. **FEBS Letters** 575, 1-8

315. Mutalik VK, Singh AP, Edwards JS and Venkatesh KV. (**2004**) Robust global sensitivity in multiple enzyme cascade system explains how the downstream cascade structure may remain unaffected by cross-talk. **FEBS Letters** 558, 79-84

316. Ruhela A, Verma M, Edwards JS, Bhat PJ, Bhartiya S and Venkatesh KV. (**2004**) Autoregulation of Regulatory Proteins is Key for Dynamic Operation of GAL Switch in *Saccharomyces cerevisiae*. **FEBS Letters** 576, 119-126

317. Sampa B. (**2004**) Functional properties of Soybean Nodulin26 from a comparative three dimensional model. **FEBS Letters** 558, 39-44

318. Sengupta B, Banerjee A and Sengupta PK. (**2004**) Investigations on the binding and antioxidant properties of the plant flavonoid fisetin in model biomembranes. **FEBS Letters** 77, 77-81

319. Venkatesh KV, Bhartiya S and Ruhela A. (**2004**) Multiple feedback loops are key to a robust dynamic performance of tryptophan regulation in *Escherichia coli*. **FEBS Letters** 563,234-240

320. Jha S, Dabas N, Karnani N, Saini P and Prasad R. (**2004**) ABC multidrug transporter Cdr1p of *Candida albicans* has divergent nucleotide-binding domains which display functional asymmetry. **FEMS Yeast Research** 5, 63-72

321. Singh NK, Raguvanshi S, Srivastava SK, Gaur A, Pal AK, Dalai V, Singh A, Ghazi IA, Yadav M, Dixit A, Batra K, Gaikwad K, Sharma TR, Mohapatra T, Mohanty A, Bharti AK, Kapur A, Gupta V, Kumar D, Vij S, Ravi V, Khurana P, Sharma S, McCombie D, Messing J, Wing R, Sasaki T, Khurana P, Khurana JP and Tyagi AK. (**2004**) Sequence analysis of the long arm of rice chromosome 11 for rice-wheat synteny . **Functional & Integrative Genomics** 4,102-117

322. Rawat DS, Sharma I, Jalah R, Lomash S, Kothekar V, Pasha ST and Sharma YD. (**2004**) Identification, expression, modeled structure and serological

characterization of *Plasmodium* vivax histone 2B. **Gene** 337, 25-35

323. Miftahudin K, Ross X-F Ma, Mahmoud A, Layton J, Rodriguez M, Chikmawati T, Ramalingam J, Feril O, Pathan MS, Momirovic G Surlan Kim S, Chema K, Fang P, Haule L, Struxness H, Birkes J, Yaghoubian C, R. Kinner S, Nguyen V, Qi L, Linkiewicz AM, Dubcovsky J, Akhunov ED, Dvorak J, Dilbirligi M, Gill KS, Peng J, Lapitan NLV, Drake T, Sorrells ME, Hossain KG, Kalavacharla V, Kianian SF, Lazo G, Chao S, Anderson OD, Gill BS, Gonzalez J, Wennerlind E, Anderson JA, Choi D-W, Fenton RD, Close TJ, McGuire PE, Qualset CO, Nguyen HT and Gustafson JP. (**2004**) Analsyis of wheat EST loci on wheat chromosome 4. **Genetics** 168, 651-663

324. Issac B and Raghava GPS. (**2004**) EGPred: Prediction of Eukaryotic genes using *Ab initio* methods after combining with sequence similarity approaches. **Genome Research** 14, 1756-1766

325. Raval S, Gowda SB, Singh DD and Chandra NR. (**2004**) A database analysis of 'jacalin-like' lectins: sequence-structure-function relationships. **Glycobiology** 14, 1247-1263

326. Majumder S, Roy A and Mandal C. (**2004**) Prediction of 3-D structures of fucose-binding proteins and structural analysis of their interaction with ligands. **Glycoconjugate Journal** 20, 545-550

327. Mahajan A, Sharma A, Chavali S, Kabra M, Chowdhury MR, Srinivasan N and Bharadwaj D. (**2004**) Novel missense mutation in the coagulation factor IX catalytic domain associated with severe hemophilia B factor IXDelhi. **Haemophilia** 10, 550-552

328. Janaki C and Joshi RR. (**2004**) Motif detection in Arabidopsis: correlation with gene expression data. ***In silico* Biology** 4,149-161

329. Kohli DK, Srikanth CV and Bachhawat AK. (**2004**) A search tool for identification and analysis of conserved sequence patterns in Saccharomyces spp. orthologous promoter. ***In silico* Biology** 4, 411-5

330. Mohan Katta AVSK, Rajeshwari M, Rajiv VB and Krishnaswamy S. (**2004**) Consensus based validation of membrane porins. ***In silico* Biology** 4, 549-561

331. Namboori S, Srinivasan N and Pandit SB. (**2004**) Recognition of remotely related structural homologues using sequence profiles of aligned homologous protein structures. ***In silico* Biology** 4, 445-460

332. Nandi T, Brahmachari SK, Kannan K and Ramachandran S. (**2004**) Clusters of proteins in archaeal and bacterial proteomes using compositional analysis. ***In silico* Biology** 4, 573-91

333. Ganguly I, Sarma A, De S and Mitra A. (**2004**) Genetic polymorphism of BoLA-DRB3.2 locus in crossbred cattle as revealed by PCR-RFLP analysis. **Indian Journal of Animal Sciences** 74, 195–199

334. Parmar SNS, Yadav BR and Srivastava PN. (**2004**) Genetic diversity between Malvi and Nimari breeds of Zebu cattle using RAPD markers. **Indian Journal of Animal Sciences** 74, 281–284

335. Nallini A, Saraboji K and Ponnuswamy MN. (**2004**) A study of aromatic hydrogen bonds for peptides with aromatic amino acid side-chains. **Indian Journal of Biochemistry & Biophysics** 41, 184-187

336. Anand B, Namboori S, Sandhya S and Srinivasan N. (**2004**) Influence of protein structural similarities in adding value to genome data. **Indian Journal of Biotechnology** 3, 473-485

337. Ahmed N and Hasnain SE. (**2004**) Genomics of *Mycobacterium tuberculosis*: old threats & new trends. **Indian Journal of Medical Research** 120, 207-12

338. Kumar R, Kulkarni A, JayaramanVK and Kulkarni BD. (**2004**) Structure-activity relationships using locally linear embedding assisted by support vector and lazy learning regressors. **Int. Elect. J. Mol. Des** 3, 118–133

339. Raychaudhury C and Ghosh I. (**2004**) An Information-Theoretical Measure of Similarity and a Topological Shape and Size Descriptor for Molecular Similarity Analysis. **Int. Elect. J. Mol. Des** 3, 350-360

340. Shelokar PS, Jayaraman, VK and Kulkarni BD. (**2004**) An ant colony optimization–based classifier system for bacterial growth. **Int. Elect. J. Mol. Des** 3, 572–585

341. Chowdhury S Paul, Khanna S, Verma SC and Tripathi AK. (**2004**) Molecular diversity of tannic acid degrading bacteria isolated from tannery soil. **Journal of Applied Microbiology** 97, 1210-1219

342. Ghosh M, Verma SC, Mengoni A and Tripathi AK. (**2004**) Enrichment and identification of bacteria capable of reducing chemical oxygen demand of anaerobically treated molasses spent wash. **Journal of Applied Microbiology** 96, 1278-1286

343. Banerjee S, Hess D, Majumder P, Roy D and Das S. (**2004**) The interactions of *Allium sativum* leaf agglutinin with a chaperonin group of unique receptor protein Isolated from a bacterial endosymbiont of the mustard aphid. **Journal of Biological Chemistry** 279, 23782-23789

344. Bhasin M and Raghava GPS. (**2004**) Classification of nuclear receptors based on amino acid composition and dipeptide composition. **Journal of Biological Chemistry** 279, 23262-23266

345. Chakrabarty P, Sethi DK, Padhan N, Kaur KJ, Salunke DM, Bhattacharya S and Bhattacharya A. (**2004**) Identification and characterization of EhCaBP2. A second member of the calcium-binding protein family of the protozoan parasite *Entamoeba histolytica*. **Journal of Biological Chemistry** 279, 12898-12908

346. Kumar P, Rao AG, Hariharaputran S, Chandra N and Gowda LR. (**2004**) Molecular mechanism of dimerizationof bowman-birk inhibitors: Pivotal role of ASP76 in dimerization. **Journal of Biological Chemistry** 279, 30425-30432

347. Kumar P, Rao AG, Hariharaputran S, Chandra, N and Gowda LR. (**2004**) Molecular mechanism of dimerizationof bowman-birk inhibitors: Pivotal role of ASP76 in dimerization. **Journal of Biological Chemistry** 279,30425-30432

348. Rahaman A, Srinivasan N, Shamala N and Shaila MS. (**2004**) Phosphoprotein of Rinderpest virus forms a tetramer through coiled-coil region important for biological function: A structural insight. **Journal of Biological Chemistry** 279, 23606-23614

349. Shanmugham D, Chandra NR, Chandrasekhar SBK, Rangarajan, PN and Govindarajan P. (**2004**) d-

aminolevulinate dehydrase from *Plasmodium falciparum* - indigenous vs imported. **Journal of Biological Chemistry** 279, 6934-6942

350. Sudha R, Anantharaman L, Sivaram MV, Mirsamadi N, Choudhury D, Lohiya NK, Gupta RB and Roy RP. (**2004**) Linkage of interactions in sickle hemoglobin fiber assembly: inhibitory effect emanating from mutations in the AB region of the alpha-chain is annulled by a mutation at its EF corner. **Journal of Biological Chemistry** 279, 20018-20027

351. Banerjee T, Basak S, Gupta SK and Ghosh TC. (**2004**) Evolutionary forces in shaping the codon and amino acid usages in *Blochmannia floridanus*. **Journal of Biomolecular Structure and Dynamics** 22, 13-24

352. Basak S, Banerjee T, Gupta SK and Ghosh TC. (**2004**) Investigation on the Causes of Codon and Amino Acid Usages Variation between Thermophilic *Aquifex aeolicus* and Mesophilic *Bacillus subtilis*. **Journal of Biomolecular Structure and Dynamics** 22, 205-214

353. Chattopadhyaya R and Pal A. (**2004**) Improved model of a LexA repressor dimer bound to recA operator. **Journal of Biomolecular Structure and Dynamics** 21, 681-689

354. Gupta SK, Bhattacharyya T K and Ghosh TC. (**2004**) Synonymous codon usage in *Lactococcus lactis*: Mutational Bias Versus Translational Selection. **Journal of Biomolecular Structure and Dynamics** 21, 527-535

355. Jeya SSD and Veluraja K. (**2004**) Disialogangliosides and their interaction with cholera toxin – Investigation by molecular modelling, molecular mechanics and molecular dynamics. **Journal of Biomolecular Structure and Dynamics** 22, 299-313

356. Jeya SSD and Veluraja K. (**2004**) Monosialogangliosides and their interaction with cholera toxin Investigation by molecular modelling and molecular mechanics. **Journal of Biomolecular Structure and Dynamics** 21, 591-613

357. Latha N, Jain T, Sharma P and Jayaram B. (**2004**) A free energy based computational pathway from chemical templates to lead compounds: a case study of COX-2 inhibitors. **Journal of Biomolecular Structure and Dynamics** 21, 791-804

358. Sanjeev BS and Vishveshwara S. (**2004**) Conformational Transitions in Eosinophil Cationic Protein: A Molecular Dynamics Study in Aqueous Environment. **Journal of Biomolecular Structure and Dynamics** 22, 171-182

359. Chattopadhyay A, Chattopadhyay AK and Rao CB. (**2004**) Bhattacharyya's distance measure as a precursor of genetic distance measures. **Journal of Biosciences** 29, 135-138

360. Namboori S, Mhatre N, Sujatha S, Srinivasan N and Pandit SB. (**2004**) Enhanced functional and structural domain assignments using remote similarity detection procedures for proteins encoded in the genome of *Mycobacterium tuberculosis* H37Rv. **Journal of Biosciences** 29, 245-259

361. Deshmukh M, Sastry NV and Gadre SR. (**2004**) Molecular Interpretation of Water Structuring and Destructuring effects: Hydration of Alkanediols. **Journal of Chemical Physics** 121, 12402-12410

362. Barman P, Ghosh S, Das S, Varghese V, Chaudhuri S, Sarkar S, Krishnan T, Bhattacharya SK, Chakrabarti A,

Kobayashi N and Naik TN. (**2004**) Sequencing and sequence analysis of VP7 and NSP5 genes reveal emergence of a new genotype of bovine Group B rotaviruses in India. **Journal of Clinical Microbiology** 42, 2816-2818

363. Bhattacharyya C, Grate LR, Jordan MI, El Ghaoui L and Mian IS. (**2004**) Robust sparse hyperplane classifiers: application to uncertain molecular profiling data. **Journal of Computational Biology** 11, 1073-1089

364. Essock EA, Sinai MJ, DeFord JK, Hansen B and Srinivasan N. (**2004**) Human perceptual performance with nighttime imagery: Region recognition and texture-based segmentation. **Journal of Experimental Psychology: Applied** 10, 97-110

365. Tyagi AK, Khurana JP, Khurana P, Raghuvanshi S, Gaur A, Kapur A, Gupta V, Kumar D, Ravi V, Vij S, Khurana P and Sharma S. (**2004**) Structural and functional analysis of rice genome. **Journal of Genetics** 83, 79-99

366. Pandey N, Mittal U, Srivastava AK and Mukerji M. (**2004**) SMARCA2 and THAP11: potential candidates for polyglutamine disorders as evidenced from polymorphism and protein-folding simulation studies. **Journal of Human Genetics** 49, 596-602

367. Das Soma, Varghese Vici, Chaudhuri Susmita, Barman Provaboti, Kojima Kazunobu, Dutta Phalguni, Bhattacharya Sujit K, Krishnan Triveni, Kobayashi Nobumichi and Naik Trailokya N. (**2004**) Genetic variability of human rotavirus strains isolated from eastern and northern India. **Journal of Medical Virology** 72, 156-161

368. Bahadur RP, Chakrabarti P, Rodier F and Janin J. (**2004**) A dissection of specific and non-specific protein-protein interfaces. **Journal of Molecular Biology** 336, 943-955

369. Chakrabarti S, John J and Sowdhamini R . (**2004**) Improvement of comparative modeling by the application of conserved motifs amongst distantly related proteins as additional restraints. **Journal of Molecular Biology** 10, 69-75

370. Innis CA, Anand PA and Sowdhamini R. (**2004**) Prediction of Functional Sites in Proteins using Conserved Functional Group Analysis. **Journal of Molecular Biology** 337, 1053-1068

371. Krupa A, Preethi G and Srinivasan N. (**2004**) Structural modes of stabilization of permissive phosphorylation sites in protein kinases: Distinct strategies in Ser/Thr and Tyr kinases. **Journal of Molecular Biology** 339, 1025-1039

372. Pidugu LS, Kapoor M, Surolia N, Surolia A and Suguna K. (**2004**) Structural basis for the variation in triclosan affinity to enoyl reductases. **Journal of Molecular Biology** 343, 147-155

373. Tendulkar AV, Joshi AA, Sohoni MA and Wangikar PP. (**2004**) Clustering of Protein Structural Fragments Reveals Modular Building Block Approach of Nature. **Journal of Molecular Biology** 338, 611-629

374. Kumar V, Sardana S and Madan AK. (**2004**) Predicting anti-HIV activity of 2,3-diaryl-1,3-thiazolidin-4-ones: computational approach using reformed eccentric connectivity index. **Journal of Molecular Modeling** 10, 399-407

375. Mohapatra PK, Khamari A and Raval MK. (**2004**) A method for structural analysis of alpha-helices of membrane proteins. **Journal of Molecular Modeling** 10, 393-8

376. Blaise MC, Sowdhamini R, Metpally RPR and Pradhan N. (**2004**) Evolutionary Trace Analysis of Ionotropic Glutamate Receptors and Modeling the Interactions of Agonists with Different NMDA Receptor Subunits. **Journal of Molecular Modelling** 10, 305-316

377. Kulkarni D, Babu K and Gadre SR. (**2004**) Exploring hydration patterns of aldehydes and amides *Ab initio* investigations. **Journal of Physical Chemistry A** 108, 2492-2498

378. Arockiasamy A, Murthy GS, Rukmini MR, Sundara Baalaji N, Katpally UC and Krishnaswamy S. (**2004**) Conformational epitope mapping of OmpC, a major cell surface antigen from *Salmonella typhi*. **Journal of Structural Biology** 148, 22-33

379. Behera N and Nanjundiah V. (**2004**) Phenotypic plasticity can potentiate rapid evolutionary change. **Journal of Theoretical Biology** 226, 177-84

380. Krishnamachari A, Moy Mandal, and Karmeshu V. (**2004**) Study of DNA binding sites using the Renyi parametric entropy measure. **Journal of Theoretical Biology** 227, 429-436

381. Singh BK, Chattopadhyay J and Somdatta S. (**2004**) The role of virus infection in a simple phytoplankton-zooplankton system. **Journal of Theoretical Biology** 231, 153-166

382. Chakhaiyar P and Hasnain SE. (**2004**) Defining the mandate of tuberculosis research in a postgenomic era. **Med Princ Pract** 13(4):177-84

383. Kelkar MA, Pednekar DV, Pimple SR and Akamanchi KG. (**2004**) 3D QSAR Studies of Inhibitors of Cholesterol Ester Transfer Protein (CETP) by CoMFA, CoMSIA and GFA Methodologies. **Medicinal Chemistry Research** 8, 590-604

384. Pednekar DV, Kelkar MA, Pimple SR and Akamanchi KG. (**2004**) 3D QSAR Studies of Inhibitors of Epidermal Growth Factor Receptor [EGFR] Using CoMFA and GFA Methodologies. **Medicinal Chemistry Research** 8, 604-618

385. Pimple SR, Kelkar MA, Pednekar DV and Akamanchi KG. (**2004**) Studies On Novel Non- Imidazole Human H4 Receptor Antagonists Using GFA And Free-Wilson Analysis. **Medicinal Chemistry Research** 8, 619-630

386. Sarkar D, Ghosh I and Datta S. (**2004**) Biochemical characterization of *Plasmodium falciparum* HGXPRTase: role of histidine in substrate selectivity. **Molecular and Biochemical Parasitology** 137, 267-276

387. Mukhopadhyay A, Talukdar S, Bhattacharjee A and Ray K. (**2004**) Bioinformatic approaches for identification and characterization of olfactomedin related genes with a potential role in pathogenesis of ocular disorders. **Molecular Vision** 10, 304-314

388. Trivedi OA, Arora P, Sridharan V, Tickoo R, Mohanty D and Gokhale RS. (**2004**) Enzymic activation and transfer of fatty acids as acyl-adenylates in mycobacteria. **Nature** 428, 441-445

389. Albo Z, Di Prisco GV, Chen Y, Rangarajan G, Truccolo W, Feng J, Vertes RP and Ding M. (**2004**) Is partial coherence a viable technique for identifying generators of Cybernet. **Neural oscillations Biol** 90, 318-326

390. Ansari MZ, Yadav G, Gokhale RS and Mohanty D. (**2004**) NRPS-PKS: A

knowledge-based resource for analysis of NRPS/PKS megasynthases. **Nucleic Acids Research** 32: W405-413

391. Bhaduri A, Pugalenthi G, Gupta N and Sowdhamini R. (**2004**) iMOT: an interactive package for the selection of spatially interacting motifs. **Nucleic Acids Research** 32, W602-W605

392. Bhasin M and Raghava GPS. (**2004**) ESLpred: SVM Based Method for Subcellular Localization of Eukaryotic Proteins using Dipeptide Composition and PSI-BLAST. **Nucleic Acids Research** 32, W414-W419

393. Bhasin M and Raghava GPS. (**2004**) GPCRpred: An SVM Based Method for Prediction of families and subfamilies of G-protein coupled receptors. **Nucleic Acids Research** 32, W383-W389

394. Fernando SA, Selvarani P, Soma D, Kiran Ch. K, Sukanta M, Ramakumar S and Sekar K. (**2004**) THGS: A web based database of Transmembrane Helices in Genome Sequences. **Nucleic Acids Research** 32, D125-D128

395. Krupa A, Abhinandan KR and Srinivasan N. (**2004**) KinG: a database of protein kinases in genomes. **Nucleic Acids Research** 32, D153-5

396. Kulkarni-Kale U, Bhosle S, Manjari S, and Kolaskar AS. (**2004**) VirGen: A comprehensive viral genome resource. **Nucleic Acids Research** 32, 289-292

397. Saravanan M, Bujnicki JM, Cymerman IA, Rao DN and Nagaraja V. (**2004**) Type II restriction endonuclease R.KpnI is a member of the HNH nuclease superfamily. **Nucleic Acids Research** 32, 6129-35

398. Sathyapriya R and Vishveshwara S. (**2004**) Interaction of DNA with Clusters of Amino acids in Proteins. **Nucleic Acids Research** 32, 4109-4118

399. Selvarani P, Shanthi V, Rajesh CK, Saravanan S and Sekar K. (**2004**) BSDD: Biomolecules Segment Display Device - A web based interactive display tool. **Nucleic Acids Research** 32, W645-W648

400. Singh B. (**2004**) PepBuild: A web server for building structure data of peptides / proteins. **Nucleic Acids Research** 32, 559-561

401. Singh S, Rekha N, Pillai B, Singh V, Naorem A, Sampath V, Srinivasan N and Sadhale PP. (**2004**) Domainal Organization Of The Lower Eukaryotic Homologs Of The Yeast RNA Polymerase II Core Subunit Rpb7 Reflects Functional Conservation. **Nucleic Acids Research** 32, 201-210

402. Vinayagam, A, Pugalenthi G, Rajesh T and Sowdhamini R. (**2004**) DSDBASE: A consortium of native and modelled disulphide bonds in proteins. **Nucleic Acids Research** 32, D200-D202

403. Yellaboina S, Seshadri J, Kumar MS and Ranjan A. (**2004**) Predictregulon, A webserver for the prediction of the regulatory protein binding sites and operons in prokaryote genomes. **Nucleic Acids Research** 32, W318-W320

404. Kumar R, Kulkarni A, Jayaraman, VK and Kulkarni BD. (**2004**) Symbolization assisted SVM classifier for noisy data. **Pattern Recognition Letters** 25, 495-504

405. Mundra PA, Madhan Kumar, Krishna Kumar, Jayaraman, VK and Kulkarni BD. (**2004**) Using Pseudo Amino Acid Composition to Predict Protein Subnuclear Localization: Approached with PSSM. **Pattern Recognition Letters** 28, 1610-1615

406. Karmakar R and Bose I. (**2004**) Graded and binary responses in stochastic gene expression. **Physical Biology** 1, 197-204

407. Dasgupta Arupratan, Sinha Subodh K and Praveen Shelly. (**2004**) Structure of replication initiator protein unites diverse viruses causing tomato leaf curl disease (ToLCD). **Plant Science** 166, 1063-1067

408. Chatterjee A, Majee M, Ghosh S and Majumder AL. (**2004**) sll1722, an unassigned open reading frame of Synechocystis PCC 6803, codes for L-myo-inositol 1-phosphate synthase. **Planta** 218, 989-998

409. Kanhere A and Bansal M. (**2004**) DNA Bending and Curvature: A Turning Point in DNA Function. **Proceedings of the National Academy of Sciences of the USA** B70, 239-254

410. Biswas S and Kayastha AM. (**2004**) Spectroscopic characterization of *Phaseolus vulgaris* leucoagglutinin. **Protein and Peptide Letters** 11, 1-7

411. Bhattacharyya R, Pal D and Chakrabarti P. (**2004**) Disulfide bonds, their stereospecific environment and conservation in protein structures. **Protein Engineering, Design and Selection** 17, 795-808

412. Ravi Chandra B, Gowthaman R, Raj Akhouri R, Gupta D and Sharma A. (**2004**) A Distribution of proline-rich (PxxP) motifs in distinct proteomes: functional and therapeutic implications for malaria and tuberculosis. **Protein Engineering, Design and Selection** 17, 175-182

413. Chakrabarti S and Sowdhamini R. (**2004**) Functional sites and evolutionary connections of Acyl Homoserine Lactone synthases. **Protein Engineering, Design, and Selection** 16, 271-278

414. Gopalaswamy R, Narayanan PR and Narayanan S. (**2004**) Cloning, overexpression, and characterization of a serine/threonine protein kinase pknI from *Mycobacterium tuberculosis* H37Rv. **Protein Expression and Purification** 36, 82-9

415. Bhasin M and Raghava GPS. (**2004**) Analysis and Prediction of affinity of TAP binding peptides using Cascade SVM. **Protein Science** 13, 596-607

416. Brinda KV, Nivedita M, Surolia A and Vishveshwara S. (**2004**) Determinants of quaternary association in legume lectins. **Protein Science** 13, 1735-1749

417. Murugan R and Mazumdar S. (**2004**) A simple formalism on dynamics of proteins on potential energy landscapes. **Protein Science** 13, 487-93

418. Preeti M, Krishnamohan K and Krishnaswamy S. (**2004**) HNH family sub-classification leads to identification of commonality in the His-Me endonuclease superfamily. **Protein Science** 13, 295-300

419. Sujatha MS, Sasidhar YU and Balaji PV. (**2004**) Energetics of galactose- and glucose-aromatic amino acid interactions: implications for binding in galactose-specific proteins. **Protein Science** 13, 2502-2514

420. Dasgupta B, Pal L, Basu G and Chakrabarti P. (**2004**) Expanded turn conformations: characterization and sequence-structure correspondence in α-turns with implications in helix folding. **Proteins: Structure, Function and Bioinformatics** 55, 305-315

421. Natt NK, Kaur H and Raghava GPS. (**2004**) Prediction of Transmembrane regions of betabarrel proteins using ANN and SVM based method. **Proteins: Structure, Function and Bioinformatics** 56, 11-18

422. Sanjeev BS and Vishveshwara S. (**2004**) Protein-Water Interactions in Ribonuclease A and Angiogenin: A Molecular Dynamics Study. **Proteins: Structure, Function and Bioinformatics** 55, 915-923

423. Chandu D and Nandi D. (**2004**) Comparative genomics and functional roles of the ATP-dependent proteases Lon and Clp during cytosolic protein degradation. **Research in Microbiology** 155, 710-9

424. Bhinge A, Chakrabarti P, Uthanumallian K, Bajaj K, Chakraborty K and Varadarajan R. (**2004**) Accurate detection of protein : ligand binding sites using molecular dynamics simulations. **Structure** 12, 1989-99

425. Rudresh, Ramakumar S, Ramagopal UA, Inai Y, Goel S, Sahal D and Chauhan VS. (**2004**) *De novo* design and characterization of a helical hairpin eicosapeptide; emergence of an anion receptor in the linker region. **Structure** 12, 389-396

426. Bhasin M and Raghava GPS. (**2004**) Prediction of CTL epitopes using QM, SVM and ANN techniques. **Vaccine** 22, 3195-3204

427. Praveen Shelly, Dasgupta Arupratan and Varma Anupam. (**2004**) Phylogenetic Analysis and Homologies of the Replicase of Tomato Leaf Curl Geminiviruses: Implications for Obtaining Pathogen Derived Resistance. **Virus Genes** 28, 197-201

428. Ray S, Schall JD and Murthy A. (**2004**) Programming of double step saccade sequences: Modulation by cognitive control. **Vision Research** 44, 2271-2707

429. Kumar S and Udayasuriyan V. (**2004**) Cloning of cry2Aa and cry2Ab genes from new isolates of Bt and its expression in recombinant Bt and *E. coli* strains. **World Journal of Microbiology and Biotechnology** 20, 11-17

2005

430. Sahu K, Sau S, Mandal SC and Ghosh TC. (**2005**) Factors influencing the synonymous codon and amino acid usage bias in an AT-rich *P. aeruginosa* phage PhiKZ. **Acta Biochimica et Biophysica Sinica** 37, 625-633

431. Balamurugan B, Samaya Mohan K, Ramesh J, Roshan MN, Sumathi K and Sekar K. (**2005**) SSEP-2.0: Secondary Structural Elements of Proteins. **Acta Crystallographica: Section D-Biological Crystallography** D61, 634-636

432. Samaya KM, Sheik SS, Ramesh J, Balamurugan B, Jeyasimhan, M, Mayilarasi C and Sekar K. (**2005**) CADB - 2.0: Conformation Angles DataBase. **Acta Crystallographica: Section D-Biological Crystallography** D61, 637-639

433. Ananthalakshmi P, Samayamohan K, Chokalingam C, Mayilarasi C, and Sekar K. (**2005**) PSST-2.0: Protein Data Bank Sequence Search Tool. **Applied Bioinformatics** 4, 141-5

434. Bharanidharan D and Gautham N. (**2005**) Amino acid variation in cellular processes in 108 bacterial proteomes.

Archives of Microbiology 184, 168-174

435. Patel PS, Telang SD, Rawal RM and Shah MH. (**2005**) A review of proteomics in cancer research. **Asian Pacific Journal of Cancer Prevention** 6, 113-7

436. Agarwal SM. (**2005**) Evolutionary rate variation in eukaryotic lineage specific human intronless proteins. **Biochemical & Biophysical Research Communications** 337, 1192-1197

437. Agarwal SM and Gupta J. (**2005**) Comparative analysis of human intronless proteins. **Biochemical & Biophysical Research Communications** 331, 512-9

438. Bagchi A and Ghosh TC. (**2005**) A structural study towards the understanding of the interactions of SoxY, SoxZ, and SoxB, leading to the oxidation of sulfur anions via the novel global sulphur oxidizing (sox) operon. **Biochemical & Biophysical Research Communications** 335, 609-15

439. Bagchi A and Roy P. (**2005**) Structural insight into SoxC and SoxD interaction and their role in electron transport process in the novel global sulfur cycle in *Paracoccus pantotrophus*. **Biochemical & Biophysical Research Communications** 331, 1107-1113

440. Banerjee T, Gupta SK and Ghosh TC. (**2005**) Towards a resolution on the inherent methodological weakness of the "effective number of codons used by a gene". **Biochemical & Biophysical Research Communications** 330, 1015-1018

441. Basak S and Ghosh TC. (**2005**) On the origin of genomic adaptation at high temperature for prokaryotic organisms. **Biochemical & Biophysical Research Communications** 330, 629-632

442. Basak S, Mandal S and Ghosh TC. (**2005**) Correlations between genomic GC levels and optimal growth temperatures: some comments. **Biochemical & Biophysical Research Communications** 327, 969-970

443. Padmanabhan PK, Mukherjee A, Singh S, Chattopadhyaya S, Gowri VS, Myler PJ, Srinivasan N and Rentala M. (**2005**) Glyoxalase I from *Leishmania donovani*: A potential target for anti-parasite drug. **Biochemical & Biophysical Research Communications** 337, 1237-1248

444. Brinda KV, Surolia A and Vishveshwara S. (**2005**) Insights into the quaternary association of proteins through structure graphs: A case study of lectins. **Biochemical Journal** 391, 1-15

445. Verma M, Bhat PJ and Venkatesh KV. (**2005**) Steady state analysis of glucose repression reveals hierarchical expression of proteins under Mig1p control in *Saccharomyces cerevisiae*. **Biochemical Journal** 388, 843-849

446. Chakraborty K, Thakurela S, Prajapati RS, Indu S, Ali PS, Ramakrishnan C and Varadarajan R. (**2005**) Protein stabilization by introduction of cross-strand disulfides. **Biochemistry** 44, 14638-46

447. Gupta S, Banerjee M, Poddar A, Banerjee A, Basu G, Roy Dand Bhattacharya B. (**2005**) The biphasic kinetics of Colchicine-Tubulin interaction: Role of amino acids surrounding the A-ring of bound colchicine molecule. **Biochemistry** 44, 10181-10188

448. Shenoy AR, Sreenath N, Podobnik M, Kovacevic M, Visweswariah SS. (**2005**) The Rv0805 gene from *Mycobacterium*

tuberculosis encodes a 3',5'-cyclic *nucleotide* phosphodiesterase: biochemical and mutational analysis. **Biochemistry** 44, 15695-704

449. Sujatha MS, Sasidhar YU and Balaji PV. (**2005**) Insights into the role of aromatic residue in galactose-binding sites: MP2/6-311G++** study on galactose- and glucose-aromatic residue analog complexes. **Biochemistry** 44, 8554-8562

450. Raghothama C, Harsha HC, Prasad CK and Pandey A. (**2005**) Bioinformatics and proteomics approaches for aging research. **Biogerontology** 6, 227-32

451. Anand B, Gowri VS and Srinivasan N. (**2005**) Use of multiple profiles corresponding to a sequence alignment enables effective detection of remote homologues. **Bioinformatics** 21, 2821-2826

452. Bhasin M, Garg A and Raghava GPS. (**2005**) PSLpred: prediction of subcellular localization of bacterial proteins. **Bioinformatics** 21, 2522-2524

453. Chavali S, Mahajan A, Tabassum R, Maiti S and Bharadwaj D . (**2005**) Oligo*nucleotide* properties determination and primer designing: a critical examination of predictions. **Bioinformatics** 21, 3918-25

454. Hu ZZ, Narayanaswamy M, Ravikumar KE, Vijay-Shanker K and Wu CH. (**2005**) Literature mining and database annotation of protein phosphorylation using a rule-based system. **Bioinformatics** 21, 2759-2765

455. Jacob E, Sasikumar R and Nair KN. (**2005**) A fuzzy guided genetic algorithm for operon prediction. **Bioinformatics** 21, 1403-7

456. Kulkarni OC, Vigneshwar R, Jayaraman VK and Kulkarni BD. (**2005**) Identification of coding and non-coding sequences using local Holder exponent formalism. **Bioinformatics** 21, 3818-23

457. Narayanaswamy M, Ravikumar KE and Vijay-Shanker K. (**2005**) Beyond the clause: extraction of phosphorylation information from medline. **Bioinformatics** 21 Suppl 1:i319-27

458. Prakash P, Yellaboina S, Ranjan A and Hasnain SE. (**2005**) Computational prediction and experimental verification of novel IdeR binding sites in the upstream sequences of *Mycobacterium tuberculosis* ORFs. **Bioinformatics** 21, 2161-2166

459. Sachdeva G, Kumar K, Jain P and Ramachandran S. (**2005**) SPAAN: a software program for prediction of adhesins and adhesin-like proteins using neural networks. **Bioinformatics** 21, 483-491

460. Sandhu KS and Acharya KK. (**2005**) ExPrimer: To design primers from exon-exon junctions. **Bioinformatics** 21, 2091-2092

461. Tendulkar AV, Sohoni MA, Ogunnaike, B and Wangikar PP. (**2005**) A geometric invariant based framework for the analysis of protein conformational space. **Bioinformatics** 21, 3622-3628

462. Bhargavi R, Vishwakarma S, and Murty US. (**2005**) A secondary structural common core in the ribosomal ITS2 (internal transcribed spacer) of Culexspecies from diverse geographical locations. **Bioinformation** 1, 52-5

463. Gowthaman R, Duraisamy S, Kalita MK and Gupta D. (**2005**) A database for *Plasmodium falciparum* protein models. **Bioinformation** 1, 50-51

464. Kumar DVRS, Sriram K, Madhusudhan Rao K and Suryanarayana Murty U. (**2005**) Management of filariasis using prediction rules derived from data mining. **Bioinformation** 1, 8-11

465. Masood A, Shafi M. (**2005**) A database for medicinal and aromatic plants of JK (Jammu and Kashmir) in India. **Bioinformation** 1, 56-7

466. Murty US, Kumar DV, Rao MS, Reuben R, Tewari SC, Hiriyan J, Akiyama J and Akavaram D. (**2005**) Rapid identification of female Culexmosquito species using Expert System in the South East Asian region. **Bioinformation** 1, 40-41

467. Murty USN, Kumar DVRS, Sriram K, Madhusudhan RKK, Bhattacharyulu CHNV, Praveen B and Radha Krishna A. (**2005**) A Web based relational database management system for filariasis control. **Bioinformation** 1, 19-20

468. Praveen Bhoopathi, Vincent S, Murty USN, Radha Krishna A and Jamil Kaiser . (**2005**) A rapid identification system for metallothionein proteins using expert system. **Bioinformation** 1, 14-15

469. Rajagopal V, Manimekalai R, Devakumar K, Rajesh, Karun A, Niral V, Gopal M, Aziz S, Gunasekaran M, Kumar MR and Chandrasekar A. (**2005**) A database for coconut crop improvement. **Bioinformation** 1, 75-7

470. Rayavarapu B, Siddharth V and Upadhyayula SM. (**2005**) Modeling analysis of GST (glutathione- S-transferases) from *Wuchereria bancrofti* and *Brugia malayi*. **Bioinformation** 1, 25-27

471. Tamanna A and Khan AU. (**2005**) Mapping and analysis of simple sequence repeats in the *Arabidopsis thaliana* genome. **Bioinformation** 1, 64-8

472. Narayanan R and Gunturi SB. (**2005**) *In silico* ADME modelling: prediction models for blood-brain barrier permeation using a systematic variable selection method. **Bioorganic & Medicinal Chemistry** 1, 3017-28

473. Bagchi A and Ghosh TC. (**2005**) Structural insight into the interactions of SoxV, SoxW and SoxS in the process of transport of reductants during sulfur oxidation by the novel global sulfur oxidation reaction cycle. **Biophysical Chemistry** 119, 7-13

474. Sinha S and Surolia A. (**2005**) Oligomerization endows enormous stability to soybean agglutinin: A Comparison of the stability of monomer and tetramer of Soybean Agglutinin. **Biophysical Journal** 88, 4243-4251

475. Nandel FS and Khare B. (**2005**) Conformation of peptides Constructed from Achiral Amino Acid Residues Aib and DZPhe: Computational study of the Effect of L/D- Leu at terminal positions. **Biopolymers** 77, 63-73

476. Pal, L., Dasgupta, B and Chakrabarti P. (**2005**) 310-helix adjoining α -helix and β -strand: sequence, structural features and their conservation. **Biopolymers** 78, 147-162

477. Ramakrishnan V, Ranbhor R and Durani S. (**2005**) Simulated folding in polypeptides of diversified molecular tacticity: implications for protein folding and *de novo* design. **Biopolymers** 78, 96-105

478. Banerjee T, Gupta SK and Ghosh TC. (**2005**) Role of mutational bias and natural selection on genome-wide *nucleotide* bias in prokaryotic organisms. **BioSystems** 81, 11-18

479. Roy S, Alam S, Chattopadhyay J. (**2005**) Role of nutrient bound of prey on the dynamics of predator-mediated competitive-coexistence. **Biosystems** 82, 143-53

480. Chandrasekaran S, Bhartiya S. And Wangikar P P. (**2005**) Substrate specificity of lipases in alkoxycarbonylation reaction: QSAR model development and experimental validation. **Biotechnology and Bioengineering** 94, 554-564

481. Brinda KV and Vishveshwara S. (**2005**) Oligomeric protein structure networks: Insights into protein-protein interactions. **BMC Bioinformatics** 6, 296

482. Ganapathi M, Srivastava P, Das Sutar SK, Kumar K, Dasgupta D, Pal S G, Brahmachari V and Brahmachari SK. (**2005**) Comparative analysis of chromatin landscape in regulatory regions of human housekeeping and tissue specific genes. **BMC Bioinformatics** 6, 126

483. Gupta K, Thomas D, Vidya SV, Venkatesh KV and Ramakumar S. (**2005**) Detailed protein sequence alignment based on Spectral Similarity Score (SSS). **BMC Bioinformatics** 6, 105

484. Kanhere A and Bansal M. (**2005**) A novel method for prokaryotic promoter prediction based on DNA stability. **BMC Bioinformatics** 6, 1

485. Raghava GPS and Han JH. (**2005**) Correlation and prediction of gene expression level from amino acid and dipeptide composition of its protein. **BMC Bioinformatics** 6, 59

486. The Rice Chromosomes 11 and 12 Sequencing Consortia. (**2005**) The sequence of rice chromosomes 11 and 12, rich in disease resistance genes and recent gene duplication. **BMC Biology** 3, 20

487. Metpally RP and Sowdhamini R. (**2005**) Genome wide survey of G protein-coupled receptors in Tetraodon nigroviridis. **BMC Evolutionary Biology** 5, 41

488. Krupa A and Srinivasan N. (**2005**) Diversity in domain architectures of Ser/Thr kinases and their homologues in prokaryotes. **BMC Genomics** 6, 129

489. Metpally RR and Sowdhamini R. (**2005**) Cross genome phylogenetic analysis of Human and Drosophila G-protein-coupled receptors: Application to functional annotation of orphan receptors. **BMC Genomics** 6, 106

490. Nandi S, Mehra N, Lynn AM and Bhattacharya A. (**2005**) Comparison of theoretical proteomes: Identification of COGs with conserved and variable pI within the multimodal pI distribution. **BMC Genomics** 6, 116

491. Saha S, Bhasin M and Raghava GPS. (**2005**) BCIPEP: A database of B-cell epitopes. **BMC Genomics** 6, 79

492. Kauser F, Hussain MA, Ahmed I, Srinivas S, Devi SM, Majeed AA, Rao KR, Khan AA, Sechi LA and Ahmed N. (**2005**) Comparative genomics of *Helicobacter pylori* isolates recovered from ulcer disease patients in England. **BMC Microbiolgy** 5, 32

493. De S, Krishnadev O, Srinivasan N and Rekha N. (**2005**) Interaction preferences across proteinprotein interfaces of obligatory and non-obligatory components are different. **BMC Structure Biology** 5, 15

494. Sharma P, Sahni NS, Tibshirani R, Skaane P, Urdal P, Berghagen H, Jensen

M, Kristiansen L, Moen C, Sharma P, Zaka A, Arnes J, Sauer T, Akslen LA, Schlichting E, Borresen-Dale AL and Lonneborg A. (**2005**) Early detection of breast cancer based on geneexpression patterns in peripheral blood cells. **Breast Cancer Research** 7, R634-R644

495. Shabaana AK, Kulangar K, Semac I, Parel Y, Ilangumaran S, Dharmalingam, K, Chizzolini C and Hoessli DC. (**2005**) *Mycobacterial liporaabinomannans* modulate cytokine production in human T helper cells by interfering with raft/microdomain signalling. **Cellular and Molecular Life Sciences** 62, 001-009

496. Rana S, Kundu B and Durani S. (**2005**) A small peptide stereochemically customized as a globular fold with a molecular cleft. **Chemical Communications** 2005, 207-209

497. Mueller LA, Tanksley SD, Giovannoni JJ, van Eck J, Stack S, Choi D, Kim B D, Chen M, Cheng Z, Li C, Ling Xue Y, Seymour G, Bishop G, Bryan G, Sharma R, Khurana J, Tyagi AK, Chattopadhyay D, Singh N, Stiekema W, Lindhout P, Jesse T, Lankhorst R K, Bouzayen M, Shibata D, Tabata S, Granell A, Botella MA, Giuliano G, Frusciante L, Causse M and Zamir D. (**2005**) The tomato sequencing project, the first cornerstone of the international Solanaceae project (SOL). **Comparative and Functional Genomics** 6, 153-158

498. Saraboji K, Gromiha MM and Ponnuswamy MN. (**2005**) Relative importance of secondary structure and solvent accessibility to the stability of protein mutants: A case study with amino acid properties and energetics on T4 and human lysozymes. **Computational Biology and Chemistry** 29, 25-35

499. Sharmila A, Mridula P and Pennathur G. (**2005**) Potential Drug Targets in *Mycobacterium tuberculosis* through Metabolic Pathway Analysis. **Computational Biology and Chemistry** 29, 368-379

500. Pande MB, Nagabhushan P, Hegde ML, Rao TS and Rao KS. (**2005**) An algorithmic approach to understand trace elemental homeostasis in serum samples of Parkinson disease. **Computers in Biology and Medicine** 35, 475-93

501. Kalia A and Gupta RP. (**2005**) Proteomics: a paradigm shift. **Critical Reviews in Biotechnology** 25, 173-98

502. Natarajan J, Berrar D, Hack CJ and Dubitzky W. (**2005**) Knowledge Discovery in Biology and Biotechnology Texts: A Review of Techniques, Evaluation Strategies and Applications. **Critical Reviews in Biotechnology** 25, 31-52

503. Rajasethupathy P, Vayttaden S J and Bhalla US. (**2005**) Systems modeling: a pathway to drug discovery. **Current Opinion in Chemical Biology** 9, 400-406

504. Chavan V, Rane NS, Ghate HV and Krishnan S. (**2005**) IndCollections: biological specimens in Indian collections. **Current Science** 89, 1454-1455

505. Das D, Verma SK and Ray SK. (**2005**) An Altered G + C% Region Within Potential Hemagglutinin ORFs of *Ralstonia solanacearum*. **Current Science** 88, 786-792

506. Ghosh AK, Datta A, Mahendran B and Kundu SC. (**2005**) Molecular characterization of a Paolike long terminal repeat retrotransposon, Tamy in saturniid silkworm *Antheraea mylitta*. **Current Science** 89, 539-543

507. Malathi S, Karunasagar I and Karunasagar I. (**2005**) A computer based identification of variable number of tandem repeats in White Spot Syndrome Virus (WSSV) genomes. **Current Science** 89, 882-887

508. Sheik SS, Aggarwal SK, Poddar A, Sathiyabhama B, Balakrishnan N and Sekar K. (**2005**) Analysis of string searching algorithms on biological sequence databases. **Current Science** 89, 368-374

509. Uma A, Koteeswaran A, Karunasagar I and Karunasagar I. (**2005**) Prevalence of Whitespot Syndrome Virus (WSSV) and monodon baculovirus (MBV) in *Penaeus monodon* broodstock and postlarvae (PL) from hatcheries in southeast coast of India. **Current Science** 89: 1619-1622

510. Vengadesan K and Gautham N. (**2005**) A new conformational search technique and its applications. **Current Science** 88, 1759-1770

511. Verma, SK, Das D, Satapathy SS, Buragohain AK and RaySK. (**2005**) Compositional Symmetry of DNA Duplex in Bacterial Genomes. **Current Science** 89, 374-384

512. Manjanaik B, Umesha KR, Karunasagar I, and Karunasagar I. (**2005**) Detection of hepatopancreatic parvovirus (HPV) in wild shrimps in India by nested polymerase chain reaction (PCR). **DAO** 63, 255-259

513. Das S, Paul S, Chatterjee S and Dutta C. (**2005**) Codon and amino Acid usage in two major human pathogens of genus bartonella - optimization between replicational-transcriptional selection, translational control and cost minimization. **DNA Research** 12, 91-102

514. Gandhi TK, Chandran S, Peri S, Saravana R, Amanchy R, Prasad TS and Pandey A. (**2005**) A bioinformatics analysis of protein tyrosine phosphatases in humans. **DNA Research** 12, 79-89

515. Mallick B, Chakrabarti J, Sahoo S, Ghosh Z and Das S. (**2005**) Identity Elements of Archaeal tRNA. **DNA Research** 12, 235-246

516. Latha, N and Jayaram B. (**2005**) A Binding Affinity Based Computational Pathway for Active-Site Directed Lead Molecule Design: Some Promises and Perspectives. **Drug Design Reviews - Online** 2, 145-165

517. Parvathi, A., Sanath, K. H., Karunasagar, I. & Karunasagar, I. (2005). (**2005**) Study of occurrence of *V. vulnificus* by RAPD and gyrB sequence analysis. **Environmental Microbiology** 7, 995-1002

518. Bakre A A, Rawal K, Ramaswamy R, Bhattacharya A and Bhattacharya S. (**2005**) The LINEs and SINEs of *Entamoeba histolytica*: comparative analysis and genomic distribution. **Experimental Parasitology** 110, 207-213

519. Rathinavelan T and Yathindra N. (**2005**) Molecular dynamics structures of peptide nucleic acid x DNA hybrid in the wild-type and mutated alleles of Ki-ras proto-oncogene--stereochemical rationale for the low affinity of PNA in the presence of an AC mismatch. **FEBS Journal** 272, 4055-70

520. Sathyapriya R and Vishveshwara S. (**2005**) Short hydrogen bonds in proteins. **FEBS Journal** 272, 1819-1832

521. Bhat P J and Venkatesh KV. (**2005**) Stochastic variation in the concentration

of a repressor activates GAL genetic switch: Implications in evolution of regulatory network. **FEBS Letters** 579, 597-603

522. Das S, Ghosh S, Pan A and Dutta C. (**2005**) Compositional variation in bacterial genes and proteins with potential expression level. **FEBS Letters** 579, 5205-5210

523. Jain T and Jayaram, B. (**2005**) An all atom energy based computational protocol for predicting binding affinities of protein-ligand complexes. **FEBS Letters** 579, 6659-6666

524. Kulkarni KA, Sinha S, Katiyar S, Surolia A, Vijayan M and Suguna K. (**2005**) Structural basis for the specificity of basic winged bean lectin for the Tn-antigen: A crystallographic, thermodynamic and modelling study. **FEBS Letters** 579, 6775-6780

525. Kumar A, Chandolia A, Chaudhry U, Brahmachari V and Bose M. (**2005**) Comparison of mammalian cell entry operons of mycobacteria: *In silico* analysis and expression profiling. **FEMS Immunology and Medical Microbiology** 43, 185-95

526. Ramachandran SS, Shunmugiah KP, Nirmala Lini, Abdul Khader Shabaana, Nagavardhini A and Dharmalingam K. (**2005**) Cloning of mce1 locus of *Mycobacterium leprae* in *Mycobacterium smegmatis* mc2 155 SMR5 and evaluation of expression of mce1 genes in *M. smegmatis* and *M. leprae*. **FEMS Immunology and Medical Microbiology** 45, 291-302

527. Rasool S et al. (**2005**) Molecular cloning of enantioselective ester hydrolase from *Bacillus pumilus* DBRL-191. **FEMS Microbiology Letters** 249, 113-120

528. Nagarajaram HA, Iengar P and Ghosh I. (**2005**) *In silico* approach to antimalarial drug discovery: Design of selective inhibitor to *Plasmodium falciparum* aspartic proteases. **Frontiers in Biophysics** 2005, 168-181

529. Bandyopadhyay S. (**2005**) An Efficient Technique for Superfamily Classification of Amino Acid Sequences: Feature Extraction, Fuzzy Clustering and Prototype Selection. **Fuzzy Sets and Systems** 152, 5-16

530. Bala P, Georgantas RW 3rd, Sudhir D, Suresh M, Shanker K, Vrushabendra BM, Civin CI, Pandey A. (**2005**) TAGmapper: a web-based tool for mapping SAGE tags. **Gene** 364, 123-129

531. Onofrio DG and Ghosh TC. (**2005**) The compositional transition of vertebrate genomes: an analysis of the secondary structure of the proteins encoded by human genes. **Gene** 345, 27-33

532. Prasad AM, Sivanandan C, Resminath R, Thakare DR, Bhat SR, Srinivasan. (**2005**) Cloning and characterization of a pentatricopeptide protein encoding gene (LOJ) that is specifically expressed in lateral organ junctions in *Arabidopsis thaliana*. **Gene** 353, 67-79

533. Suresh S, Sujatha Mohan S, Mishra G, Hanumanthu GR, Suresh M, Reddy R and Pandey A. (**2005**) Proteomic resources: integrating biomedical information in humans. **Gene** 364, 13-8

534. Chatterjee SN, Taraphdar T and Mohandas TP. (**2005**) Molecular analysis of divergence in tachinid Uzi (*Exorista sorbillans*) populations in India. **Genetica** 125, 1-15

535. Wu XL, MacNeil MD, De S, Xiao QJ, Michal JJ, Gaskins CT, Reeves JJ, Busboom JR, Wright RW and Jiang Z.

(**2005**) Evaluation of candidate gene effects for beef back fat via Bayesian model selection. **Genetica** 125, 103–113

536. Prasad MD, Muthulakshmi M, Madhu M, Archak S, Mita K and Nagaraju J. (**2005**) Survey and analysis of microsatellites in the silkworm, *Bombyx mori*, frequency, distribution, mutations, marker potential and their conservation in heterologous species. **Genetics** 169, 197-214

537. Basu A, Chaudhuri P and Majumder Partha P. (**2005**) Identification of polymorphic motifs using probabilistic search algorithms. **Genome Research** 15, 67-77

538. Singh DD, Saikrishnan K, Kumar P, Sekar K, Surolia A. and Vijayan M. (**2005**) Unusual sugar specificity of banana lectin from *Musa paradisiaca* and its probable evolutionary origin. Crystallographic and modelling studies. **Glycobiology** 15, 1025-1032

539. The Indian Genome Variation Consortium. (**2005**) The Indian Genome Variation database (IGVdb): a project overview. **Human Genetics** 118, 1-11

540. Babu PA, Boddepalli R, Lakshmi VV, Rao GN. (**2005**) DoD: Database of Databases--updated molecular biology databases. ***In silico*** **Biology** 5, 605-10

541. Bhadra R, Srinivasan, N and Pandit SB. (**2005**) A new domain family in the superfamily of alkaline phosphatises. ***In silico*** **Biology** 5, 379-387

542. Gaurav K, Gupta N and Sowdhamini R. (**2005**) FASSM: Enhanced Function Association in whole genome analysis using Sequence and Structural Motifs. ***In silico*** **Biology** 5, 425-438

543. Mondal S, Vijayan R, Shichina K, Babu RM and Ramakumar S. (**2005**) I-superfamily conotoxins: sequence and structure analysis. ***In silico*** **Biology** 5, 557-571

544. Prasad PA, Vengadesan K and Gautham N. (**2005**) MOLS - A program to explore the potential energy surface of a peptide and locate its low energy conformations. ***In silico*** **Biology** 5, 401-405

545. Basu S, Majumdar R, Das GK and Bhattacharyya D. (**2005**) Energy barriers and rates of tautomeric transitions in DNA bases: *Ab initio* quantum chemical study. **Indian Journal of Biochemistry & Biophysics** 42, 378-385

546. Rajeshwari M. and Palanivelu P. (**2005**) UlTRaSCAN - an algorithm for prediction of pattern (s) in untranslated regions of eukaryotic mRNAs. **Indian Journal of Biotechnology** 4, 21-38

547. Sujatha K, Mahalakshmi A and Shenbagarathai R. (**2005**) Analysis of PCR products for PHB production for indigenous Pseudomonas sp. LDC-5. **Indian Journal of Biotechnology** 4, 323 – 335

548. Bhattacharyya D, Sen K and Mukherjee S. (**2005**) Non-planar Amino Groups: Protein Structure Database Analysis and *Ab initio* Quantum Chemical Studies on Model Systems. **Indian Journal of Chemistry** 45A, 58-67

549. Vishwas C, Achuthankutty CT, Edward VB and Mohideen W. (**2005**) Indobis an Ocean Biogeographic Information System for assessment and conservation of Indian Ocean biodiversity. **Indian Journal of Marine Sciences** 34, 120-127

550. Bhargavi R, Sastry GM, Murty USN and Sastry GN. (**2005**) Structural and active site analysis of plasmepsins of

Plasmodium falciparum: Potential anti-malarial targets. **International Journal of Biological Macromolecules** 37, 73-84

551. Guruprasad K, Savitha S and Babu AV. (**2005**) Computational tools for the analysis of heteroatom groups and their neighbours in protein tertiary structure. **International Journal of Biological Macromolecules** 37, 35-41

552. Guruprasad K, Srikanth K and Babu AV. (**2005**) PSSARD: protein sequence-structure analysis relational database. **International Journal of Biological Macromolecules** 36, 259-262

553. Garg AR, Obermayer K and Bhaumik B. (**2005**) Development of feed-forward Receptive Field Structure of a Simple Cell and its Contribution to the Orientation Selectivity: A Modelling Study. **International Journal of Neural Systems** 15, 55-70

554. Sung KK, Ananthasuresh GK and Vishveshwara S. (**2005**) A Deterministic Optimization Approach to Protein Sequence Design Using Continuous Models. **International Journal of Robotics Research** 24, 109-130

555. Rajshekhar, Kulkarni A, Jayaraman VK and Kulkarni BD. (**2005**) Modeling Structure Property Relationships with Kernel Recursive Least Squares. **Internet Electronic Journal of Molecular Design** 4, 381-392

556. Bhattacharjee A and Bansal M. (**2005**) Collagen Structure: The Madras triple helix and the current scenario. **IUBMB Life** 57, 161-172

557. Patel RY and Balaji PV. (**2005**) Effect of the choice of pressure coupling method on the spontaneous aggregation of DPPC molecules. **Journal of Physical Chemistry B** 109, 14667-14674

558. Gupta SK, Banerjee T, Basak S, Sahu K, Sau S and Ghosh TC. (**2005**) Studies on codon usage in *Thermoplasma acidophilum* and its possible implications on the occurrences of lateral gene transfer. **Journal of Basic Microbiology** 45, 344-354

559. Harsha Rani GV, Vayttaden SJ and Bhalla US. (**2005**) Electronic data sources for kinetic models of cell signaling. **Journal of Biochemistry** 137, 653-657

560. Bandyopadhyay S, Bagchi A and Maulik U. (**2005**) Active site driven ligand design: an evolutionary approach. **Journal of Bioinformatics and Computational Biology** 3, 1053-1070

561. Mukherjee S and Mitra S. (**2005**) Hidden Markov Models, grammars, and biology: a tutorial. **Journal of Bioinformatics and Computational Biology** 3, 491-526

562. Garg A, Bhasin M and Raghava GP. (**2005**) Support vector machine-based method for subcellular localization of human proteins using amino acid compositions, their order, and similarity search. **Journal of Biological Chemistry** 280, 14427-14432

563. Srivastava SK, Tripati RP and Ravishankar R. (**2005**) NAD+-dependent DNA ligase(rv3014c) from *M. tuberculosis*: Crystal structure of the adenylation domain and identification of novel inhibitors. **Journal of Biological Chemistry** 280, 30273-30281

564. Bansal-Mutalik, R, Mustafi SM, Bhattacharya A and Chary KV. (**2005**) Sequence specific 1HN, 13C and 15N resonance assignments of a novel calcium-binding protein from *Entamoeba histolytica*. **Journal of Biomolecular NMR** 31, 379-380

565. Bagchi A Roy D and Roy P. (**2005**) Homology modeling of a transcriptional regulator SoxR of the lithotrophic sulfur oxidation (Sox) operon in α-Proteobacteria. **Journal of Biomolecular Structure and Dynamics** 22, 571-577

566. Blaise MC, Bhattacharyya D, Sowdhamini R and Pradan N. (**2005**) Structural consequences of D481N/K483Q mutation at glycine binding site of NMDA ionotropic glutamate receptors: a molecular dynamics study. **Journal of Biomolecular Structure and Dynamics** 22, 399-410

567. Das S, Pan A, Paul, S and Dutta. (**2005**) Comparative analyses of codon and amino acid usage in symbiotic island and core genome in nitrogen-fixing symbiotic bacterium *Bradyrhizobium japonicum*. **Journal of Biomolecular Structure and Dynamics** 23, 221-232

568. Madhumalar A and Bansal M. (**2005**) Sequence preference for BI/BII conformations in DNA: MD and crystal structure data analysis. **Journal of Biomolecular Structure and Dynamics** 23, 13-27

569. Roy S and Sen S. (**2005**) Homology Modeling based solution structure of Hoxc8-DNA complex; role of context bases outside TAAT stretch. **Journal of Biomolecular Structure and Dynamics** 22, 707-718

570. Sandhya S, Chakrabarti S, Abhinandan KR, Sowdhamini R and Srinivasan N. (**2005**) Assessment of a rigorous transitive profile based search method to detect remotely similar proteins. **Journal of Biomolecular Structure and Dynamics** 23, 283-298

571. Sanjeev BS and Vishveshwara S. (**2005**) Dynamics of the native and the ligand-bound structures of eosinophil cationic protein: Network of hydrogen bonds at the catalytic site. **Journal of Biomolecular Structure and Dynamics** 22, 657-671

572. Veluraja K and Margulis CJ. (**2005**) Conformational dynamics of sialyl Lewisx in aqueous solution and its interaction with SelectinE – A study by Molecular Dynamics. **Journal of Biomolecular Structure and Dynamics** 23, 101-111

573. Das S, Chakrabarti J, Ghosh Z, Sahoo S and Mallick B. (**2005**) A new measure to study phylogenetic relations in the brown algal order Ectocarpales: the "codon impact parameter". **Journal of Biosciences** 30, 699-709

574. Tatu U, Jain S and Priya PP. (**2005**) Whither genome research: of man, mosquito and malaria. **Journal of Biosciences** 30, 567-71

575. Gopalakrishnan B, Aparna V, Jeevan J, Ravi M and Desiraju GR. (**2005**) A virtual screening approach for thymidine monophosphate kinase inhibitors as antitubercular agents based on docking and pharmacophore models. **Journal of Chemical Information and Modeling** 45, 1101-8

576. Chopra Madhu and Mishra AK. (**2005**) Ligand-Based Molecular Modeling Study on Chemically Diverse Series of Cholecystokinin-B/Gastrin Receptor Antagonists: Generation of Predictive Model. **Journal of Chemical Information and Modeling,** 45, 1934-1942

577. Guerra-Peraza O, Kirk D, Seltzer V, Veluthambi K, Schmidt AC, Hohn T and Herzog E. (**2005**) Coat proteins of Rice tungro bacilliform virus and Mungbean

yellow mosaic virus contain multiple nuclear-lacalization signals and interact with importin. **Journal of General Virology** 86, 1815-1826

578. Eswaran V, Harpending H and Rogers AR. (**2005**) Genomics refutes an exclusively African origin of humans. **Journal of Human Evolution** 49, 1-18

579. Banerjee M, Poddar A, Mitra G, Surolia A, Owa T and Bhattacharyya B. (**2005**) Sulfonamide drugs binding to the colchicine site of tubulin: thermodynamic analysis of the drug-tubulin interactions by isothermal titration calorimetry. **Journal of Medicinal Chemistry** 48, 547-555

580. Majumdar S and Sikdar SK. (**2005**) Fast pseudo-periodic oscillations in the rat brain voltage-gated sodium channel a subunit. **Journal of Membrane Biology** 208, 1-14

581. Bhaduri A and Sowdhamini R. (**2005**) Genome-wide survey of prokaryotic O-protein phosphatases. **Journal of Molecular Biology** 352, 736-752

582. Cheeran A, Suganthan RB, Swapna G, Bandey I, Acharya S, Nagarajaram HA and Sen R. (**2005**) *E. coli* RNA polymerase mutations located near the upstream edge of RNA,DNA hybrid and the beginning of the RNA exit channel are defective for transcription antitermination by N protein from lambdoid phage H-19B. **Journal of Molecular Biology** 352, 28-43

583. Jeyaprakash AA, Jayashree G, Mahanta SK, Swaminathan CP, Sekar K, Surolia A and Vijayan M. (**2005**) Structural basis for the energetics of jacalin-sugar interactions: promiscuity versus specificity. **Journal of Molecular Biology** 347,181-188

584. Gadkari R, Roy S, Murthy GS, Rekha N, Srinivasan N and Dighe RR. (**2005**) Identification of a heterodimer-specific epitope present in human chorionic gonadotropin (hcg) using a monoclonal antibody that can distinguish between hcg and human luteinizing hormone. **Journal of Molecular Endocrinology** 34, 879-884

585. Chanda I, Pan A and Dutta C. (**2005**) Proteome composition in *Plasmodium falciparum*: higher usage of GC-rich nonsynonymous codons in highly expressed genes. **Journal of Molecular Evolution** 61, 513-523

586. Gaur M, Choudhury D and Prasad R. (**2005**) Complete inventory of ABC proteins in human pathogenic yeast, *Candida albicans*. **Journal of Molecular Microbiology and Biotechnology** 9, 3-15

587. Blaise M, Sowdhamini R and Pradhan N. (**2005**) Comparative analysis of different competitive antagonists interaction with NR2A and NR2B subunits of N-methyl-D-aspartate (NMDA) ionotropic glutamate receptor. **Journal of Molecular Modelling** 11, 489-502

588. Jyothi S, Mustafi SM, Chary KVR and Joshi RR. (**2005**) Structure Prediction of a Multidomain EF-hand Ca2+ Binding Protein by PROPAINOR. **Journal of Molecular Modelling** 11, 481-488

589. Bagchi A and Ghosh TC. (**2005**) Structural identification of a novel thioredoxin SoxS: prediction of the function in the process of transport of reductants during sulfur oxidation by the novel global sulfur oxidation reaction cycle. **Journal of Molecular Structure Theochem** 758, 113-118

590. Yadav A and Singh SK. (**2005**) Common binding mode for structurally

and chemically diverse nonnucleosidic HIV-1RT inhibitors723. **Journal of Molecular Structure Theochem** 723, 205-209

591. Mukherjee S, Majumdar S and Bhattacharyya D. (**2005**) Role of Hydrogen Bonds in Protein-DNA Recognition: Effect of Non-planar Amino Groups. **Journal of Physical Chemistry B** 109, 10484-10492

592. Khachane A, Kumar R, Jain S, Jain S, Banumathy G, Singh V, Nagpal S and Tatu U. (**2005**) Plasmo2D": an ancillary proteomic tool to aid identification of proteins from *Plasmodium falciparum*. **Journal of Proteome Research** 4, 2369-74

593. Saha RP, Bahadur RP and Chakrabarti P. (**2005**) Interresidue contacts in proteins and protein-protein interfaces and their use in characterizing the homodimeric interface. **Journal of Proteome Research** 4, 1600-1609

594. Surjit M, Kumar R, Mishra RN, Reddy MK, Chow VTK and Lal SK. (**2005**) The SARS coronavirus nucleocapsid (N) protein is phosphorylated and localizes in the cytoplasm by 14-3-3 mediated translocation. **Journal of Virology** 79, 11476-11486

595. Sridhar GR, Nirmala G, Apparao A, Madhavi AS, Sreelatha S, Rani JS and Vijayalakshmi P. (**2005**) Serum butyrylcholinesterase in type 2 D*iabetes mellitus*: a biochemical and bioinformatics approach. **Lipids in Health and Disease** 4, 18

596. Joshi RR. (**2005**) Diagnostics Using Computational Nadi Patterns. **Mathematical and Computer Modelling** 41, 33-47

597. Sinha S, Kosalai K, Arora S, Namane A, Sharma P, Gaikwad AN, Brodin P and Cole ST. (**2005**) Immunogenic membrane-associated proteins of *Mycobacterium tuberculosis* revealed by proteomics. **Microbiology** 151, 2411-9

598. Upadhyay R, Bawankar P, Malhotra D and Patankar S. (**2005**) A screen for conserved sequences with biased base composition identifies noncoding RNAs in the A-T rich genome of *Plasmodium falciparum*. **Molecular and Biochemical Parasitology** 144, 149-58

599. Trivedi OA, Arora P, Vats A, Ansari MZ, Tickoo R, Sridharan V, Mohanty D and Gokhale RS. (**2005**) Dissecting the mechanism and assembly of a complex virulence mycobacterial lipid. **Molecular Cell** 17, 631-643

600. Suresh A, Shah V, Rani DS, Singh BN, Prasad GU, Subramanian S, Kumar S and Singh L. (**2005**) A mouse gene encoding a novel member of the WD family of proteins is highly conserved and predominantly expressed in the testis (Wdr13). **Molecular Reproduction and Development** 72, 299-310

601. International Rice Genome Sequencing Project. (**2005**) The map-based sequence of the rice genome. **Nature** 436, 793-800

602. Loftus B, Anderson I, Davies R, Alsmark UC, Samuelson J, Amedeo P, Roncaglia P, Berriman M, Hirt R P, Mann B J, Nozaki T, Suh B, Pop M, Duchene M, Ackers J, Tannich E, Leippe M, Hofer M, Bruchhaus I, Willhoeft U, Bhattacharya A, ChillingworthT, Churcher C, Hance Z, Harris B, Harris D, Jagels K., Moule S, Mungall K, Ormond D, Squares R, Whitehead S, Quail MA, Rabbinowitsch E, Norbertczak H, Price C, Wang Z, Guillen N, Gilchrist C, Stroup SE, Bhattacharya S, Lohia A, Foster P G,

Sicheritz-Ponten T, Weber C, Singh U, Mukherjee C, El-Sayed NM, Petri WA, JrClark C G, Embley TM, Barrell B, Fraser CM And Hall N. (**2005**) The genome of the protist parasite *Entamoeba histolytica*. **Nature** 433, 865-868

603. Le Novere N, Finney A, Hucka M, Bhalla US, Campagne F, Collado-Vides J, Crampin E, Halstead M, Klipp E, Mendes P, Nielsen P, Sauro H, Shapiro B, Snoep JL, Spence HG and Wanner BL. (**2005**) Minimal Information Requested In the Annotation of biochemical Models (MIRIAM). **Nature Biotechnology** 23, 1509-1515

604. Garg AR, Bhaumik B and Obermayer K. (**2005**) Variable Discharge Pattern and Contrast Invariant Orientation Tuning of a Simple Cell: A Modelling Study. **Neural Inf. Proc. Lett. Rev.** 6, 59-68

605. Mathur M and Bhaumik B. (**2005**) Study of Sptail Frequency Selectivity and its Spatial Organization in the Visual Cortex through a Feedforward Model. **Neurocomputing** 65, 85-91

606. Saha S, Bhasin M and Raghava GPS. (**2005**) BCIpep. **Nucleic Acids Reasearch** Online; http://www3.oup.co.uk/nar/database/summary/642/

607. Ananthalakshmi P, Kiran ChK, Jeyasimhan M, Sumathi K and Sekar K. (**2005**) FF – Fragment Finder: A web based software to identify similar three-dimensional structural motif. **Nucleic Acids Research** 33, W85-W88

608. Bhasin M and Raghava GPS. (**2005**) GPCRsclass : A web tool for classification of amine type of Gprotein coupled Receptors. **Nucleic Acids Research** 33, W143-W147

609. Bhasin M and Raghava GPS. (**2005**) Pcleavage: an SVM based method for prediction of constitutive proteasome and immunoproteasome cleavage sites in antigenic sequences. **Nucleic Acids Research** 33, W202-7

610. Chakrabarti S, Anand AP, Bhardwaj N, Pugalenthi G And Sowdhamini R. (**2005**) SCANMOT: searching for similar sequences using a simultaneous scan of multiple sequence motifs. **Nucleic Acids Research** 33, W274-W276

611. Gangal R and Sharma P. (**2005**) Human pol II promoter prediction: time series descriptors and machine learning. **Nucleic Acids Research** 33, 1332-6

612. Kamra P, Gokhale RS and Mohanty D. (**2005**) SEARCHGTr: a program for analysis of glycosyltransferases involved in glycosylation of secondary metabolites. **Nucleic Acids Research** 33, W220-5

613. Kanhere A and Bansal M. (**2005**) Structural properties of promoters: similarities and differences between prokaryotes and eukaryotes. **Nucleic Acids Research** 33, 3165-3175

614. Krishnadev O, Rekha N, Pandit SB, Abhiman SS, Mohanty Swapna LS, Gore S and Srinivasan N. (**2005**) PRODOC resource for comparison of tethered protein domain architectures with in-built information on distantly related domain families. **Nucleic Acids Research** 33, W126-W129

615. Kulkarni-Kale U, Bhosle S and Kolaskar AS. (**2005**) CEP: a conformational epitope prediction server. **Nucleic Acids Research** 33, W168-W171

616. Kumar M, Bhasin M, Natt NK and Raghava GPS. (**2005**) BhairPred: A webserver for Prediction of Beta-

hairpins in proteins from Multiple Alignment Information Using ANN and SVM Techniques. **Nucleic Acids Research** 33, W154-W159

617. Prasad MD, Muthulakshmi M, Arunkumar KP, Madhu M, Sreenu VB, Pavithra V, Bose B, Nagarajaram, HA, Mita K, Shimada T and Nagaraju J. (**2005**) SilkSatDb, A microsatellite database of the silkworm, *Bombyx mori*. **Nucleic Acids Research** 33, D403-D406

618. Pugalenthi G, Archunan G and Sowdhamini R. (**2005**) DIAL: a web-based server for the automatic identification of structural domains in proteins . **Nucleic Acids Research** 33, W130-W132

619. Pugalenthi G, Bhaduri A and Sowdhamini R. (**2005**) GenDiS: Genomic Distribution of Protein Structural Superfamilies. **Nucleic Acids Research** 33, D252-D255

620. Srivastava SK, Dube D, Tewari N, Dwivedi N, Tripath RP and Ravishankar R. (**2005**) *Mycobacterium tuberculosis* NAD+ -dependent DNA ligase is selectively inhibited by glycosylamines compared with human DNA ligase 1. **Nucleic Acids Research** 33, 7090-7101

621. Sundar DK, Kandavelou M Mani Wu J, Porteus MH and Chandrasegaran S. (**2005**) Zinc finger nucleases: custom-designed molecular scissors for genome engineering of plant and mammalian cells. **Nucleic Acids Research** 33, 5978-5990

622. Thenmalarchelvi R and Yathindra N. (**2005**) New insights into DNA triplexes: Residual twist and radial difference as measures of base triplet non-isomorphism and their implication to sequencedependent non-uniform DNA triplex. **Nucleic Acids Research** 33, 43-55

623. Uma M, Anton M, Johannes G, Krishnasamy S, Rajyashri Villoo MP, KR and Chris B. (**2005**) The Diatom EST Database. **Nucleic Acids Research** 33, D344-D347

624. Manickam MC Durai, Annalakshmi S, Pitchumani K and Srinivasan C. (**2005**) Effect of Cyclodextrin complexation in bromine addition to unsymmetrical olefins: Evidence for participation of cyclodextrin hydroxyl groups. **Organic & Biomolecular Chemistry** 3, 1008

625. Kumar R, Jayaraman VK and Kulkarni BD. (**2005**) An SVM classifier incorporating simultaneous noise reduction and feature selection: Illustrative case examples. **Pattern Recognition** 38, 41-49

626. Deswal R, Singh R, Lynn AM and Frank R. (**2005**) Identification of immunodominant regions of *Brassica juncea* glyoxalase I as potential antitumor immunomodulation targets. **Peptides** 26, 395-404

627. Bagler G and Sinha S . (**2005**) Network properties of protein structures. **Physica A** 346, 27-33

628. Suguna C and Somdatta S. (**2005**) Dynamics of coupled cell-systems. **Physica A** 346, 154-164

629. Ghosh B, Karmakar R and Bose I. (**2005**) Noise Characteristics of Feed Forward Loops. **Physical Biology** 2, 36-45

630. Narang P, Bhushan K, Bose S and Jayaram B. (**2005**) A computational pathway for bracketing native-like structures for small alpha helical globular proteins. **Physical Chemistry Chemical Physics** 7, 2364-75

631. Banerjee T, Gupta SK and Ghosh TC. (**2005**) Compositional transitions between *Oryza sativa* and *Arabidopsis thaliana* genes are linked to the functional change of encoded proteins. **Plant Science** 170, 267-273

632. Kulshreshtha R, Kumar N, Balyan HS, Gupta PK, Khurana P, Tyagi AK and Khurana JP. (**2005**) Structural characterization, expression analysis and evolution of the red/far-red sensing photoreceptor gene, PHYTOCHROME C (PHYC) localized on the 'B' genome of hexaploid wheat (*Triticum aestivum* L.). **Planta** 221, 675-689

633. Hayer A and Bhalla US. (**2005**) Molecular Switches at the Synapse Emerge from Receptor and Kinase Traffic. **PLoS Computational Biology** 1, e20

634. Raman K, Rajagopalan P and Chandra NR. (**2005**) Flux balance analysis of mycolic Acid pathway: targets for anti-tubercular drugs. **PLoS Computational Biology** 1, e46

635. Subbulakshmi LC, Aswin SNS, Krishnan R, Sharmila A and Gautam P. (**2005**) Evidence of a Double-Lid Movement in *Pseudomonas aeruginosa* Lipase: Insights from Molecular Dynamics Simulations. **PLoS Computational Biology** 1, e28

636. Guharoy M and Chakrabarti P. (**2005**) Conservation and relative importance of residues across protein-protein interfaces. **Proceedings of the National Academy of Sciences of the USA** 102, 15447-15452

637. Sen R and Babu S. (**2005**) Modeling and optimization of the process conditions for biomass production and sporulation of a probiotic. **Process Biochem** 40, 2531–2538

638. Idicula-Thomas S and Balaji P V. (**2005**) Understanding the relationhip between the primary structure of proteins and their amyloidogenic propensity: clues from inclusion body formation. **Protein Engineering, Design and Selection** 18, 175-180

639. Idicula-Thomas S and Balaji PV. (**2005**) Understanding the relationship between the primary structure of proteins and their propensity to be soluble on overexpression in *Escherichia coli*. **Protein Science** 14, 582-592

640. Anamika, Srinivasan N and Krupa A. (**2005**) A genomic perspective of protein kinases in *Plasmodium falciparum*. **Proteins Structure, Function and Bioinformatics** 58, 180-189

641. Krishnadev O, Brinda KV Vishveshwara S. (**2005**) A Graph Spectral Analysis of the Structural Similarity Network of Protein Chains. **Proteins Structure, Function, and Bioinformatics** 61, 152-163

642. Garg A, Kaur H and Raghava GPS. (**2005**) Real value prediction of Solvent accessibility in proteins using multiple sequence alignment and secondary structure. **Proteins: Structure, Function and Bioinformatics** 61, 318-324

643. Rajeev M, Sudheer KG, Shambhavi M. and Balaji P. (**2005**) Analysis of GTPases carrying hydrophobic amino acid substitutions in lieu of the catalytic glutamine: Implications for GTP hydrolysis. **Proteins: Structure, Function and Bioinformatics** 59, 332-338

644. Rodier F, Bahadur RP, Chakrabarti P and Janin J. (**2005**) Hydration of protein-protein interfaces. **Proteins: Structure,**

Function and Bioinformatics 60, 36-45

645. Sharadadevi A, Sivakamasundari C and Nagaraj R. (**2005**) Amphipathic alpha-helices in proteins: results from analysis of protein structures. **Proteins: Structure, Function and Bioinformatics** 59, 791-801

646. Sistla RK, Brinda KV and Vishveshwara S. (**2005**) Identification of Domains and Domain Interface Residues in Multidomain Proteins from Graph Spectral Method. **Proteins: Structure, Function and Bioinformatics** 59, 616-626

647. Thangudu RR, Vinayagam A, Pugalenthi G, Manonmani A, Offmann B and Sowdhamini R. (**2005**) Native and modelled disulphide bonds in proteins: Knowledge-based approaches towards structure prediction of disulphide-rich polypeptides. **Proteins: Structure, Function and Bioinformatics** 58, 866-879

648. Muthusamy B, Hanumanthu G, Suresh S, Rekha B, Srinivas D, Karthick L, Vrushabendra BM, Sharma S, Mishra G, Chatterjee P, Mangala KS, Shivashankar HN, Chandrika KN, Deshpande N, Suresh M, Kannabiran N, Niranjan V, Nalli A, Prasad TS, Arun KS, Reddy R, Chandran S, Jadhav T, Julie D, Mahesh M, John SL, Palvankar K, Sudhir D, Bala P, Rashmi NS, Vishnupriya G, Dhar K, Reshma S, Chaerkady R, Gandhi TK, Harsha HC, Mohan SS, Deshpande KS, Sarker M and Pandey A. (**2005**) Plasma Proteome Database as a resource for proteomics research. **Proteomics** 5, 3531-6

649. Chaudhuri P and Dasgupta A. (**2005**) On some stochastic models for replication of character strings. **Statistics & probability letters** 75, 230-236

650. Pal D and Eisenberg D. (**2005**) Inference of protein function from protein structure. **Structure** 13, 121-30

651. Mehta PA, Sivaprakash K, Parani M, Venkataraman G and Parida AK. (**2005**) Generation and analysis of expressed sequence tags from the salt-tolerant mangrove species *Avicennia marina* (Forsk) Vierh. **Theoretical and Applied Genetics** 110, 416-24

652. Karthikeyan S, Aswin SNS, Krishnakumar S, Geetha M and Gautam P . (**2005**) Promoter Addresses: Revelations from Oligo*nucleotide* Profiling Applied to the *Escherichia coli* genome. **Theoretical Biology and Medical Modelling** 2, 20

653. Mutalik VK and Venkatesh KV. (**2005**) Quantification of the glycogen cascade system: the ultrasensitive responses of liver glycogen synthase and muscle phosphorylase are due to distinctive regulatory designs. **Theoretical Biology and Medical Modelling** 2, 19

654. Mitra D, Saha B, Das D, Wiker HG and Das AK. (**2005**) Correlating sequential homology of Mce1A, Mce2A, Mce3A and Mce4A with their possible functions in mammalian cell entry of *Mycobacterium tuberculosis* performing homology modeling. **Tuberculosis (Edinb)** 85, 337-345

655. Singh R, Singh A and Tyagi AK. (**2005**) Deciphering the genes involved in pathogenesis of *Mycobacterium tuberculosis*. **Tuberculosis (Edinb)** 85, 325-35

656. Chaitra MG, Hariharaputran S, Chandra NR, Shaila MS and Nayak R. (**2005**) Defining putative T cell epitopes from PE and PPE families of proteins of *Mycobacterium tuberculosis* with vaccine potential. **Vaccine** 23, 1265-1272

657. Girish KR and Usha R. (**2005**) Molecular characterization of two soybean infecting begomoviruses from India and evidence for recombination among legume infecting begomoviruses from South-East Asia. **Virus Research** 108, 167-176

658. Sahu K, Gupta SK, Sau S and Ghosh TC. (**2005**) Synonymous codon usage bias in 16 *Staphylococcus aureus* phages: Implication in phage therapy. **Virus Research** 113, 123-131

2006

659. Banka H and Mitra S. (**2006**) Evolutionary biclustering of gene expressions. **ACM Ubiquity** 7, 17-26

660. Chatterjee R and Chaudhuri K. (**2006**) An approach for the identification of microRNA with an application to *Anopheles gambiae*. **Acta Biochimica Polonica** 53, 303-9

661. Sekar K, Yogavel M, Kanaujia SP, Sharma A, Velmurugan D, Poi MJ, Dauter Z and Tsai MD. (**2006**) Suggestive evidence for the involvement of the second calcium and surface loop in interfacial binding: monoclinic and trigonal crystal structures of a quadruple mutant of phospholipase A2. **Acta Crystallographica: Section D-Biological Crystallography** D62, 717-724

662. Vanniarajan A, Rajshekher GP, Joshi MB, Reddy AG, Singh L and Thangaraj K. (**2006**) Novel mitochondrial mutation in the ND4 gene associated with Leigh syndrome. **Acta Neurologica Scandinavica** 114, 350-3

663. Reddy Haranatha and Jamil Kaiser. (**2006**) Polymorphism in the GST (M1 and T1) gene and their possible association with susceptibility to childhood acute lymphocytic leukemia (ALL) in the Indian population. **African Journal of Biotechnology** 5, 1454 - 1456

664. Aggarwal PK, Banerjee B, Daryaei MG, Bhatia A, Bala A, Rani S, Chander S, Pathak H, and Kalra N. (**2006**) InfoCrop: A dynamic simulation model for the assessment of crop yields, 18 losses due to pests, and environmental impact of agro-ecosystems in tropical environments. II. Performance of the model. **Agricultural Systems** 89, 47-67

665. Aggarwal PK, Kalra N, Chander S and Pathak H. (**2006**) InfoCrop: A dynamic Simulation model for the assessment of crop yields, losses due to pests, and environmental impact of agroecosystems in tropical environments. I Model description. **Agricultural Systems** 89, 1-25

666. Bapat PM, Padiyar NU, Dave NN, Dash S, Bhartiya S and Wangikar PP. (**2006**) Model based optimization of substrate feeding recipe for rifamycin fermentation. **AIChE J** 52, 4248-4257

667. De S and Singh RK. (**2006**) Identification of new MHC-DRB3 alleles from Indian (*Bos indicus*) cattle. **Animal Genetics** 37, 605

668. Uma G and Chandramohanakumar N. (**2006**) *Vibrio cholerae* CTXPhi phage repressor gene is borne on an insertion sequence-like element and encodes a putative transposase. **Applied Bioinformatics** 5, 21-28

669. Vinod PK, Konkimalla B and Chandra NR. (**2006**) *In-silico* pharmacodynamics: correlation of adverse effects of H2-antihistamines with histamine N-methyl transferase binding potential. **Applied Bioinformatics** 5, 141-150

670. Bapat PM, Sohoni SV, Moses TA and Wangikar PP. (**2006**) A cybernetic model to predict the effect of freely available nitrogen substrate on rifamycin B production in complex media. **Applied Microbiology and Biotechnology** 72, 662-670

671. Sharma AK, Sharma RK and Kasana HS. (**2006**) Prediction of first lactation 305-day milk yield in Karan Fries dairy cattle using ANN modeling. **Applied Soft Computing** 7, 1112-1120

672. Bhattacharya A, Padhan N, Jain R and Bhattacharya S. (**2006**) Calcium-binding proteins of *Entamoeba histolytica*. **Archives of Medical Research** 37, 221-225

673. Tandon R, Adak S and Kaye JA. (**2006**) Neural networks for longitudinal studies in Alzheimer's disease. **Artificial Intelligence in Medicine** 36, 245-55

674. Ghosh Z, Chakrabarti J, Mallick B, Das S, Sahoo S and Sethi HS. (**2006**) tRNA-isoleucinetryptophan composite gene. **Biochemical & Biophysical Research Communications** 339, 37-40

675. Khajamohiddin S, Babu PS, Chakka D, Merrick M, Bhaduri A, Sowdhamini R and Siddavattam D. (**2006**) A novel meta-cleavage product hydrolase from Flavobacterium sp. ATCC27551. **Biochemical & Biophysical Research Communications** 351, 675-681

676. Srivastava R, Das DR, Wiker HG and Das AK. (**2006**) Functional insights from the molecular modeling of a novel two-component system. **Biochemical & Biophysical Research Communications** 344, 1327–1333

677. Arunachalam J, Kanagasabai V and Gautham N. (**2006**) Protein Structure Prediction Using Mutually Orthogonal Latin Squares and a Genetic Algorithm. **Biochemical and Biophysical Research Communications** 342, 424-433

678. Bharanidharan DN and Gautham N. (**2006**) Principal Component Analysis (PCA) of DNA Oligo*nucleotide* Structural Data. **Biochemical and Biophysical Research Communications** 340, 1229-1237

679. Thiyagarajan S, Rajan SS and Gautham N. (**2006**) Effect of DNA structural flexibility on promoter strength – Molecular dynamics studies of *E. coli* promoter sequences. **Biochemical and Biophysical Research Communications** 341, 557-566

680. Shanker A, Tripathi D, Khandelwal G, Sharma G, Agrawal S, Singh A and Sharma V. (**2006**) Data mining and database development for simple sequence repeats of *Takifugu rubripes* (Japanese Pufferfish). **Biochemical and Cellular Archives** 6, 1-12

681. Saha M and Kundu SC. (**2006**) Molecular identification of tropical tasar silkworm (*Antheraea mylitta*) ecoraces with RAPD and SCAR markers. **Biochemical Genetics** 44, 75-88

682. Sharma AK, Sharma SK, Surolia A, Surolia N and Sarma SP. (**2006**) Solution Structures of Conformationally Equilibrium forms of Holo -Acyl Carrier Protein (PfACP) from *Plasmodium falciparum* provides insight into the mechanism of activation of ACPs. **Biochemistry** 45, 6904-16

683. Padyana AK and Ramakumar S. (**2006**) Lateral energy transfer model for adjacent light-harvesting antennae rods of C-phycocyanins. **Biochimica et Biophysica Acta - Biomembranes** 757, 161-165

684. Bhattacharyya R, Bhattacharya S and Choudhuri S. (**2006**) Conservation and

documentation of the medicinal plant resources of India. **Biodiv Conserv** 15, 2705-2717

685. Vij S, Gupta V, Kumar D, Vydianathan R, Raghuvanshi S, Khurana P, Khurana JP and Tyagi AK. (**2006**) Decoding the rice genome. **Bioessays** 28, 421-432

686. Archak S and Nagaraju J. (**2006**) Eicosapentapeptide repeats (EPRs), novel repeat proteins specific to flowering plants. **Bioinformatics** 22, 2455-2458

687. Idicula-Thomas S, Kulkarni AJ, Kulkarni BD, Jayaraman VK and Balaji PV. (**2006**) A support vector machine-based method for predicting the propensity of a protein to be soluble or to form inclusion body on overexpression in *Escherichia coli*. **Bioinformatics** 22, 278-84

688. Rajendrakumar P, Biswal AK, Balachandran,SM, Srinivasarao K and Sundaram RM. (**2006**) Simple sequence repeats in organellar genomes of rice: frequency and distribution in genic and intergenic regions. **Bioinformatics** 23, 1-4

689. Shipra A, Chetan K and Rao MR. (**2006**) CREMOFAC--a database of chromatin remodeling factors. **Bioinformatics** 22, 2940-4

690. Singh MK, Srivastava S, Raghava GPS and Varshney GC. (**2006**) HaptenDB: A comprehensive database of haptens, carrier proteins and anti-hapten antibodies. **Bioinformatics** 22, 253-255

691. Yuan X, Hu ZZ, Wu HT, Torii M, Narayanaswamy M, Ravikumar KE, Vijay-Shanker K and Wu CH. (**2006**) An online literature mining tool for protein phosphorylation. **Bioinformatics** 22, 1668-1669

692. Anwar T and Khan AU. (**2006**) MAP MUTATION: a program for analyzing mutations in protein sequences. **Bioinformation** 1, 92-3

693. Anwar T and Khan AU. (**2006**) SSRscanner: a program for reporting distribution and exact location of simple sequence repeats. **Bioinformation** 1, 89-91

694. Anwar T, Lal SK and Khan AU. (**2006**) Matrix protein 1: A comparative *In silico* study on different strains of influenza A H5N1 Virus. **Bioinformation** 1, 253-6

695. Babu PA, Krishna TV, Boddepalli R, Srinivas LD, Rao GN. (**2006**) DoD2006: molecular biology database update. **Bioinformation** 1, 228-30

696. Balaji J, Crouch JH, Petite PV and Hoisington DA. (**2006**) A database of annotated tentative orthologs from crop abiotic stress transcripts. **Bioinformation** 1, 225-7

697. Balaji S, Kalpana R and Eapen SJ. (**2006**) PIR Pairwise Alignment - A slip up for signal peptides. **Bioinformation** 1, 188-193

698. Balaji S, Kalpana R and Shapshak P. (**2006**) Paradigm development: comparative and predictive 3D modeling of HIV-1 Virion Infectivity Factor (Vif). **Bioinformation** 1, 290-309

699. Debnath Pal. (**2006**) On Gene Ontology and Function Annotation. **Bioinformation** 1, 97-98

700. Gowri VS, Sandhya S. (**2006**) Recent trends in remote homology detection: an Indian Medley. **Bioinformation** 1, 94-6

701. Gowthaman R, Silvester AJ, Saranya K, Kanya KS and Archana NR. (**2006**) Modeling of the potential coiled-coil

structure of snapin protein and its interaction with SNARE complex. **Bioinformation** 1, 269-75

702. Gowthaman R, Venugopal R and Dayanandam D. (**2006**) Database of cell signaling enzymes. **Bioinformation** 1, 265-8

703. Guruprasad S and Sekar K. (**2006**) Artificial life and living systems: Insight into artificial Life and its implications in life science research. **Bioinformation** 1, 139-140

704. Hemalatha GR, Swathi A and Guruprasad L. (**2006**) Analysis and modeling of mycolyltransferases in the CMN group. **Bioinformation** 1, 161-169

705. Jaganatharaja J and Gowthaman R. (**2006**) Computational screening of inhibitors for HIV-1 integrase using a receptor based pharmacophore model. **Bioinformation** 1, 112-7

706. Khan AU. (**2006**) Bird Flu: a recent threat to human health. **Bioinformation** 1, 132

707. Murty USN, Rao MS, Neelima A and Krishna AR. (**2006**) Database management system for control of malaria in Arunachal Pradesh, India. **Bioinformation** 1, 194-196

708. Nair AS and Sreenadhan SP. (**2006**) A coding measure scheme employing electron-ion interaction pseudopotential (EIIP). **Bioinformation** 1, 197-202

709. Shanthi N and Parthiban M. (**2006**) Binding site prediction of galanin peptide using evolutionary trace method. **Bioinformation** 1, 180-183

710. Sivashankari S and Shanmughavel P. (**2006**) Functional annotation of hypothetical proteins - A review. **Bioinformation** 1, 335-8

711. Srinivasan N. (**2006**) Computational Biology and Bioinformatics: A tinge of Indian spice. **Bioinformation** 1, 105-109

712. Tresha RAT and Shanthi N. (**2006**) DrugMetZ DB: an anthology of human drug metabolizing enzymes. **Bioinformation** 1, 248–250

713. Umashankar V, Subramanian G and Dorairaj S. (**2006**) Modeling of phosphomethyl pyrimidine kinase from *Leptospira interrogans* serovar lai strain 56601. **Bioinformation** 1, 158-60

714. Kumar S, Mohan A and Guleria R. (**2006**) Biomarkers in cancer screening, research and detection: present and future: a review. **Biomarkers** 11, 385-405

715. Mondal K and Gupta MN. (**2006**) The affinity concept in bioseparation: evolving paradigms and expanding range of applications. **Biomolecular Engineering** 23, 59-76

716. Gunturi SB, Narayanan R and Khandelwal A. (**2006**) *In silico* ADME modelling 2: computational models to predict human serum albumin binding affinity using ant colony systems. **Bioorganic & Medicinal Chemistry** 14, 4118-29

717. Kumar R, Ramachandran U, Khanna S, Bharatam PV, Raichur S, Chakrabarti R. (**2006**) Synthesis, *in vitro* and i*n silico* evaluation of l-tyrosine containing PPARalpha/gamma dual agonists. **Bioorganic & Medicinal Chemistry** 15, 1547-1555

718. Kadam RU and Roy N. (**2006**) Cluster analysis and 2-Dimensional Quantitative Structure Activity Relationship (2D-

QSAR) of *Pseudomonas aeruginosa deacetylase* LpxC inhibitors. **Bioorganic & Medicinal Chemistry Letters** 16, 5136-5143

719. Kadam RU, Kiran VM and Roy N. (**2006**) Comparative protein modeling and surface analysis of Leishmania sirtuin: A potential target for antileishmanial drug discovery. **Bioorganic & Medicinal Chemistry Letters** 16, 6013-6018

720. Malathy SSM, Saraboji K, Sukumar N and Ponnuswamy MN. (**2006**) Role of amino acid properties to determine backbone τ(N-Cα-C') stretching angle in peptides and proteins. **Biophysical Chemistry** 120, 24-31

721. Priti H, Guruprasad N and Vishveshwara S. (**2006**) *Ab initio* studies on the tri- and diphosphate fragments of adenosine triphosphate. **Biophysical Chemistry** 119, 127-136

722. Singh YH, Gromiha MM, Sarai A and Ahmad S. (**2006**) Atom-wise statistics and prediction of solvent accessibility in proteins. **Biophysical Chemistry** 124, 145-54

723. Achary MS, Reddy AB, Chakrabarti S, Panicker SG, Mandal AK, Ahmed N, Balasubramanian D, Hasnain SE and Nagarajaram HA. (**2006**) Disease Causing Mutations in Proteins, Structural Analysis of the CYP1b1 Mutations Causing Primary Congenital Glaucoma in Humans. **Biophysical Journal** 91, 4329-4339

724. Saraboji K, Gromiha MM and Ponnuswamy MN. (**2006**) Average assignment method for predicting the stability of protein mutants. **Biopolymer s** 82, 80-92

725. Bandyopadhyay D and Bhattacharyya D. (**2006**) Estimation of Strength in different Extra Watson- Crick Hydrogen Bonds in DNA Double Helices through Quantum Chemical studies. **Biopolymers** 83, 313-325

726. Joshi S, Rana S, Wangikar P and Durani S. (**2006**) Computational design of proteins stereochemically optimized in size, stability, and folding speed. **Biopolymers** 83, 122-134

727. Ranbhor R, Ramakrishnan V Kumar A And Durani S. (**2006**) The interplay of sequence and stereochemistry in defining conformation in proteins and polypeptides. **Biopolymers** 83, 537-545

728. Rathinavelan T and Yathindra N. (**2006**) Base triplet non-isomorphism strongly influences DNA triplex conformation: Effect of non-isomorphic G*GC and A*AT triplets and bending of DNA triplexes. **Biopolymers** 82, 443-461

729. Desai C and Madamwar D. (**2006**) Extraction of inhibitor-free metagenomic DNA from polluted sediments, compatible with molecular diversity analysis using adsorption and ion-exchange treatments. **Bioresource Technology** 98, 761-8

730. Kelkar DS, Kumar AR and Zinjarde SS. (**2006**) Hydrocarbon emulsification and enhanced crude oil degradation by lauroyl glucose ester. **Bioresource Technology** 98, 1505-8

731. Pandey SP and Krishnamachari A. (**2006**) Computational analysis of plant RNA Pol-II promoters. **BioSystems** 83, 38-50

732. Sau K, Gupta SK, Sau S, Mandal SC and Ghosh TC. (**2006**) Factors influencing synonymous codon and amino acid usage biases in Mimivirus. **BioSystems** 85, 107-113

733. Bapat, PM, Bhartiya S, Venkatesh KV and Wangikar PP. (**2006**) A structured kinetic model to represent the utilization of multiple substrates in complex media during rifamycin B fermentation. **Biotechnology and Bioengineering** 93, 779-790

734. Thilakavathi M, Basak T and Panda T. (**2006**) Simplified approach for developing the rate expressions for enzyme-catalyzed reactions. **Biotechnology Letters** 28, 1889-94

735. Bhattacharya S, Bhattacharya C and Chandra NR. (**2006**) Projections for fast protein structure retrieval. **BMC Bioinformatics** 7, S5

736. Gayen K and Venkatesh KV. (**2006**) Analysis of optimal phenotypic space using elementary modes as applied to Corynebacterium glutamicum. **BMC Bioinformatics** 7, 445

737. Jayashree B, Reddy PT, Leeladevi Y, Crouch JH, Mahalakshmi V, Buhariwalla HK, Eshwar KE, Mace E, Folksterma R, Senthilvel S, Varshney RK, Seetha K, Rajalakshmi R, Prasanth VP, Chandra S, Swarupa L, Srikalyani P and Hoisington DA. (**2006**) Laboratory Information Management Software for genotyping workflows: applications in high throughput crop genotyping. **BMC Bioinformatics** 7, 383

738. Jeyakumar N, Daniel B, Werner D, Catherine H, Yonghong Z, Catherine D, James R V B and Eric GB. (**2006**) Text mining of full-text journal articles combined with gene expression analysis reveals a relationship between sphingosine-1-phosphate and invasiveness of a glioblastoma cell. **BMC Bioinformatics** 7, 373

739. Kalita MK, Ramasamy G, Duraisamy S, Chauhan VS and Gupta D. (**2006**) ProtRepeatsDB database of amino acid repeats in genome. **BMC Bioinformatics** 7, 336

740. Kaundal R, Kapoor AS and Raghava GPS. (**2006**) Machine learning techniques in disease forecasting: a case study on rice blast prediction. **BMC Bioinformatics** 7, 485

741. Kulkarni-Kale U, Bhosle S, Manjari S, Joshi M, Bansode S and Kolaskar AS. (**2006**) Curation of viral genomes: Challenges, applications and the way forward. **BMC Bioinformatics** 7, S12

742. Mathivanan S, Periaswamy B, Gandhi TK, Kandasamy K, Suresh S, Mohmood R, Ramachandra YL and Pandey A. (**2006**) An evaluation of human protein-protein interaction data in the public domain. **BMC Bioinformatics** 7, Suppl 5:S19

743. Raghava GPS and Barton GJ. (**2006**) Quantification of the variation in percentage identity for protein sequence alignments. **BMC Bioinformatics** 7, 415

744. Ranjan S, Gundu RK, Ranjan A. (**2006**) MycoperonDB: a database of computationally identified operons and transcriptional units in Mycobacteria. **BMC Bioinformatics** 7 Suppl 5:S9

745. Samal A, Singh S, Giri V, Krishna S, Raghuram N and Jain S. (**2006**) Low Degree metabolites explain essential reactions and enhance modularity in biological networks. **BMC Bioinformatics** 7,118

746. Siddharthan R. (**2006**) Sigma: multiple alignment of weakly-conserved non-coding DNA sequence. **BMC Bioinformatics** 7, 143

747. Das S, Paul S, Bag SK. and Dutta C. (**2006**) Analysis of Nanoarchaeum equitans genome and proteome

composition: indications for hyperthermophilic and parasitic adaptation. **BMC Genomics** 7, 186

748. Gandhe AS, Arunkumar KP, John SH and Nagaraju J. (**2006**) Analysis of bacteria-challenged wild silkmoth, *Antheraea mylitta* (lepidoptera) transcriptome reveals potential immune genes. **BMC Genomics** 7, 184

749. Sharma VK, Sharma A, Kumar N, Khandelwal M, Mandapati K, Horn-Saban, S, Strichman-Almashanu L, Lancet D, Brahmachari S and Ramachandran S. (**2006**) Expoldb:expression linked polymorphism database with inbuilt tools for analysis of expression and simple repeats. **BMC Genomics** 7, 258

750. Sreenu VB, Kumar P, Nagaraju J and Nagarajaram HA. (**2006**) Microsatellite polymorphism across the *M. tuberculosis* and *M. bovis* genomes, Implications on genome evolution and plasticity. **BMC Genomics** 7, 78

751. Tripathi LP and Sowdhamini R. (**2006**) Cross-genome comparisons of serine proteases in Arabidopsis & rice. **BMC Genomics** 7, 200

752. Jain M, Tyagi AK and Khurana JP. (**2006**) Molecular characterization and differential expression of cytokinin-responsive type-A response regulators in rice (*Oryza sativa*). **BMC Plant Biology** 6, 1

753. Saha RP and Chakrabarti P. (**2006**) Molecular modeling and characterization of *Vibrio cholera* transcription regulator HlyU. **BMC Structure Biology** 6,24

754. Saha RP, Bahadur R, Pal A, Mandal S and Chakrabarti P. (**2006**) ProFace: a server for the analysis of the physicochemical features of protein-protein interfaces. **BMC Structure Biology** 6, 11

755. Sujatha MS and Balaji PV. (**2006**) Fold recognition and comparative modeling of human alpha 2,3-sialyltransferases reveal their sequence and structural similarities to CstII from Campylobacter jejuni. **BMC Structure Biology** 6, 9

756. G Alexe, GS Dalgin, R Ramaswamy, C Delisi and G Bhanot. (**2006**) Data perturbation independent diagnosis and validation of breast-cancer subtypes using clustering and patterns. **Cancer Informatics Online** 2, 243

757. Ray S and Chatterjee A. (**2006**) Influence of endogenous glutathione level on X-ray induced cell cycle delay in human lymphocytes. **Cell proliferation** 39, 37-47

758. Banerjee A and Sengupta PK. (**2006**) Encapsulation of 3-hydroxyflavone and fisetin in betacyclodextrins:Excited state proton transfer fluorescence and molecular mechanics studies. **Chemical Physics Letters** 424, 379-386

759. Priti H, Vishveshwara S and Samir KP. (**2006**) Tryptophan-water interaction in Monellin: Hydration patterns from molecular dynamics simulation. **Chemical Physics Letters** 420, 517-522

760. Bagchi A and Ghosh TC. (**2006**) Structural study of two proteins SigE and ORF1 to predict their roles in the biochemical oxidation of sulfur anions via the global sulfur oxidation operon (sox). **Computational Biology and Chemistry** 30, 227-232

761. Reddy ChS, Vijayasarathy K, Srinivas E, Sastry GM and Sastry GN. (**2006**) Homology modeling of membrane proteins: a critical assessment.

Computational Biology and Chemistry 30, 120-6

762. Ranjan S, Yellaboina S and Ranjan A. (**2006**) IdeR in mycobacteria, From target recognition to physiological function. **Critical Reviews in Microbiology** 32, 69-75

763. Malathy SSM and Ponnuswamy MN. (**2006**) Nature of Π-Interactions in nitrogen-containing heterocyclic systems: A structural database analysis. **Crystal Growth & Design** 6, 736–742

764. Karthik R, Preethi R and Chandra NR. (**2006**) Principles and Practices of Pathway modeling. **Current Bioinformatics** 1, 147-160

765. Gomase VS. (**2006**) Prediction of antigenic epitopes of neurotoxin Bmbktx1 from *Mesobuthus martensii*. **Current Drug Discovery Technologies** 3, 225-9

766. Alahari A, Tripathi AK and Le Rudulier D. (**2006**) Cloning and characterization of a fur homolog from *Azospirillum brasilense* Sp7. **Current Microbiology** 52, 123-127

767. Chavan V and Aniruddha K. (**2006**) Open Access geospatial data repository. **Current Science** 90, 617-618

768. Das D, Satapathy, SS, Buragohain, AK and Ray SK. (**2006**) Occurrence of all *nucleotide* combinations at the third and the first positions of two adjacent codons in open reading frames of bacteria. **Current Science** 90, 22-24

769. Kundhavai NS, Srinivas O, Nivedita M, Sagarika D, Jayaraman N, Surolia A and Vijayan M. (**2006**) Multivalency in lectins- A crystallographic, modelling and light scattering study involving peanut lectin and a bivalent ligand. **Current Science** 90, 1230-1237

770. Mahendran B, Padhi BK, Ghosh SK and Kundu SC. (**2006**) Genetic variation in ecoraces of tropical tasar silkworm, *Antheraea mylitta* using RFLP technique. **Current Science** 90, 100-103

771. Saha RP and Chakrabarti P. (**2006**) Parity in the number of atoms in residue composition in proteins and contact preferences. **Current Science** 90, 558-561

772. Thathoo R, Virmani A, Sai S L, Balakrishnan N and Sekar K. (**2006**) TVSBS: A fast exact pattern matching algorithm for biological sequences. **Current Science** 91, 47-53

773. Jitendra G and Vishwas C. (**2006**) Open access and biodiversity conservation: Changes and potentials for the developing world. **Data Science Journal** 5, 1-17

774. Garg D, Saxena SC and Bhardwaj LM. (**2006**) An efficient algorithm after ungapped analysis in BLAST. **DNA sequencing** 17, 247-53

775. Sukla S, Bhattacharya TK, Venkatachalapathy RT, Kumar P and Sharma A. (**2006**) Cloning and characterization of alpha(s2)-casein gene of Riverine buffalo. **DNA sequencing** 17, 458-64

776. Arunkumar KP, Metta M and Nagaraju J. (**2006**) Molecular phylogeny of silkmoths reveals the origin of domesticated silkmoth, *Bombyx mori* from Chinese *Bombyx mandarina* and paternal inheritance of *Antheraea proylei* mitochondrial. **DNA. Mol. Phylogenet. Evol** 40, 419-427

777. Shukla SK, Chaudhary P, Kumar IP, Samanta N, Afrin F, Gupta ML, Sharma UK, Sinha AK, Sharma YK and Sharma

RK. (**2006**) Protection from radiation-induced mitochondrial and genomic DNA damage by an extract of Hippophae rhamnoides. **Environmental and Molecular Mutagenesis** 47, 647-56

778. Parvathi A, Kumar S, Bhanumathi A, Ishibashi M, Nishibuchi M, Karunasagar I and Karunasagar I. (**2006**) Molecular characterization of thermostable direct haemolysin-related haemolysin (TRH) positive *Vibrio parahaemolyticus* from oysters in Mangalore, India. **Environmental Microbiology** 8, 997–1004

779. Das D, Badri P, Kumar K N And Bhattacharya P. (**2006**) Simulation and modeling of continuous H2 production process by Enterobacter cloacae IIT-BT 08 using different bioreactor configuration. **Enzyme and Microbial Technology** 31, 867-875

780. Kumar M, Kulwal PL, Gaur A, Tyagi AK, Khurana JP, Khurana P, Balyan HS and Gupta PK. (**2006**) QTL analysis for grain weight in common wheat. **Euphytica** 151, 135-144

781. Deswal S and Roy N. (**2006**) Quantitative Structure Activity Relationship of Benzoxazinone Derivatives as Neuropeptide Y Y5 Receptor Antagonists. **European Journal of Medicinal Chemistry** 41, 552-557

782. Deswal S and Roy N. (**2006**) Quantitative structure activity relationship studies of aryl heterocyclebased thrombin inhibitors. **European Journal of Medicinal Chemistry** 41, 1339-1346

783. Singh SK, Dessalew N. and Bharatam, PV. (**2006**) 3D-QSAR CoMFA studies on Indenopyrazole as CDK2 Inhibitors. **European Journal of Medicinal Chemistry** 41, 1310-1319

784. Annalakshmi S and Pitchumani K. (**2006**) Acceleration of Thiol Ester hydrolysis by Cyclodextrins: Evidence from rate and computational studies. **European Journal of Organic Chemistry** 2006, 1034-1042

785. Deb K and Gupta H. (**2006**) Introducing robustness in multi-objective optimization. **Evolution Computing** 14, 463-94

786. Hemalatha, GR, Swathi A and Guruprasad L. (**2006**) The Rv3799.Rv3807 gene cluster in *Mycobacterium tuberculosis* genome corresponds to the ancient conserved region in CMN mycolyltransferases. **Evolutionary Bioinformatics Online** 2, 117-125

787. De S, Pal D and Ghosh SK. (**2006**) *Entamoeba histolytica*: Computational identification of putative microRNA candidates. **Experimental Parasitology** 113, 239-243

788. Jain M, Tyagi A K and Khurana JP . (**2006**) Overexpression of putative topoisomerase 6 genes from rice confers stress tolerance in transgenic Arabidopsis plants. **FEBS Journal** 273, 5245-5260

789. Kathiresan T, Krishnan K, Krishnakumar V, Agrawal R, Anand A, Muralidhar D,Mishra AK, Dhople VM, Aggrawal RK, Sharma Y. (**2006**) Triose phosphate isomerase, a novel enzyme-crystallin, and tau-crystallin in crocodile cornea. High accumulation of both proteins during late embryonic development. **FEBS Journal** 273, 3370-80

790. Mahesha HG, Singh SA, Srinivasan N and Rao, AGA. (**2006**) A spectroscopic

study of the interactions of isoflavones with human serum albumin. **FEBS Journal** 273, 451-467

791. Sharma K, Gupta M, Krupa A, Srinivasan N and Singh Y. (**2006**) EmbR, a regulatory protein with ATPase activity, is a substrate of multiple serine/threonine kinases and phosphatase in *Mycobacterium tuberculosis*. **FEBS Journal** 273, 2711-2721

792. Basak S and Ghosh TC. (**2006**) Temperature adaptation of synonymous codon usage in different functional categories of genes: a comparative study between *Methanococcus jannaschii* and *Methanococcus maripaludis* homologous genes. **FEBS Letters** 580, 3895-3899

793. Ramesh S, Bharath MM, Chandra NR and Rao MR. (**2006**) A K52Q substitution in the globular domain of histone H1t modulates its nucleosome binding properties. **FEBS Letters** 580, 5999-6006

794. Sharmila A, Ramesh A and Gautam P. (**2006**) Understanding mutations and protein stability through tripeptides. **FEBS Letters** 580, 2071-2082

795. Swarnamukhi PL, Sharma SK, Bajaj P, Surolia N, Surolia A and Suguna K. (**2006**) Crystal structure of dimeric Fab Z of *Plasmodium falciparum* reveals conformational switching to active hexamers by peptide flips. **FEBS Letters** 580, 2653-60

796. Yellaboina S, Ranjan S, Vindal V & Ranjan A. (**2006**) Comparative analysis of Iron Regulated genes in mycobacteria. **FEBS Letters** 580, 2567-2576

797. Das SK, Gautam, US, Chakrabartty, PK and Singh A. (**2006**) Characterization of a symbiotically defective serine auxotroph of *Mesorhizobium ciceri*. **FEMS Microbiology Letters** 263, 244-251

798. Jain M, Kaur N, Garg R, Thakur JK, Tyagi AK and Khurana JP. (**2006**) Structure and expression analysis of early auxin-responsive Aux/IAA gene family in rice (*Oryza sativa*). **Functional & Integrative Genomics** 6, 47-59

799. Jain M, Kaur N, Tyagi AK and Khurana JP. (**2006**) Comprehensive analysis of auxin responsive GH3 gene family in rice (*Oryza sativa*). **Functional & Integrative Genomics** 6, 36-46

800. Sahi C, Singh A, Kumar K, Blumwald E and Grover A. (**2006**) Salt stress response in rice: genetics, molecular biology, and comparative Genomics. **Functional & Integrative Genomics** 6, 263-84

801. Bhaduri A and Sowdhamini R. (**2006**) Domain architectural census of eukaryotic gene products containing O-protein phosphatises. **Gene** 366, 246-255

802. Krupa A, Anamika and Srinivasan N. (**2006**) Genome wide comparative analyses of domain organisation of repertoires of protein kinases of *Arabidopsis thaliana* and *Oryza sativa*. **Gene** 318,1-13

803. Mahendran B, Acharya C, Dash R, Ghosh SK and Kundu SC. (**2006**) Repetitive DNA in tropical tasar silk worm Antheraea mylitta. **Gene** 370, 51-57

804. Sarin R. and Sharma YD. (**2006**) Thioredoxin system in obligate anaerobe DesulfoVibrio desulfuricans: Identification and characterization of a novel thioredoxin 2. **Gene** 376, 107-115

805. Ramalingam J, Pathan MS, Feril O, Miftahudin K Ross, X.-F Ma, MahmoudAA, Layton J, Rodriguez-Milla MA, ChikmawatiT, Valliyodan B SkinnerR, Matthews DE, Gustafson JP and Nguyen HT. (**2006**) Structural and functional analyses of the wheat genomes based on expressed sequence tags (ESTs) related to abiotic stresses. **Genome** 49, 1324-1340

806. Jehan Z, Vallinayagam S, Tiwari S, Pradhan S, Singh L, Suresh A, Reddy HM, Ahuja YR and Jesudasan RA. (**2006**) Novel noncoding RNA from human Y distal heterochromatic block (Yq12) generates testis-specific chimeric CDC2L2. **Genome Research** 17, 433-440

807. Rawal P, Kummarasetti VB, Ravindran J, Kumar N, Halder K, Sharma R, Mukerji M, Das SK and Chowdhury S. (**2006**) Genome-wide prediction of G4 DNA as regulatory motifs: role in *Escherichia coli* global regulation. **Genome Research** 16, 644-655

808. Sreenu VB, Kumar P, Nagaraju J and Nagarajaram HA. (**2006**) Crosatellite polymorphism across the *M. tuberculosis* and *M. bovis* genomes: Implications on genome evolution and plasticity. **Genomics** 7, 78-88

809. Saha S and Raghava GPS. (**2006**) VICMpred: SVM-based method for the prediction of functional proteins of gram-negative bacteria using amino acid patterns and composition. **Genomics Proteomics Bioinformatics** 4, 42-47

810. Chandra NR, Kumar N, Jeyakani J, Singh DD, Gowda S B and Prathima MN. (**2006**) Lectindb: a plant lectin database. **Glycobiology** 16, 938-946

811. Patel RY and Balaji PV. (**2006**) Identification of linkage-specific sequence motifs in sialyltransferases. **Glycobiology** 16, 108-116

812. Patra M and Mandal C. (**2006**) Search for glucose/galactose-binding proteins in newly discovered protein sequences using molecular modeling techniques and structural analysis. **Glycobiology** 16,959-968

813. Majumder S, Patra M and Mandal C. (**2006**) Search for fucose binding domains in recently sequenced hypothetical proteins using molecular modeling techniques and structural analysis. **Glycoconjugate Journal** 23, 251-257

814. Patra M, Majumder S and Mandal C. (**2006**) Structural studies on mannose-selective glycoprotein receptors using molecular modeling techniques. **Glycoconjugate Journal** 23, 241-249

815. Mitra S and Hayashi Y. (**2006**) Bioinformatics with soft computing. **IEEE Trans. Syst. Man Cyber.Part C: Appl. Rev** 36, 616-635

816. Anwar T, Lal SK and Khan AU. (**2006**) *In silico* analysis of genes nucleoprotein, neuraminidase and hemagglutinin: a comparative study on different strains of influenza A (Bird flu) virus sub-type H5N1. ***In silico*** **Biology** 6, 161-8

817. Anwar T, Lal SK and Khan AU. (**2006**) *In-silico* analysis of genes Nucleoprotein, Neuramindase and Heamaglutinin: a comparative study on different strains of influenza A (Bird Flu) virus sub-type H5N1. ***In silico*** **Biology** 6, 15-20

818. Balamurugan B, Roshan MNA Md, Daliah M, Ambaree M, Divya S, Keerthana H, Seemanthini M and Sekar K. (**2006**) SMS: Sequence, Motif and Structure – A database on the structural rigidity of peptide fragments in non-

redundant proteins. ***In silico*** **Biology** 6, 229-235

819. Chakrabarti S, Manohari G, Pugalenthi G and Sowdhamini R. (**2006**) SSToSS: Sequence Structural Templates of Single-member superfamilies. ***In silico*** **Biology** 6, 311-319

820. Chandrashekar C, Manonmani A, Babu M and Sowdhamini R. (**2006**) Enhanced structure prediction of gene products containing adenylyl cyclise. ***In silico*** **Biology** 6, 351-362

821. Dutta A, Singh SK, Ghosh P, Mukherjee R, Mitter S and Bandyopadhyay D. (**2006**) *In silico* identification of potential therapeutic targets in the human pathogen *Helicobacter pylori*. ***In silico*** **Biology** 6, 43-7

822. Jayashree B, Punna R, Prasad P, Bantte K, Hash CT, Chandra S, Hoisington DA and Varshney RK. (**2006**) A database of simple sequence repeats from cereal and legume expressed sequence tags mined in silico: survey and evaluation. ***In silico*** **Biology** 6, 607-20

823. Joy S, Nair PS, Hariharan R and Pillai MR. (**2006**) Detailed comparison of the protein-ligand docking efficiencies of gold, a commercial package and Arguslab, a licensable freeware. ***In silico*** **Biology** 6, 601-605

824. Kaur H and Raghava GPS. (**2006**) Prediction of Cα-H...O and Cα-H...π interactions in proteins using recurrent neural network. ***In silico*** **Biology** 6, 11

825. Nair Achuthsankar S and Mahalakshmi T. (**2006**) Are categorical periodograms and indicator sequences of genomes spectrally equivalent?. ***In silico*** **Biology** 6, 215-222

826. Nataraj SP, Kavi Kishor PB, Reddy LA, Mondal P, Dash AK, Kar M, Mohanty S and Sabat SC. (**2006**) *In silico* modeling and hydrogen peroxide binding study of rice catalase. ***In silico*** **Biology** 6, 435-437

827. Singh NK, Selvam SM and Chakravarthy P. (**2006**) T-iDT : tool for identification of drug target in bacteria and validation by *Mycobacterium tuberculosis*. ***In silico*** **Biology** 6, 485-493

828. Om Praba G and Velmurugan D. (**2006**) Quantitative structure-activity relationship (QSAR) analysis of a series of indole analogues as inhibitor for human group V secretory phospholipase A2. **Indian Journal of Biochemistry & Biophysics** 43, 154-9

829. Singh MP, Patel S, Dikshit M and Gupta YK. (**2006**) Contribution of genomics and proteomics in understanding the role of modifying factors in Parkinson's disease. **Indian Journal of Biochemistry & Biophysics** 43(2):69-81

830. Palanivelu P. (**2006**) Polygalacturonases: Active site analyses and Mechanism of action. **Indian Journal of Biotechnology** 5, 148-162

831. Ghosh I. (**2006**) Target based High Throughput Screening and lead designing in pharmaceutical drug industry. **Indian Journal of Chemistry** 45, 63-73

832. Jayaram B, Latha N, Jain T, Sharma P, Gandhimathi A and Pandey VS. (**2006**) Sanjeevini: A Comprehensive Active-Site Directed Lead Design Software. **Indian Journal of Chemistry** 45A, 21-33

833. Lakshmi M, Dixit A and Saxena AK. (**2006**) QSAR studies on cis-hexa and tetrahydrophthalaziones: A new class of

PDE-4 inhibitors. **Indian Journal of Chemistry** 45A, 34-45

834. Nagini M, Reddy GV, Hemalatha GR, Guruprasad L and Reddanna P. (**2006**) Functional correlation of cyclooxygenases- 1, 2 and 3 from amino acid sequences and three dimensional model structures. **Indian Journal of Chemistry** 45A, 182-187

835. Rajan P, Vetriselvi R and Chandra NR. (**2006**) Carbohydrate based drug design: Recognition fingerprints and their use in lead identification. **Indian Journal of Chemistry** 45, 77-92

836. Suman G, Khan M, Sabitha K and Kaiser Jamil. (**2006**) Mutations in mexR gene leading to drug resistance in Corneal keratitis in human. **Indian journal of Experimental Biology** 44, 929-936

837. Bhattacharya Rittwika, Sahoo Ganesh C, Nayak Mukti K, Saha Dhira Rani, Sur D, Naik TN, Bhattacharya SK and Krishnan Triveni. (**2006**) Molecular epidemiology of human picobirnaviruses among children of a slum community in Kolkata, India. **Infection, Genetics and Evolution** 6, 453-458

838. Chakraborty PD, Bhattacharyya D, Pal S and Ali N. (**2006**) *In vitro* induction of nitric oxide by mouse peritoneal macrophages treated with human placental extract. **International Immunopharmacology** 6, 100-7

839. Jai K, Lavanya VT and Guruprasad K. (**2006**) Analysis of disulphide bond connectivity patterns in protein tertiary structure. **International Journal of Biological Macromolecules** 38, 174-179

840. Sridhar S, Babu AV and Guruprasad K. (**2006**) A database server for making flexible queries relating amino acid sequences to main-chain secondary structure conformations for proteins of known three-dimensional structure and certain useful applications. PSSARD (2.0). **International Journal of Biological Macromolecules** 41, 109-113

841. Sen K, Basu S. and Bhattacharyya D. (**2006**) *Ab initio* Studies on Excited State Intramolecular Electron Transfer in 4-Amino-N-Methylphthalimide and 3-Amino-N-Methylphthalimid. **International Journal of Quantum Information** 106, 913-927

842. Talla V, Narayanan C, Srinivasan N and Balasubramanian D. (**2006**) Mutations causing selfaggregation in human γ-C crystalline leads to congenital cataract. **Investigative Ophthalmology & Visual Science** 47, 5212-5217

843. Madan BM, Leena PM, Tamil SA, Martin M, Julian G, Aravind L and Sankaran K. (**2006**) A Database of Bacterial Lipoproteins (DOLOP) with Functional Assignments to Predicted Lipoproteins. **Journal of Bacteriology** 188, 2761-2773

844. Joy F, Basak S, Gupta SK, Das PJ, Ghosh SK and Ghosh TC. (**2006**) Compositional correlations in canine genome reflects similarity with human genes. **Journal of Biochemistry and Molecular Biology** 39, 240-6

845. Bagaria A, Surendranath K, Ramagopal UA, Ramakumar S and Karande AA. (**2006**) Structure-function analysis and insights into the reduced toxicity of Abrus precatorius agglutinin I in relation to abrin. **Journal of Biological Chemistry** 281, 34465-34474

846. Kumar M, Verma R and Raghava GPS . (**2006**) Prediction of mitochondrial proteins using support vector machine and hidden markov model. **Journal of**

Biological Chemistry 281, 5357 - 5363

847. Raichaudhuri A, Bhattacharyya R, Chaudhuri S, Chakrabarti P and DasGupta M. (**2006**) Domain analysis of a groundnut calcium-dependent protein kinase: nuclear localization sequence in the junction domain is coupled with nonconsensus calcium binding domains. **Journal of Biological Chemistry** 281, 10399-10409

848. Joshi RR, Raghuvanshi M and Pandya P. (**2006**) Yagyopathy Vs Oral and I.V. Drug Administration: Evaluation for Pulmonary Tuberculosis using Compartment Modeling. **Journal of Biological Systems** 10, 107-126

849. Banerjee T and Ghosh TC. (**2006**) Gene expression level shapes the amino acid usages in *Prochlorococcus marinus* MED4. **Journal of Biomolecular Structure and Dynamics** 23, 547-554

850. Bhattacharyya M, Mukhopadhyay C and Chakrabarti A. (**2006**) Specificity of prodan for the selfassociating domain of spectrin: A Molecular docking study. **Journal of Biomolecular Structure and Dynamics** 24, 269-276

851. Das J, Mukherjee S, Mitra A and Bhattacharyya D. (**2006**) Non-Canonical Base Pairs and Higher Order Structures in Nucleic Acids: Crystal Structure Database Analysis. **Journal of Biomolecular Structure and Dynamics** 24, 149-161

852. Jeya SSD and Veluraja K. (**2006**) Conformations of higher gangliosides and their binding with cholera toxin – Investigation by molecular modelling, molecular mechanics and molecular dynamics. **Journal of Biomolecular Structure and Dynamics** 23, 641-656

853. Naran P, Bhushan K, Bose S and Jayaram B. (**2006**) Protein structure evaluation using allatom energy based empirical scoring function. **Journal of Biomolecular Structure and Dynamics** 23, 385-406

854. Sahu K, Gupta SK, Sau S and Ghosh TC. (**2006**) Comparative analysis of the base composition and codon usages in fourteen *mycobacteriophage genomes*. **Journal of Biomolecular Structure and Dynamics** 23, 63-72

855. Bhasin M and Raghava GPS. (**2006**) A hybrid approach for predicting promiscuous MHC class I restricted T cell epitopes. **Journal of Biosciences** 31, 31–42

856. Singh OP, Chandra D, Nanda N, Sharma SK, Htun PT, Adak T, Subbarao SK and Dash AP. (**2006**) On the conspecificity of Anopheles fluviatilis species S with *Anopheles minimus* species C. **Journal of Biosciences** 31, 671-677

857. Maqbool QA et. al. (**2006**) Molecular cloning of enantioselective carboxylesterase gene and biochemical characterisation of encoded protein from *Bacillus subtilis*. **Journal of Biotechnology** 125, 1-10

858. Bhavani S, Nagargadde A, Thawani A, Sridhar V and Chandra NR. (**2006**) Substructure-Based Support Vector Machine Classifiers for Prediction of Adverse Effects in Diverse Classes of Drugs. **Journal of chemical information and modeling** 46, 2478 - 2486

859. Biswas D, Roy S and Sen S. (**2006**) A simple approach for indexing the oral druglikeness of a compound: Discriminating druglike compounds from nondruglike ones. **Journal of chemical information and modeling** 46, 1394-1401

860. Dutta S, Singhal P, Agrawal P, Tomer R, Khurana Kritee E and Jayaram B. (**2006**) A Physico- Chemical Model for Analyzing DNA sequences. **Journal of chemical information and modeling** 46, 78-85

861. Garg P and Verma J. (**2006**) *In silico* prediction of blood brain barrier permeability: an Artificial Neural Network model. **Journal of Chemical Information and Modeling** 46, 289-97

862. Pandey OP and Ghosh I. (**2006**) Developing an antituberculosis compounds database and data mining in the search of a motif responsible for the activity of a diverse class of antituberculosis agents. **Journal of chemical information and modeling** 46, 17-23

863. Sathyapriya R, Brinda KV and Vishveshwara S. (**2006**) Correlation of the Side-Chain Hubs with the Functional Residues in DNA Binding Protein Structures. **Journal of chemical information and modeling** 46, 123-129

864. Sharma P and Ghoshal N. (**2006**) Exploration of a binding mode of benzothiazol-2-yl acetonitrile pyrimidine core based derivatives as potent c-Jun N-terminal kinase-3 inhibitors and 3D-QSAR analyses. **Journal of chemical information and modeling** 46, 1763-1774

865. Bandyopadhyay S, Chakraborty S and Bagchi B. (**2006**) Coupling between hydration layer dynamics and unfolding kinetics of HP-36. **Journal of Chemical Physics** 125, 084912

866. Haimovich AD, Byrne B, Ramaswamy R and Welsh WJ. (**2006**) Wavelet Analysis of DNA Walks. **Journal of Computational Biology** 13, 1289-1298

867. Mukherjee S Bansal M and Bhattacharyya D. (**2006**) Conformational Specificity of Non-Canonical Base Pairs and Higher Order Structures in Nucleic Acids: Crystal Structure Database Analysis. **Journal of Computer-Aided Molecular Design** 20, 629-645

868. Patel DS and Bharatam PV. (**2006**) New leads for selective GSK-3 inhibition: pharmacophore mapping and virtual screening studies. **Journal of Computer-Aided Molecular Design** 20, 55-66

869. Mahendran B, Ghosh SK and Kundu SC . (**2006**) Molecular phylogeny of silk producing insects (Saturniidae family, Genus, Antheraea) based on 16S ribosomal RNA and cytochrome oxidase genes. **Journal of Genetics** 85, 31-38

870. Mittra P, Vinayak S, Chandawat H, Das MK, Singh N, Biswas S, Dev V, Kumar A, Ansari MA and Sharma YD. (**2006**) Progressive increase in point mutations associated with chloroquine resistance in *Plasmodium falciparum* isolates from India. **Journal of Infectious Diseases** 193, 1304-1312

871. Ghosh S, Barve AC, Kumbhar AA, Kumbhar AS, Puranik VG, Datar PA, Sonawane UB and Joshi RR. (**2006**) Synthesis, characterization, X-ray structure and DNA photocleavage by cisdichloro bis(diimine) Co(III) complexes. **Journal of Inorganic Biochemistry** 100, 331-343

872. Premanandh J, Priya B, Teneva I, Dzhambazov B, Prabaharan D and Uma L. (**2006**) Molecular Characterization of Marine Cyanobacteria from the Indian Subcontinent Deduced from Sequence Analysis of the Phycocyanin Operon (cpcB-IGS-cpcA) and 16S-23S ITS Region. **Journal of Microbiology** 44, 607-616

873. Das S, Paul S and Dutta C. (**2006**) Evolutionary constraints on codon and amino acid usage in two strains of human pathogenic *actinobacteria Tropheryma* whipplei. **Journal of Molecular Evolution** 62, 645-658

874. Goyal K, Qamra R and Mande SC. (**2006**) Multiple gene duplication and rapid evolution in the groEL gene, functional implications. **Journal of Molecular Evolution** 63, 781-787

875. Patel S, Sista P, Balaji PV and Sasidhar YU. (**2006**) Beta-hairpins with native-like and non-native hydrogen bonding patterns could form during the refolding of staphylococcal nuclease. **Journal of Molecular Graphics and modeling** 25, 103-115

876. Hariharan R and Pillai MR. (**2006**) Homology modeling of the DNA-binding domain of human Smad5: A molecular model for inhibitor design. **Journal of Molecular Graphics and Modelling** 24, 271-277

877. Roy S and Sen S. (**2006**) Exploring the potential of complex formation between a mutant DNA and the wild type protein counterpart: A MM and MD simulation approach. **Journal of Molecular Graphics and Modelling** 25, 158-168

878. Aswin SNS, Krishnan R, Karthikeyan S and Gautam P. (**2006**) Role of Hydrophobic Interactions and Salt-Bridges in beta Hairpin Folding. **Journal of Molecular Modelling** 12, 197-205

879. Joshi RR and Samant VV. (**2006**) Fast Prediction of Protein Domain Boundaries using Conserved Local Patterns. **Journal of Molecular Modelling** 12, 943-952

880. Varadwaj PR and Jaman AI. (**2006**) Centrifugal distortion analysis of the millimeter-wave spectrum of 2-fluorobenzonitrile and *Ab initio* DFT calculations. **Journal of Molecular Spectroscopy** 236, 70-74

881. Varadwaj PR and Jaman AI. (**2006**) Millimeter-wave spectrum of 2, 3-difluorobenzonitrile and *Ab initio* DFT calculations. **Journal of Molecular Spectroscopy** 239, 216-220

882. Banerjee A, Sengupta B, Chaudhuri S, Basu K and Sengupta PK. (**2006**) Encapsulation of Prodan in beta-cyclodextrin environments: A critical study via electronic spectroscopy and molecular mechanics. **Journal of Molecular Structure** 794, 181-189

883. Mondal S, Babu RM, Bhavna R and Ramakumar S. (**2006**) I-conotoxin superfamily revisited. **Journal of Peptide Science** 12, 679-685

884. Godhe A, McQuoid MR , Karunasagar I, Rehnstam Holm and Ann S. (**2006**) Comparison of three common molecular tools for distinguishing among geographically separated clones of the diatom Skeletonema marinoi sarno et zingone (Bacillariophyceae). **Journal of Phycology** 42, 280-291

885. Deshmukh MM, Gadre SR and Bartolotti LJ. (**2006**) Estimation of Intramolecular Hydrogen Bond Energy via Molecular Tailoring Approach. **Journal of Physical Chemistry A** 110, 12519-12523

886. Bandyopadhyay S, Chakraborty S and Bagchi B. (**2006**) Exploration of the secondary structure specific differential solvation dynamics between the native and molten globule states of the protein HP-36. **Journal of Physical Chemistry B** 110, 20629-20634

887. Chanda J and Bandyopadhyay S. (**2006**) Hydrogen bond lifetime dynamics at the interface of a surfactant monolayer. **Journal of Physical Chemistry B** 23, 23443-23444

888. Chanda J and Bandyopadhyay S. (**2006**) Molecular dynamics study of surfactant monolayers adsorbed at the oil/water and air/water interfaces. **Journal of Physical Chemistry B** 110, 23482 –23488

889. Ramakrishnan V, Ranbhor R, Kumar A and Durani S. (**2006**) The link between sequence and conformation in protein structures appears to be stereochemically established. **Journal of Physical Chemistry B** 110, 9314-9323

890. Bhushan D, Pandey A, Chattopadhyay A, Choudhary MK, Chakraborty S, Datta A and Chakraborty N. (**2006**) Extracellular matrix proteome of chickpea (*Cicer arietinum* L) illustrates pathway abundance, novel protein functions and evolutionary perspect. **Journal of Proteome Research** 5, 1711-20

891. Pandey A, Choudhary MK, Bhushan D, Chattopadhyay A, Chakraborty S, Datta A and Chakraborty N. (**2006**) The nuclear proteome of chickpea (*Cicer arietinum* L.) reveals predicted and unexpected proteins. **Journal of Proteome Research** 5, 3301-3311

892. Sirdeshmukh R. (**2006**) Fostering proteomics in India. **Journal of Proteome Research** 5, 2879

893. Mondal S, Bhavna R, Mohan BR and Ramakumar S. (**2006**) Pseudo amino acid composition and multi-class support vector machines approach for conotoxin superfamily classification. **Journal of Theoretical Biology** 243, 252-260

894. Bhutoria S, Mukherjee PK, Chhabra S and Ghoshal N. (**2006**) A 3D-QSAR of N- substituted 4-amino3-3-dialkyl-2 (3H)-furanone GABAA receptor modulators based on Receptor Surface Analysis. **Letters In Drug Design & Discovery** 3, 625-632

895. Sharma Priyanka, RD Senthilkumar, Brahmachari Vani, Sundaramoorthy Elayanambi, Mahajan Anubha, Sharma Amitabh and Shantanu Sengupta V. (**2006**) Mining literature for a comprehensive pathway analysis: A case study for retrieval of homocysteine related genes for genetic and epigenetic studies. **Lipids in Health and Disease** 5, 1

896. Sridhar GR, Thota H, Allam AR, Suresh Babu C, Siva Prasad A and Divakar Ch. (**2006**) Alzheimer's disease and type 2 D*iabetes mellitus*: the cholinesterase connection?. **Lipids in Health and Disease** 5, 28

897. Vani J, Shaila MS, Chandra NR and Nayak R. (**2006**) A combined immuno-informatics and structure-based modeling approach for prediction of T cell epitopes of secretory proteins of *Mycobacterium tuberculosis*. **Microbes and Infection** 8, 738-746

898. Bapat PM, Das D, Sohoni SV and Wangikar PP. (**2006**) Hierarchical amino acid utilization and its influence on fermentation dynamics: rifamycin B fermentation in Amycolatopsis mediterranei S699, a case study. **Microbial Cell Factories** 5, 32

899. Vinayak S, Mittra P and Sharma YD. (**2006**) Wide variation in microsatellite sequences within each Pfcrt mutant haplotype. **Molecular and Biochemical Parasitology** 147, 101-108

900. Gadkari RA, Sandhya S, Sowdhamini R and Dighe RR . (**2006**) The antigen binding sites of various hCG monoclonal antibodies show homology to different

domains of LH receptor. **Molecular and Cellular Endocrinology** 351, 675-681

901. Siwach P, Pophaly SD and Ganesh S. (**2006**) Genomic and evolutionary insights into genes encoding proteins with single amino acid repeats. **Molecular Biology and Evolution** 23, 1357-69

902. Vij S and Tyagi AK. (**2006**) Genome-wide analysis of the stress associated protein (SAP) gene family containing A20/AN1 zinc-finger(s) in rice and their phylogenetic relationship with Arabidopsis. **Molecular Genetics & Genomic** 276, 565-575

903. Santhiya ST, Soker T, Klopp N, Illig T, Prakash MV, Selvaraj B, Gopinath PM and Graw J. (**2006**) Identification of a novel, putative cataract-causing allele in CRYAA (G98R) in an Indian family. **Molecular Vision** 12, 768-73

904. Singh SK, Hora R, Belrhali H, Chitnis CE and Sharma A. (**2006**) Structural basis for Duffy recognition by the malaria parasite Duffy-binding-like domain. **Nature** 439, 741-744

905. Gandhi TK, Zhong J, Mathivanan S, Karthick L, Chandrika KN, Mohan SS, Sharma S, Pinkert S, Nagaraju S, Periaswamy B, Mishra G, Nandakumar K, Shen B, Deshpande N, Nayak R, Sarker M, Boeke JD, Parmigiani G, Schultz J, Bader JS and Pandey A. (**2006**) Analysis of the human protein interactome and comparison with yeast, worm and fly interaction datasets. **Nature Genetics** 38, 285-93

906. Sharma AK, Sharma RK and Kasana HS. (**2006**) Empirical comparisons of feed-forward connectionist and conventional regression models for prediction of first lactation 305-day milk yield in Karan Fries dairy cows. **Neural Computing & Applications** 15, 359–365

907. Baskaran A, Sunil KV and Balaji P. (**2006**) Circularly Permuted GTP Binding Proteins Need Additional domains for GTP hydrolysis. **Nucleic Acids Research** 34, 2196-2205

908. Bhadra R, Sandhya S, Abhinandan KR, Chakrabarti S and Sowdhamini R and Srinivasan N. (**2006**) Cascade PSI-BLAST Web server: A remote homology search tool for relating protein domains. **Nucleic Acids Research** 34, W143-W146

909. Gowri VS, Krishnadev O, Swamy CS and Srinivasan N. (**2006**) MulPSSM: A database of multiple position specific scoring matrices of protein domain families. **Nucleic Acids Research** 34, D243-246

910. Harish N, Gupta R, Agarwal P, Scaria V and Pillai B. (**2006**) DyNAVacS: an integrative tool for optimized DNA vaccine design. **Nucleic Acids Research** 34, W264-W266

911. Jayaram B, Bhushan K, Shenoy SR, Narang P, Bose S, Agrawal P, Sahu D and Pandey VS. (**2006**) Bhageerath : An Energy Based Web Enabled Computer Software Suite for Limiting the Search Space of Tertiary Structures of Small Globular Proteins. **Nucleic Acids Research** 34, 6195-6204

912. Krishna R, Manjunath GP, Kumar P, Surolia A, Chandra NR, Muniyappa K and Vijayan M. (**2006**) Crystallographic identification of an ordered C-terminal domain and a second nucleotide-binding site in RecA new insights into allostery. **Nucleic Acids Research** 34, 2186-95

913. Mandal P, Rawal K, Ramaswamy R Bhattacharya A and Bhattacharya S. (**2006**) Biochemical and computational

analysis of insertion hot spots of *Entamoeba histolytica* non-LTR retrotransposons. **Nucleic Acids Research** 34, 5752-5763

914. Mandal PK, Rawal K, Ramaswamy R, Bhattacharya A And Bhattacharya S. (**2006**) Identification of insertion hot spots for non-LTR retrotransposons: computational and biochemical application to *Entamoeba histolytica*. **Nucleic Acids Research** 34, 5752-5763

915. Mishra GR, Suresh M, Kumaran K, Kannabiran N, Suresh S, Bala P, Shivakumar K, Anuradha N, Reddy R, Raghavan TM, Menon S, Hanumanthu G, Gupta M, Upendran S, Gupta S, Mahesh M, Jacob B, Mathew P, Chatterjee P, Arun KS, Sharma S, Chandrika KN, Deshpande N, Palvankar K, Raghavnath R, Krishnakanth R, Karathia H, Rekha B, Nayak R, Vishnupriya G, Kumar HG, Nagini M, Kumar GS, Jose R, Deepthi P, Mohan SS, Gandhi TK, Harsha HC, Deshpande KS, Sarker M, Prasad TS and Pandey A. (**2006**) Human protein reference database--2006 update. **Nucleic Acids Research** 34, D411-4

916. Pugalenthi G and Sowdhamini R. (**2006**) iMOTdb - a comprehensive collection of spatially interacting motifs in proteins. **Nucleic Acids Research** 34, D285-D286

917. Pugalenthi G, Shameer K, Srinivasan N and Sowdhamini R. (**2006**) HARMONY: a web-server for the assessment of protein structures. **Nucleic Acids Research** 34, W231-W234

918. Ranjan S, Seshadri J, Vindal V, Yellaboina S and Ranjan A. (**2006**) iCR, A web tool to identify conserved targets of a regulatory protein across the prokaryotic species. **Nucleic Acids Research** 34, W584-W587

919. Saha S and Raghava GPS. (**2006**) AlgPred: Prediction of allergenic proteins and mapping of IgE epitopes. **Nucleic Acids Research** 34, W202-W209

920. Scaria V, Hariharan M, Arora A and Maiti S. (**2006**) Quadfinder: server for identification and analysis of quadruplex-forming motifs in *nucleotide* sequences. **Nucleic Acids Research** 34, W683-W685

921. Sumathi K, Ananthalakshmi P, Roshan MNA Md. and Sekar K. (**2006**) 3dSS: 3-Dimensional Structural Superposition. **Nucleic Acids Research** 34, W128-W134

922. Tyagi M, Sharma P, Swamy CS, Cadet F, Srinivasan N, de Brevern AG and Offmann B. (**2006**) Protein Block Expert (PBE): A web-based protein structure analysis server using a structural alphabet. **Nucleic Acids Research** 34, W119-W223

923. Pathak H, Singh R, Bhatia A and Jain N. (**2006**) Recycling of rice straw to improve Crop yield and soil fertility and reduce atmospheric pollution. **Paddy Water Environ** 4, 111-117

924. Ghosh K, Sarkar S and Bhaumik K . (**2006**) Proposing new methods in low-level vision from Mach band illusion in retrospect. **Pattern Recognition** 39, 726-730

925. Mitra S and Bank H. (**2006**) Multi-objective evolutionary biclustering of gene expression data. **Pattern Recognition** 39,2464-2477

926. Kim JK, Raghava GPS, Bang S and Choi S. (**2006**) Prediction of subcellular localization of proteins using pairwise sequence alignment and support vector machine. **Pattern Recognition Letters** 27, 996-1001

927. Srinivasan N and Brown JM. (**2006**) Effects of endogenous visual attention on the detection and discrimination of spatial frequencies. **Perception** 35, 193-200

928. Aftabuddin Md and Kundu S. (**2006**) Weighted and unweighted network of amino acids within protein. **Physica A: Stat. Theor. Phys** 369, 895-904

929. Karmakar R and Bose I. (**2006**) Stochastic model of transcription factor-regulated gene expression. **Physical Biology** 3, 200-208

930. Ajay SM and Bhalla US. (**2006**) Synaptic plasticity *in vitro* and *in silico*: insights into an intracellular signaling maze. **Physiology (Bethesda)** 21, 289-296

931. Ghosh Dastidar, K., Maitra S, Goswami, L., Roy D, Das KP and Majumder AL. (**2006**) An insight into the molecular basis of salt tolerance of L-myo-inositol 1-P synthase (PcINO1) from *Porteresia coarctata* (Roxb) Tateoka, a halophytic wild rice. **Plant Physiology** 140, 1279-1296

932. Pareek A, Singh A, Kumar M, Kushwaha HR, Lynn AM and Singla-Pareek SL. (**2006**) Whole-genome analysis of *Oryza sativa* reveals similar architecture of two-component signalling machinery with Arabidopsis. **Plant Physiology** 142, 380-397

933. Jain S, Srivastava S, Sarin NB and Kav NN. (**2006**) Proteomics reveals elevated levels of PR 10 proteins in saline-tolerant peanut (*Arachis hypogaea*) calli. **Plant Physiology and Biochemistry** 44(4):253-9

934. Arunkumar KP and Nagaraju J. (**2006**) Unusually long palindromes are abundant in mitochondrial control regions of insects and nematodes. **PLoS ONE** 1, e110

935. Bocxlaer IV, Roelants K, Biju SD, Nagaraju J and Bossuyt F. (**2006**) Late cretaceous vicariance in *gondwanan amphibians*. **PLoS ONE** 1, e74

936. Rangrez AY, Dayananda KM, Atanur S, Joshi R, Patole MS and Shouche YS. (**2006**) Detection of conjugation related type four secretion machinery in *Aeromonas culicicola*. **PLoS One** 27, e115

937. Krithika R, Marathe U, Saxena P, Ansari MZ, Mohanty D and Gokhale RS. (**2006**) A genetic locus required for iron acquisition in *Mycobacterium tuberculosis*. **Proceedings of the National Academy of Sciences of the USA** 103, 2069-74

938. Shenoy S, Jayaram B, et al. (**2006**) From gene to drug: A proof of concept for a plausible computational pathway. **Proceedings, IEEE Computer Society** 1147-1152

939. Bhalla US. (**2006**) Understanding complex signaling networks through models and metaphors. **Progress in Biophysics and Molecular Biology** 81, 45-65

940. Dubey VK, Shah A, Jagannadham MV and Kayastha AM. (**2006**) Effect of Organic Solvents on the Molten Globule State of Procerain: B-sheet to α -helix switchover in the presence of trifluroethanol. **Protein and Peptide Letters** 13, 545-547

941. Guruprasad K, Kartik VJ, Lavanya T and Guruprasad L. (**2006**) Juxtaposed half-cystines as disulphide bridged partners in protein tertiary structure. **Protein and Peptide Letters** 13, 577-579

942. Joshi RR and Gupta VK. (**2006**) Data Mining of VDJ Genes Reveals Interesting Clues. **Protein and Peptide Letters** 13, 587-593

943. Manikandan K, Bhardwaj A, Guptam N, Lokanath NK, Ghosh A, Reddy VS and Ramakumar S. (**2006**) Crystal structures of native and xylosaccharide-bound alkali thermostable xylanase from an alkalophilic Bacillus sp. NG-27: structural insights into alkalophilicity and implications for adaptation to polyextreme conditions. **Protein Science** 15, 1951-1960

944. Brinda KV and Vishveshwara S. (**2006**) Characterization of the backbone geometry of protein native state structures. **Proteins: Structure, Function and Bioinformatics** 64, 992-1000

945. Chattopadhyay S, Sinha NK, Banerjee S, Roy D, Chattopadhyay D and Roy S. (**2006**) Small cationic protein from a marine turtle has beta-defensin-like fold and antibacterial and antiviral activity. **Proteins: Structure, Function and Bioinformatics** 64, 524-531

946. Gowri VS, Tina KG, Krishnadev O and Srinivasan N. (**2006**) Strategies for the effective identification of remotely related sequences in multiple PSSM search approach. **Proteins: Structure, Function and Bioinformatics** 67, 789-794

947. Rajavel M, Warrier T and Gopal B. (**2006**) Old fold in a new X-ray diffraction dataset? Low-resolution molecular replacement using representative structural templates can provide phase information. **Proteins: Structure, Function and Bioinformatics** 64, 923-30

948. Saha S and Raghava GPS. (**2006**) Prediction of continuous B-cell epitopes in an antigen using recurrent neural network. **Proteins: Structure, Function and Bioinformatics** 65, 40-48

949. Singh GP, Ganapathi M, Sandhu KS and Dash D. (**2006**) Intrinsic unstructuredness and abundance of PEST motifs in eukaryotic proteomes. **Proteins: Structure, Function and Bioinformatics** 62, 309-315

950. Thangudu RR, Sharma P, Srinivasan N and Offmann B. (**2006**) Analycys: a database for conservation and conformation of disulphide bonds in homologous proteins. **Proteins: Structure, Function and Bioinformatics** 67, 255-261

951. Tyagi M, Gowri VS, Srinivasan N, de Brevern AG and Offmann B. (**2006**) A substitution matrix for structural alphabet based on structural alignment of homologous proteins and its 24 applications. **Proteins: Structure, Function and Bioinformatics** 65, 32-39

952. Joy F, Basak S, Gupta SK, Das PJ, Ghosh SK and Ghosh TC. (**2006**) Compositional correlations in canine genome reflects similarity with human genes. **Res J Microbiol** 1, 172-182

953. Bagchi A and Ghosh TC. (**2006**) Structural and functional characterization of SoxW – a thioredoxin involved in the transport of reductants during sulfur oxidation by the global sulfur oxidation reaction cycle. **Research Journal of Microbiology** 1, 392-400

954. Saxena AK and Prathipati P. (**2006**) Collection and preparation of molecular databases for virtual screening. **SAR and QSAR in Environmental Research** 17, 371-392

955. Maiti D, Das DK and Pathak H. (**2006**) Fertilizer requirement for irrigated wheat in eastern India using the QUEFTS simulation model. **Science World Journal** 6, 231–245

956. Pathak H, Wassmann R, Li CR and Ladha JK. (**2006**) Simulation of Nitrogen Balance in the Rice- Wheat Systems of the Indo-Gangetic Plains. **Soil Science Society of America Journal** 70, 1612-1622

957. Chaudhuri P and Dasgupta A. (**2006**) Stationarity and mixing properties of replicating character strings. **Statist. Sinica** 16, 29-43

958. Chandra NR. (**2006**) Common scaffolds, diverse recognition profiles. **Structure** 14, 1093-1094

959. Singh SP, Sundaram RM, Biradar SK, Ahmed MI, Viraktamath BC and Siddiq EA. (**2006**) Identification of simple sequence repeat markers for utilizing wide-compatibility genes in intersubspecific hybrids in rice. **Theoretical and Applied Genetics** 113, 509-517

960. Singh Vivek Kumar and Ghosh Indira. (**2006**) Kinetic modeling of tricarboxylic acid cycle and glyoxylate bypass in *Mycobacterium tuberculosis*, and its application to assessment of drug targets. **Theoretical Biology and Medical Modelling** 3, 27

961. Ravi V, Khurana JP, Tyagi AK and Khurana P. (**2006**) The chloroplast genome of mulberry: complete *nucleotide* sequence, gene organization and comparative analysis. **Tree Genet. Genomes** 3, 49-59

962. Mitra N, Sinha S, Ramya TNC and Surolia A. (**2006**) N-Linked Oligosaccharides As Out-Fitters For Glycoprotein Folding, Form and Function. **Trends in Biochemical Sciences** 31, 156-163

963. Das S, Paul S and Dutta C. (**2006**) Synonymous codon usage in adenoviruses: influence of mutation, selection and protein hydropathy. **Virus Research** 117, 227-236

964. Kumar P Pravin, Usha R, Zrachya A, Levy Y, Spanov H and Gafni Y. (**2006**) Protein–protein interactions and nuclear trafficking of coat protein and βC1 protein associated with Bhendi yellow vein mosaic disease. **Virus Research** 122, 127-136

2007

965. Janin J, Rodier F, Chakrabarti P and Bahadur R. (**2007**) Macromolecular recognition in the Protein Data Bank. **Acta Crystallographica: Section D-Biological Crystallography** D63, 1-8

966. Varshney RK, Langridge P and Graner A. (**2007**) Application of genomics to molecular breeding of wheat and barley. **Advances in Genetics** 58:121-55

967. Raghava GPS. (**2007**) Prediction of subcellular localization of proteins using machine learning techniques and evolutionary information. **Amino Acids** 33, 10-11

968. Tuteja R. (**2007**) Unraveling the components of protein translocation pathway in human malaria parasite *Plasmodium falciparum*. **Archives of Biochemistry and Biophysics** 467, 249-60

969. Gangadhar V, Jeyakani JJ, Shaila MS, Nayak R and Chandra N. (**2007**) Perpetuation of immunological memory through common MHC-I binding modes of peptidomimic and antigenic peptides.

Biochemical & Biophysical Research Communications 364, 308-12

970. Ghosh Z, Chakrabarti J and Mallick B. (**2007**) miRNomics-The bioinformatics of microRNA genes. **Biochemical & Biophysical Research Communications** 363, 6-11

971. Kahali B, Basak S and Ghosh TC. (**2007**) Reinvestigating the codon and amino acid usage of S. cerevisiae genome: A new insight from protein secondary structure analysis. **Biochemical & Biophysical Research Communications** 354, 693-699

972. Pankaj Tripathy, Debnath Pal and Kalappa
Muniyappa. (**2007**) The *Saccharomyces cerevisiae* Hop1 protein zinc finger motif binds to the Holliday junction and distorts the DNA structure: implications for Holliday junction migration. **Biochemistry** 46, 12530-12542

973. Abiram A and Kolandaivel P. (**2007**) Conformational study of palindromic tripeptides (GPG, IPI and KPK) in HIV-1 protease--a density functional theory study. **Biochimica et Biophysica Acta** 1774, 382-91

974. Patel RY and Balaji PV. (**2007**) Characterization of the conformational and orientational dynamics of ganglioside GM1 in a dipalmitoylphosphatidylcholine bilayer by molecular dynamics simulations. **Biochimica et Biophysica Acta - Biomembranes** 1768, 1628-40

975. Bandyopadhyay S, Mukhopadhyay A and Maulik U. (**2007**) An improved algorithm for clustering gene expression data. **Bioinformatics** 23, 2859-65

976. Ganesh B and Somdatta S. (**2007**) Assortative mixing in Protein Contact Networks and protein folding kinetics. **Bioinformatics** 23, 1760-1767

977. Guharoy M and Chakrabarti P. (**2007**) Secondary structure based analysis and classification of biological interfaces: identification of binding motifs in protein-protein interactions. **Bioinformatics** 23, 1909-18

978. Mudunuri SB and Nagarajaram HA. (**2007**) IMEx: Imperfect Microsatellite Extractor. **Bioinformatics** 23, 1181-7

979. Patnaik PR. (**2007**) Robustness analysis of the *E. coli* chemosensory system to perturbations in chemoattractant concentrations. **Bioinformatics** 23, 875-81

980. Pugalenthi G, Suganthan PN, Sowdhamini R and Chakrabarti S. (**2007**) SMotif: A server for structural motifs in proteins. **Bioinformatics** 23, 637-638

981. Rajan I, Aravamuthan S and Mande SS. (**2007**) Identification of compositionally distinct regions in genomes using the centroid method. **Bioinformatics** 23, 2672-7

982. Rani TS, Bhavani SD and Bapi RS. (**2007**) Analysis of *E. coli* promoter recognition problem in di*nucleotide* feature space. **Bioinformatics** 23, 582-8

983. Richard T, Krishnan R, Sharmila A and Gautam P. (**2007**) *In silico* identification of putative metal binding motifs. **Bioinformatics** 23, 267-272

984. Shamim MT, Anwaruddin M and Nagarajaram HA. (**2007**) Support Vector Machine-based classification of protein folds using the structural properties of amino acid residues and amino acid residue pairs. **Bioinformatics** 23, 3320-3327

985. Annamala MK, Inampudi KK and Guruprasad L. (**2007**) Docking of phosphonate and trehalose analog inhibitors into *M. tuberculosis* mycolyltransferase Ag85C: Comparison of the two scoring fitness functions GoldScore and ChemScore, in the GOLD software. **Bioinformation** 1, 339-350

986. Anwar T and Khan AU. (**2007**) Identification of a casein kinase II phosphorylation domain in NS1 protein of H5N1 influenza virus. **Bioinformation** 2, 57-61

987. Gowthaman R, Krishnamoorthy S, Nandakumar RD and Ayyarappan V. (**2007**) TeCK database: a comprehensive collection of telomeric and centromeric sequences with their associated proteins. **Bioinformation** 2, 73-75

988. Kashyap L and Tabish M. (**2007**) Alternatively spliced isoforms encoded by cadherin genes from *C. Elegans* genome. **Bioinformation** 2, 50-6

989. Kashyap L, Tabish M, Ganesh S and Dubey D. (**2007**) Identification and comparative analysis of novel alternatively spliced transcripts of RhoGEF domain encoding gene in *C. Elegans* and *C. Briggsae*. **Bioinformation** 2, 43-9

990. Naik PK, Mishra VS, Gupta M and Jaiswal K. (**2007**) Prediction of enzymes and non-enzymes from protein sequences based on sequence derived features and PSSM matrix using artificial neural network. **Bioinformation** 2, 107-12

991. Natarajan J and Jawahar G. (**2007**) Functional gene clustering via gene annotation sentences, MeSH and GO keywords from biomedical literature. **Bioinformation** 2, 185-193

992. Parthiban M, Shanmughavel P. (**2007**) Three dimensional modeling of N-terminal region of galanin and its interaction with the galanin receptor. **Bioinformation** 2, 119-25

993. Prasad SH and Deccaraman M. (**2007**) CDAC--development of a curated database of anticancer compounds from marine resources. **Bioinformation** 2, 96

994. Rayan Nirmala Arul, Rengaswamy Saradha, James Eliza and Pitchai Daisy . (2007) Database for medicinal plants used in the treatment of diabetes and it's secondary complications. **Bioinformation** 2 , 22-23

995. Riju A, Chandrasekar A and Arunachalam V. (**2007**) Mining for single *nucleotide* polymorphisms and insertions / deletions in expressed sequence tag libraries of oil palm. **Bioinformation** 2, 128-131

996. Saravanan V and Shanmughavel P. (**2007**) An automated protein annotation filter for integrating web-based annotation tools. **Bioinformation** 2, 76-7

997. Saravanan V and Shanmughavel P. (**2007**) E-Learning as a new tool in bioinformatics teaching. **Bioinformation** 2, 83-5

998. Shameer K and Sowdhamini R. (**2007**) IWS: integrated web server for protein sequence and structure analysis. **Bioinformation** 2, 86-90

999. Vetrivel U, Arunkumar V and Dorairaj S. (**2007**) ACUA: a software tool for automated codon usage analysis. **Bioinformation** 2, 62-3

1000. Rana S, Kundu, B and Durani S. (**2007**) A double catgrip mixed L and D mini-protein only 20 residues long.

Bioorganic & Medicinal Chemistry 15, 3874-3882

1001. Sivapriya K, Hariharaputran S, Suhas VL, Chandra N and Chandrasekaran S. (**2007**) Conformationally locked thiosugars as potent alpha-mannosidase inhibitors: Synthesis, biochemical and docking studies. **Bioorganic & Medicinal Chemistry** 15, 5659-5665

1002. Agrawal H, Kumar A, Bal NC, Siddiqi MI, and Arora A. (**2007**) Ligand based Virtual Screeening and Biological Evalution of Inhibitors of Chorismate Mutase (Rv1885c) from *Mycobacterium tuberculosis* H37Rv. **Bioorganic & Medicinal Chemistry Letters** 17, 3053-3058

1003. Chhabra S, Sharma P and Ghoshal N. (**2007**) A computational docking study for prediction of binding mode of diospyrin and derivatives: Inhibitors of human and leishmanial DNA topoisomerase-I. **Bioorganic & Medicinal Chemistry Letters** 17, 4604-12

1004. Kadam RU, Chavan A and Roy N. (**2007**) Pharmacophoric features of *Pseudomonas aeruginosa* deacetylase LpxC inhibitors: An electronic and structural analysis. **Bioorganic & Medicinal Chemistry Letters** 17, 861-868

1005. Mishra JK, Garg P, Doohare P, Kumar A, Siddiqi MI, . Ray M and Panda G. (**2007**) Amino acid based enanotiomerically pure 3-substituted benzondiazepine-ones: a new class of anti-ischemic agents. **Bioorganic & Medicinal Chemistry Letters** 17, 1326-1331

1006. Ravichandran V and Agrawal RK. (**2007**) Predicting anti-HIV activity of PETT derivatives: CoMFA approach. **Bioorganic & Medicinal Chemistry Letters** 17, 2197-202

1007. Sengupta N, Vinod PK and Venkatesh KV. (**2007**) Crosstalk between cAMP-PKA and MAP kinase pathways is a key regulatory design necessary to regulate FLO11 expression. **Biophysical Chemistry** 125, 59-71

1008. Sreekanth R and Rajan SS. (**2007**) The study of helical distortions due to environmental changes: Choice of parameters. **Biophysical Chemistry** 125, 191-200

1009. Aftabuddin Md and Kundu S. (**2007**) Hydrophobic, hydrophilic and charged amino acids' networks within protein. **Biophysical Journal** 93, 225-231

1010. Sinha S. and Surolia A. (2007) Attributes of glycosylation in the establishment of the unfolding pathway of Soybean Agglutinin. **Biophysical Journal** 92, 208-216

1011. Banik P, Pramanik P, Sarkar RR, Bhattacharya S and Chattopadhayay J. (**2007**) A mathematical model on the effect of *M. denticulata* weed on different winter crops. **Biosystems** 90, 818-29

1012. Choudhary A and Krithivasan K. (**2007**) Network of evolutionary processors with splicing rules and permitting context. **Biosystems** 87, 111-6

1013. Gakkhar S, Singh B and Naji RK. (**2007**) Dynamical behavior of two predators competing over a single prey. **Biosystems** 90, 808-17

1014. Mukherjee S, Sangwan V, Taneja A and Seth B. (**2007**) Stability of an underactuated bipedal gait. **Biosystems** 90, 582-589

1015. Mutalik VK and Venkatesh KV. (**2007**) A theoretical steady state analysis indicates that induction of *Escherichia coli* glnALG operon can display all-or-none behaviour. **Biosystems** 90, 1-19

1016. Pal S, Chatterjee S, Chattopadhyay J. (**2007**) Role of toxin and nutrient for the occurrence and termination of plankton bloom--results drawn from field observations and a mathematical model. **Biosystems** 90, 87-100

1017. Rawool SB and Venkatesh KV. (**2007**) Steady state approach to model gene regulatory networks--simulation of microarray experiments. **Biosystems** 90, 636-655

1018. Roy S and Chattopadhyay J. (**2007**) Enrichment and ecosystem stability: effect of toxic food. **Biosystems** 90, 151-60

1019. Roy S and Chattopadhyay J. (**2007**) Enrichment and stability: a phenomenological coupling of energy value and carrying capacity. **Biosystems** 90, 371-8

1020. Bhattacharya S, Bhattacharya C, and Chandra NR. (**2007**) Comparison of protein structures by growing neighborhood alignments. **BMC Bioinformatics** 8, 77

1021. Kumar M, Gromiha MM and Raghava GPS. (**2007**) Identification of DNA-binding proteins using support vector machines and evolutionary profiles. **BMC Bioinformatics** 8, 463

1022. Lata S, Sharma BK and Raghava GPS. (**2007**) Analysis and prediction of antibacterial peptides. **BMC Bioinformatics** 8, 263

1023. Rashid M, Saha S and Raghava GP S. (**2007**) Support Vector Machine-based Method for Predicting Subcellular Localization of Mycobacterial Proteins Using Evolutionary Information and Motifs. **BMC Bioinformatics** 8, 337

1024. Aishwarya V, Grover A and Sharma PC. (**2007**) EuMicroSatdb: a database for microsatellites in the sequenced genomes of eukaryotes. **BMC Genomics** 8, 225

1025. Priya B, Premanandh J, Dhanalakshmi, Seethalakshmi, D, Prabaharan D, and Uma L. (2007) Comparative analysis of cyanobacterial SOD – a canonical form. **BMC Genomics** 8, 458

1026. Vindal V, Suma K and Ranjan A. (**2007**) GntR family of regulators in *Mycobacterium smegmatis*: a sequence and structure based characterization. **BMC Genomics** 8, 289

1027. Hariharan R. And Pillai M R. (**2007**) Structure-function relationship of Inhibitory Smads: Structural flexibility contributes to functional divergence. **BMC Structure Biology** 71, 1853-1862

1028. Tanusree D, Latika S and Nandini CS . (**2007**) Rhythmic structure of English and Hindi – new insights from a computational analysis. **Prog. Brain Research** 168, 207-72

1029. Kulkarni AA, Kelkar SM, Watve MG and Krishnamurthy KV. (**2007**) Characterization and control of endophytic bacterial contaminants in *in vitro* cultures of Piper spp., *Taxus baccata* subsp. wallichiana, and *Withania somnifera*. **Canadian Journal of Microbiology** 53, 63-74

1030. Malik A, Singh H, Andrabi M, Husain SA and Ahmad S. (**2007**) Databases and QSAR for cancer research. **Cancer Inform** 2, 99-111

1031. Arunkumar R, Seon-Kang Choi, UdayasuriyanV and Misawa N. (**2007**) Structure of a carotenoid gene cluster from Pantoea sp C1B1Y and characterization of β- carotene hydroxylase (crtZ) gene by functional complementation in *Escherichia coli*. **Carotenoid Science** 11, 10-15

1032. Banerjee D and Nandagopal K. (**2007**) Potential interaction between the GARS-AIRS-GART Gene and CP2/LBP-1c/LSF transcription factor in Down syndrome-related Alzheimer disease. **Cellular and Molecular Neurobiology** 27, 1117-26

1033. Parthasarathy S, Manikandakumar K. (**2007**) Multiple period-doubling bifurcation route to chaos in periodically pulsed Murali-Lakshmanan-Chua circuit-controlling and synchronization of chaos. **Chaos** 17(4):043120

1034. Hassan MI, Kumar V, Singh TP and Yadav S. (**2007**) Structural model of human PSA: a target for prostate cancer therapy. **Chemical Biology & Drug Design** 70, 261-267

1035. Jain S and Yadav A. (**2007**) *Ab initio* study of non-peptidic antihypertensives. **Chemical Biology & Drug Design** 69, 251-7

1036. Nandi S, Vracko M, and Bagchi MC. (**2007**) Anticancer activity of selected phenolic compounds: QSAR studies using ridge regression and neural networks. **Chemical Biology & Drug Design** 70, 424-36

1037. Sekhar YN, Nayana MR, Ravikumar M and Mahmood SK. (**2007**) Comparative molecular field analysis of quinoline derivatives as selective and noncompetitive mGluR1 antagonists. **Chemical Biology & Drug Design** 70, 511-9

1038. Misra A, Kumar S, Surolia N and Surolia A . (**2007**) Self-Acylation Properties of Type II Fatty Acid Biosynthesis Acyl Carrier Protein. **Chemistry & Biology** 14, 775-783

1039. Singh R, Shasany AK, Aggarwal A, Sinha S, Sisodia BS, Khanuja SP and Misra R. (**2007**) Low molecular weight proteins of outer membrane of *Salmonella typhimurium* are immunogenic in Salmonella induced reactive arthritis revealed by proteomics. **Clin Exp Immunol** 148, 486-93

1040. Gautam P, Sundaram CS, Madan T, Gade WN, Shah A, Sirdeshmukh R and Sarma PU. (**2007**) Identification of novel allergens of *Aspergillus fumigatus* using immunoproteomics approach. **Clinical & Experimental Allergy** 37, 1239-49

1041. Hemalatha GR, Rao DS and Guruprasad L. (**2007**) Identification and Analysis of Novel Amino-Acid Sequence Repeats in Bacillus anthracis str. Ames Proteome Using Computational Tools. **Comparative and Functional Genomics** 2007, 47161

1042. Jayashree B, Hanspal MS, Srinivasan R, Vigneshwaran R, Varshney RK, Spurthi N, Eshwar K, Ramesh N, Chandra S and Hoisington DA. (**2007**) An integrated pipeline of open source software adapted for multi-CPU architectures: use in the large-scale identification of single nucleotide polymorphisms. **Comparative and Functional Genomics** 2007, Article ID 35604

1043. Tiwari A and Sekhar AK. (**2007**) Workflow based framework for life science informatics. **Computational Biology and Chemistry** 31, 305-19

1044. Singh S, Kumar V and Verma HK. (**2007**) Adaptive threshold-based block classification in medical image compression for teleradiology.

Computers in Biology and Medicine 37, 811-9

1045. Pashov A, Monzavi-Karbassi B, Raghava G and Kieber-Emmons T. (**2007**) Peptide mimotopes as prototypic templates of broad-spectrum surrogates of carbohydrate antigens for cancer vaccination. **Critical Reviews in Immunology** 27, 247-270

1046. Mohan A, Goyal A, Singh R, Balyan HS and Gupta PK. (**2007**) Physical Mapping of Wheat and Rye Expressed Sequence Tag–Simple Sequence Repeats on Wheat Chromosomes. **Crop Science** 47, 3-13

1047. Rajendrakumar P, Biswal AK, Balachandran, SM, Ramesha MS, Viraktamath BC and Sundaram RM. (**2007**) A mitochondrial repeat specific marker for distinguishing wild abortive type cytoplasmic male sterile rice lines from their cognate isogenic maintainer lines. **Crop Science** 47, 207-211

1048. Joshi RR. (**2007**) A Decade of Computing to Traverse The Labyrinth of Protein Domains. **Current Bioinformatics** 2, 113 –131

1049. Joshi RRA. (**2007**) Decade of Computing to Traverse The Labyrinth of Protein Domains. **Current Bioinformatics** 2, 113-131

1050. Gomase VS, Kale KV, Chikhale NJ and Changbhale SS. (**2007**) Prediction of MHC binding peptides and epitopes from alfalfa mosaic virus. **Current Drug Discovery Technologies** 4, 117-215

1051. Dey R, Khan S and Saha B. (**2007**) A novel functional approach toward identifying definitive drug targets. **Current Medicinal Chemistry** 14, 2380-92

1052. Sriharsha S N, Pai KSR, Suhas V L, Shashikanth S and Chandra N R. (**2007**) Synthesis, Docking and Anti-Tumor Activity of β-L-1,3-Thiazolidine Pyrimidine Nucleoside Analogues. **Current Medicinal Chemistry** 3, 425-432

1053. Rao AA, Hanuman T, Srihari R, Kodanda RKRT, Sridhar RG, Annapruna A, Suresh BCh, Siva RC, Veera Swamy T, Satyanarayana VVK and Das UN. (**2007**) Bioinformatics analysis of functional protein sequences reveals a role for tumor necrosis factor-α and nitric oxide in insulin resistance syndrome. **Current Nutrition & Food Science** 3, 250-254

1054. Gokhale RS, Sankaranarayanan R and Mohanty D. (**2007**) Versatility of polyketide synthases in generating metabolic diversity. **Current Opinion in Structural Biology** 17, 736-743

1055. Sinha S, Gupta G, Vijayan M and Surolia A. (**2007**) Subunit Assembly of Plant Lectins. **Current Opinion in Structural Biology** 17, 498-505

1056. Bharatam PV, Patel DS, Adane L, Mittal A and Sundriyal S. (**2007**) Modeling and informatics in designing anti-diabetic agents. **Current Pharmaceutical Design** 13, 3518-30

1057. Shaikh SA, Jain T, Sandhu G, Latha N and Jayaram B. (**2007**) From drug target to leads- sketching a physicochemical pathway for lead molecule design *in silico*. **Current Pharmaceutical Design** 13, 3454-70

1058. Kishan KV. (**2007**) Structural biology, protein conformations and drug designing. **Current Protein and Peptide Science** 8, 376-380

1059. Reddy AS, Pati SP, Kumar PP, Pradeep HN and Sastry GN. (**2007**) Virtual

screening in drug discovery - a computational perspective. **Current Protein and Peptide Science** 8, 329-351

1060. Idicula-Thomas, S and Balaji PV . (**2007**) Protein aggregation: a perspective from amyloid and inclusion body formation. **Current Science** 92, 758-767

1061. Jamil Kaiser, Das Prabhavathi G, Shaik Abjal Pasha, Dharmi Sunita S and Murthy Sudha . (2007) Epidemiological studies of pesticide exposed individuals and their clinical implications. **Current Science** 92, 340

1062. Vidyasagar, Chandra NR, Vishveshwara, S et al., (NMITLI consortium for BioSuite). (**2007**) BioSuite: A comprehensive bioinformatics software package (a unique-industry- academia collaboration). **Current Science** 92, 29-38

1063. Singh L and Singh NC. (**2007**) The development of articulatory signatures in children. **Developmental Science** 11, 467-473

1064. Chaudhuri K and Chatterjee R. (**2007**) MicroRNA detection and target prediction: integration of computational and experimental approaches. **DNA and Cell Biology** 26, 321-37

1065. Shivu MM, Rajeeva BC, Girisha SK, Karunasagar I, Krohne G and Karunasagar I. (**2007**) Molecular characterization of *Vibrio harveyi* bacteriophages isolated from aquaculture environment along the coast of India. **Environmental Microbiology** 9, 322-331

1066. Banerjee D, Lelandais G, Shukla S, Mukhopadhyay G, Jacq C, Devaux F and Prasad R. (**2007**) Responses of pathogenic and nonpathogenic yeast species to steroids reveal the functioning and evolution of multidrug resistance transcriptional networks. **Eukaryotic Cell** 7, 68-77

1067. Pasrija R, Banerjee D and Prasad R. (**2007**) Structure and function analysis of CaMdr1p, a major facilitator superfamily antifungal efflux transporter protein of *Candida albicans*: identification of amino acid residues critical for drug/H+ transport. **Eukaryotic Cell** 6, 443-453

1068. Deswal, S and Roy N. (**2007**) A novel range based QSAR study of human neuropeptide Y (NPY) Y5 receptor inhibitors. **European Journal of Medicinal Chemistry** 42, 463-470

1069. Clavel C, Canales A, Gupta G, Cañada FJ, Penadés S, Surolia A and Jiménez-Barbero J. (**2007**) NMR Investigation of the Bound Conformation of Natural and Synthetic Oligomannosides to Banana Lectin. **European Journal of Organic Chemistry** 2007, 1577–1585

1070. Singh S, Samal, A, Giri, V, Krishna, S, Raghuram N and Jain S. (**2007**) A Universal power law and proportionate change process characterizes the evolution of metabolic networks. **European Physical Journal B** 57,75-80

1071. Joti P, Kulashekhar S, Behari M and Murthy A. (**2007**) Impaired inhibitory oculomotor control in patients with Parkinson's disease. **Experimental Brain Research** 177, 447-457

1072. Patra KP, Ramu T, Hoti SL, Pragasam GS and Das PK. (**2007**) Identification of a molecular marker for genotyping human lymphatic filarial nematode parasite *Wuchereria bancrofti*. **Experimental Parasitology** 116, 59-65

1073. Konkimalla VB, Suhas VL, Chandra NR, Gebhart E and Efferth T. (**2007**) Diagnosis and therapy of oral squamous cell carcinoma. **Expert Review of Anticancer Therapy** 7, 317-329

1074. Kanade SR, Suhas VL, Chandra N and Gowda LR. (**2007**) Functional interaction of diphenols with polyphenol oxidase. **FEBS Journal** 274, 4177-87

1075. Basak S, Roy S and Ghosh TC. (**2007**) On the origin of synonymous codon usage divergence between thermophilic and mesophilic prokaryotes. **FEBS Letters** 581, 5825-30

1076. Chanda I, Pan A, Saha SK and Dutta C. (**2007**) Comparative codon and amino acid composition analysis of Tritryps-conspicuous features of *Leishmania major*. **FEBS Letters** 581, 5751-8

1077. D'Onofrio G, Ghosh TC and Saccone S. (2007) Different functional classes of genes are characterized by different compositional properties. **FEBS Letters** 581, 5819-5824

1078. Dasgupta B, Chakrabarti P and Basu G. (2007) Enhanced stability of cis Pro-Pro peptide bond in Pro-Pro-Phe sequence motif. **FEBS Letters** 581, 4529-4532

1079. Paul Chowdhury S, Nagarajan T, Tripathi Rachna, MishraMuktinath, Le Rudulier D and Tripathi AK. (**2007**) Strain specific salt tolerance and osmoregulatory mechanisms in *Azospirillum brasilense*. **FEMS Microbiology Letters** 267, 72-79

1080. Archak S and Nagaraju J. (**2007**) InSatDb: a genomic tool for insect geneticists. **Fly (Austin)** 1, 279-81

1081. Ganapathi M, Singh GP, Sandhu KS, Brahmachari, SK and Brahmachari V. (**2007**) A whole genome analysis of 5' regulatory regions of human genes for putative cis-acting modulators of nucleosome positioning. **Gene** 391, 242-251

1082. Mukhopadhyay P, Basak S and Ghosh TC. (**2007**) Nature of selective constraints on synonymous codon usage of rice differs in GC-poor and GC-rich genes. **Gene** 400, 71-81

1083. The Rice Annotation Project. (**2007**) Curated genome annotation of *Oryza sativa* ssp. japonica and comparative genome analysis with *Arabidopsis thaliana*. **Genome Research** 17, 175-183

1084. Yellaboina S, Goyal K and Mande SC. (**2007**) Inferring genome-wide functional linkages in *E. coli* by combining improved genome context methods: comparison with high-throughput experimental data. **Genome Research** 17, 527-35

1085. Rajasekaran R, Sudandiradoss C, Doss CG and Sethumadhavan R. (**2007**) Identification and *In silico* analysis of functional SNPs of the BRCA1 gene. **Genomics** 90, 447-52

1086. Saha S, Zack J, Singh B and Raghava GPS. (**2007**) VGIchan: Prediction and classification of voltage-gated ion channels. **Genomics Proteomics and Bioinformatics** 4, 253-258

1087. Archak S and Nagaraju J. (**2007**) Computational prediction of rice (*Oryza sativa*) miRNA targets. **Genomics Proteomics Bioinformatics** 5, 196-206

1088. Muthukrishnan S, Garg A and Raghava GPS. (**2007**) OxyPred : Prediction and Classification of Oxygen-Binding Proteins. **Genomics, Proteomics & Bioinformatics** 5, 250-2

1089. Clavel C, Canales A, Gupta G, Cañada FJ, Penadés S, Surolia A and Jiménez-

Barbero J. (**2007**) NMR studies on the conformation of oligomannosides and their interaction with banana lectin. **Glycoconjugate Journal** 24, 449-464

1090. Ajay SM and Bhalla US. (**2007**) A propagating ERKII switch forms zones of elevated dendritic activation correlated with plasticity. **HFSP Journal** 1, 49–66

1091. Naravaneni Rambabu and Jamil Kaiser. (2007) Determination of Aecetylcholiesterase levels and genotoxic effects in farmers exposed to pesticides. **Human and Experimental Toxicology** 26, 723-731

1092. Soundravally R and Hoti SL. (**2007**) Immunopathogenesis of dengue hemorrhagic fever and shock syndrome: role of TAP and HPA gene polymorphism. **Human Immunology** 68, 973-9

1093. Ray SS, Bandyopadhyay S and Pal SK. (**2007**) Dynamic Range Based Distance Measure for Microarray Expressions and A Fast Gene Ordering Algorithm. **IEEE Trans. Syst. Man Cybern. Part B** 37, 742-749

1094. Bandyopadhyay S, Maulik U and Roy D. (**2007**) Gene Identification: Classical and Computational Intelligence Approaches. **IEEE Trans. Syst. Man Cybern. Part C** 38, 55-68

1095. Banerjee M, Mitra S and Banka H. (**2007**) Evolutionary-Rough feature selection in gene expression data. **IEEE Trans. Syst. Man Cybern. Part C: Appl. Rev** 37, 622-632

1096. Chaudhary N, Bhartiya S and Venkatesh KV. (**2007**) System-level Analysis of Tryptophan Regulation in *Escherichia coli* – Performance under Starved and Well-fed Conditions. **IET Systems Biology** 1, 181-189

1097. Majumder D and Mukherjee A. (**2007**) Mathematical modelling of toxicity-related trade-offs in metronomic chemotherapy. **IET Systems Biology** 1, 298-305

1098. Ghosh K, Sarkar S and Bhaumik K. (**2007**) Understanding image structure from a new multi-scale representation of higher order derivative filters. **Image and Vision Computing** 25,1228-1238

1099. Bajpai A, Sridhar S, Reddy HM and Jesudasan RA. (**2007**) BRM-Parser: a tool for comprehensive analysis of BLAST and RepeatMasker results. ***In silico* Biology** 7, 399-403

1100. Chopra P and Bender A. (**2007**) Evolved cellular automata for protein secondary structure prediction imitate the determinants for folding observed in nature. ***In silico* Biology** 7, 87-93

1101. Idicula-Thomas, S and Balaji PV. (**2007**) Correlation between the structural stability and aggregation propensity of proteins. ***In silico* Biology** 7, 225-37

1102. Jaiswal K. (**2007**) Prediction of ubiquitin proteins using artificial neural networks, hidden markov model and support vector machines. ***In silico* Biology** 7, 559-68

1103. Kundu S and Roy D. (**2007**) Structural considerations for designing adenosine analogs as selective inhibitors of Trichomonas sp. glyceraldehyde-3-phosphate dehydrogenase. ***In silico* Biology** 7, 583-593

1104. Marla S and Singh VK. (**2007**) PGV-Prokaryotic Genome visualization tool. ***In silico* Biology** 7, 543-5

1105. Mondal S, Mohan BR, Bhavna R and Ramakumar S. (**2007**) *In silico* detection of binding mode of J-superfamily

conotoxin pl14a with Kv1.6 channel. ***In silico*** **Biology** 7, 175-86

1106. Paramasivan R, Sivaperumal R, Dhananjeyan KJ, Thenmozhi V and Tyagi BK. (**2007**) Prediction of 3-dimensional structure of salivary odorant-binding protein-2 of the mosquito Culex quinquefasciatus, the vector of human lymphatic filariasis. ***In silico*** **Biology** 7, 1-6

1107. Rajesh R, Gunasekaran K, Muthukumaravel S, Balaraman K and Jambulingam P. (**2007**) *In silico* analysis of voltage-gated sodium channel in relation to DDT resistance in vector mosquitoes. ***In silico*** **Biology** 7, 413-21

1108. Saha D, Prasad AM, Sujatha TP, Kumar V, Jain PK, Bhat SR and Srinivasan R. (**2007**) *In silico* analysis of the lateral organ junction (LOJ) gene and promoter of *Arabidopsis thaliana*. ***In silico*** **Biology** 7, 7-19

1109. Saha S and Raghava GPS. (**2007**) BTXpred: prediction of bacterial toxins. ***In silico*** **Biology** 7, 405-12

1110. Saha S and Raghava GPS. (**2007**) Prediction of neurotoxins based on their function and source. ***In silico*** **Biology** 7, 369-87

1111. Saha S and Raghava GPS . (**2007**) Prediction of bacterial proteins. ***In silico*** **Biology** 7: 0028

1112. Sridhar J and Rafi ZA. (**2007**) Identification of novel genomic islands associated with small RNAs. ***In silico*** **Biology** 7, 601-11

1113. Srinivasan B and Balaram H. (**2007**) ISN1 nucleotidases and HAD superfamily protein fold: *In silico* sequence and structure analysis. ***In silico*** **Biology** 7, 187-93

1114. Nandel FS and Saini A. (**2007**) Construction and design of single stranded collagen-like structure. **Indian Journal of Biochemistry & Biophysics** 44, 106-113

1115. Palanivelu P . (**2007**) Multiple sequence analysis of polygalacturonases and invertases and phase shift in conserved motifs. **Indian Journal of Biotechnology** 6, 24-30

1116. Shanker Siva, Reddy Satish Chandra, Kaiser Jamil and Vamsy MCh. (2007) Genomic analysis of SNPs in Breast Cancer by using Bioinformatics databases. **Indian Journal of Biotechnology** 6, 456 -462

1117. Ahmed N, Majeed AA, Ahmed I, Hussain MA, Alvi A, Devi SM, Rizwan M, Ranjan A, Sechi LA and Mégraud F. (**2007**) genoBASE pylori: a genotype search tool and database of the human gastric pathogen *Helicobacter pylori*. **Infection, Genetics and Evolution** 7, 463-8

1118. Hoti SL, Thangadurai R, Patra KP and Das PK. (**2007**) Polymorphism of gp15/400 allergen gene of W. bancrofti from different regions of India endemic for lymphatic filariasis. **Infection, Genetics and Evolution** 7, 155-60

1119. Patra AK, Bhowmick T, Ramakumar S and Chakravarty AR. (**2007**) Metal-based netropsin mimics showing AT-selective DNA binding and DNA cleavage activity at red light. **Inorganic Chemistry** 46, 9030-2

1120. Praveen kumar R, Manoj MN, Kush A and Annadurai RS. (**2007**) *In silico* approach of azadirachtin binding with actins. **Insect Biochemistry and Molecular Biology** 37, 635-640

1121. Meglecz E, Anderson SJ, Bourguet D, Butcher R, Caldas A, Cassel-Lundhagen

A, d'Acier AC, Dawson DA, Faure N, Fauvelot C, Franck P, Harper G, Keyghobadi N, Kluetsch C, Muthulakshmi M, Nagaraju J, Patt A, Petenian F, Silvain JF and Wilcock HR. (**2007**) Microsatellite flanking region similarities among different loci within insect species. **Insect Molecular Biology** 16,175-85

1122. Jana S and Paliwal J. (**2007**) Novel molecular targets for antimalarial chemotherapy. **International Journal of Antimicrobial Agents** 30, 4-10

1123. Singh Harkewal, Marla Soma S and Aggarwal Manas. (**2007**) Docking studies of TAU protein. **International Journal of Computer Science** 33:1

1124. Khan Shaswati, Jamil Kaiser, Das Prabhavathy, Vamsy Mohana Ch and Sudha M. (**2007**) Polymorphic sites (1236 and 3435) in mdr1 gene influencing drug response in breast cancer patients. **International Journal of Pharmacology** 3, 453-460

1125. Varadwaj PR. (**2007**) Quantum chemical investigation of linear hydrogen bonding in ONCCN center dot center dot center dot HX (X = F, Cl, Br) dimers. **International Journal of Quantum Information** 107, 1194-1204

1126. Balamurugan B, Roshan MNAMd, Shaahul HB, Sumathi K, Senthilkumar R, Udayakumar A, Venkatesh BKH, Kalaivani M Sowmiya G, Sivasankari P, Saravanan S, Vasuki RC, Gopalakrishnan K, Selvakumar KN, Jaikumar M, Brindha T, Daliah M and Sekar K. (**2007**) PSAP: Protein Structure Analysis Package. **Journal of Applied Crystallography** 40, 773-777

1127. Prashanth K, Prabhu R, Chandra NR, Soumyendu R and Govindarajan R. (**2007**) Parallel Implementation of Autodock. **Journal of Applied Crystallography** 40, 598-599

1128. Gautam US, Jajoo A, Singh A, Chakrabartty, PK and Das SK. (**2007**) Characterization of a rpoN mutant of *Mesorhizobium ciceri*. **Journal of Applied Microbiology** 103, 1798-807

1129. Jha PN and Kumar Ashok. (2007) Endophytic colonization of *Typha australis* by a plant growth-promoting bacterium *Klebsiella oxytoca* strain GR-3. **Journal of Applied Microbiology** 103, 1311-1320

1130. SaravanakumarD and Samiyappan R. (**2007.**) ACC deaminase from *Pseudomonas fluorescens* mediated saline resistance in groundnut (Arachis hypogea) plants. **Journal of Applied Microbiology** 102, 1283–1292

1131. Singh S, Malik BK and Sharma DK. (**2007**) Metabolic pathway analysis of *S. pneumoniae*: an *In silico* approach towards drug-design. **Journal of Bioinformatics and Computational Biology** 5, 135-53

1132. Nayak L and De, RK. (**2007**) An algorithm for modularization of MAPK and Calcium signalling pathways: Comparative analysis among different species. **Journal of Biomedical Informatics** 40, 726-49

1133. Gangal R and Kumar KK. (**2007**) Reduced alphabet motif methodology for GPCR annotation. **Journal of Biomolecular Structure and Dynamics** 25, 299-310

1134. Kundu S and Roy D. (**2007**) Computational study of glyceraldehyde-3-phosphate dehydrogenase of *Entamoeba histolytica*: implications for structure-based drug design. **Journal of Biomolecular Structure and Dynamics** 25, 25-33

1135. Ramesh KV, Wagle K and Deshmukh S. (**2007**) Domain analysis of fatty acid synthase protein (NP_217040) from *Mycobacterium tuberculosis* H37Rv- a bioinformatics study. **Journal of Biomolecular Structure and Dynamics** 24, 393-412

1136. Roy D and Sengupta S. (**2007**) Structural Features of a cold-adapted Alaskan bacterial Lipase. **Journal of Biomolecular Structure and Dynamics** 24, 463-470

1137. Balaji S and Srinivasan N. (**2007**) Comparison of sequence-based and structure-based phylogenetic trees of homologous proteins: Inferences on protein evolution. **Journal of Biosciences** 32, 83-96

1138. Bose I and Ghosh B. (**2007**) The p53-MDM2 network: from oscillations to apoptosis. **Journal of Biosciences** 32, 991-997

1139. Gnanamani M, Kumar N and Ramachandran S. (**2007**) ARC: automated resource classifier for agglomerative functional classification of prokaryotic proteins using annotation texts. **Journal of Biosciences** 32, 937-45

1140. Gowri Shankar BA, Sarani R, Michael D, Mridula P, Ranjani CV, Sowmiya G, Vasundhar B, Sudha P, Jeyakanthan J, Velmurugan D and Sekar K. (**2007**) Ion pairs in non-redundant protein structures. **Journal of Biosciences** 32, 693-704

1141. Khodade P, Malhotra S, Kumar N, Iyengar MS, Balakrishnan N and Chandra N. (**2007**) Cytoview: Development of a Cell modeling framework. **Journal of Biosciences** 32, 965-977

1142. Luthra A, Jha AN, Ananthasuresh GK and Vishveswara S. (**2007**) A method for computing the inter-residue interaction potentials for reduced amino acid alphabet. **Journal of Biosciences** 32, 883-9

1143. Mukhopadhyay P, Basak S. and Ghosh TC. (**2007**) Synonymous codon usage in different protein secondary structural classes of human genes: Implication for increased non-randomness of GC3 richgenes towards protein stability. **Journal of Biosciences** 32, 947-967

1144. Pal A, Chakrabarti P, Bahadur R, Rodier F and Janin J. (**2007**) Peptide segments in proteinprotein interfaces. **Journal of Biosciences** 32, 101-111

1145. Poddar P, Chandra N, Ganapathiraju M, Sekar K, Klein-Seetharaman J, Reddy R and Balakrishnan N. (2007) Genome sequence analysis using suffix arrays: Application leading to evolutionary insights. **Journal of Biosciences** 32, 871-881

1146. Prasad P Arun, Kanagasabai V, Arunachalam J and Gautham N. (**2007**) Exploring conformational space using a mean field technique with MOLS sampling. **Journal of Biosciences** 32, 909-920

1147. Rani V. (**2007**) Computational methods to dissect cis-regulatory transcriptional networks. **Journal of Biosciences** 32, 1325-30

1148. Ray SS, Bandyopadhyay S and Pal SK. (**2007**) Gene ordering in partitive clustering using microarray expressions. **Journal of Biosciences** 32, 1019-25

1149. Roy S and Chattopadhyay J. (**2007**) The stability of ecosystems: a brief overview of the paradox of enrichment. **Journal of Biosciences** 32, 421-428

1150. Sengupta D Verma D and Naik PK. (**2007**) Docking mode of delvardine and its analogues into the p66 domain of HIV-1 reverse transcriptase: screening using molecular mechanics-generalized born/surface area and absorption, distribution, metabolism and excretion properties. **Journal of Biosciences** 32, 1307-16

1151. Sharma A, Rastogi T, Bhartiya M, Shasany AK and Khanuja SP. (**2007**) Type 2 *diabetes mellitus*: phylogenetic motifs for predicting protein functional sites. **Journal of Biosciences** 32, 999-1004

1152. Sharma Alok, Chandran Divya, Singh DD and Vijayan M . (**2007**) Multiplicity of carbohydrate-binding sites in *f*Ò-prism fold > lectins:occurrence and possible evolutionary implications. **Journal of Biosciences** 32, 1089-1110

1153. Sharma D and Tyagi JS. (**2007**) The value of comparative genomics in understanding mycobacterial virulence: *Mycobacterium tuberculosis* H37Ra genome sequencing – a worthwhile endeavour. **Journal of Biosciences** 32, 185-189

1154. Siddharthan R. (**2007**) Parsing regulatory DNA: general tasks, techniques, and the PhyloGibbs approach. **Journal of Biosciences** 32, 863-70

1155. Sreenu VB, Kumar P, Nagaraju J and Nagarajam HA. (**2007**) Simple sequence repeats in mycobacterial genomes. **Journal of Biosciences** 32, 3-15

1156. Srinivasan N, Sowdhamini R and Bhattacharya A. (**2007**) Computational Biology: More than just a set of techniques. **Journal of Biosciences** 32, 1-2

1157. Srividhya KV and Krishnaswamy S. (**2007**) Sub classification and targeted characterization of prophage encoded two-component cell lysis cassette. **Journal of Biosciences** 32, 979-990

1158. Swati D. (**2007**) *In silico* comparison of bacterial strains using mutual information. **Journal of Biosciences** 32, 1169-84

1159. Tendulkar AV, Ogunnaike B and Wangikar PP. (**2007**) Protein local conformations arise from a mixture of Gaussian distributions. **Journal of Biosciences** 32, 899-908

1160. Thukral L, Shenoy SR, Bhushan K and Jayaram B. (**2007**) ProRegIn: A regularity index for the selection of native-like tertiary structures of proteins. **Journal of Biosciences** 32, 71-81

1161. VadivukarasiT, Girish KR and Usha R. (**2007**) Sequence and recombination analysis of the replication initiator protein . **Journal of Biosciences** 32, 17-29

1162. Vetriselvi R and Bansal M. (**2007**) Identification and annotation of promoter regions in microbial genome sequences on the basis of DNA stability. **Journal of Biosciences** 32, 851-62

1163. Kadam RU, Garg D, Chavan A and Roy N. (**2007**) Evaluation of *Pseudomonas aeruginosa deacetylase* LpxC inhibitory activity of dual PDE4-TNF ? inhibitors: A multi-screening approach. **Journal of chemical information and modeling** 47, 1188–1195

1164. Kadam RU, Shivange AV and Roy N. (**2007**) *E. coli* vs *P. aeruginosa deacetylase* LpxC inhibitors Selectivity: Surface and Cavity depth based analysis. **Journal of chemical information and modeling** 47, 1215-24

1165. Mukherjee S, Nagar S, Mullick S, Mukherjee A and Saha A. (**2007**) Pharmacophore mapping of selective binding affinity of estrogen modulators through classical and space modeling approaches: exploration of bridged-cyclic compounds with diarylethylene linkage. **Journal of Chemical Information and Modeling** 47, 475-87

1166. Naim M, Bhat S, Rankini KN, Dennis S, Chowdhury SF, Siddiqi MI, Drabik P, Sulea T, BaylyC, Jakalian A and Purisima EO. (**2007**) Solvated interaction energy (SIE) for scoring proteinligand binding affinities. 1. Exploring the parameter space. **Journal of chemical information and modeling** 47, 122-133

1167. Sharma P, Chhabra S, Rai N and Ghoshal N. (**2007**) Exploration of rate-limiting conformational state for 5-[(7-chloro-4-quinolinyl)amino]-3-[(alkylamino)methyl][1,1'-biphenyl]-2-ols and N(omega)-oxides (tebuquine analogues) for antimalarial activity using molecular shape analysis and molecular field analysis studies. **Journal of Chemical Information and Modeling** 47, 1087-96

1168. Porwal G, Jain S, Babu SD, Singh D, Nanavati H and Noronha S. (**2007**) Protein structure prediction aided by geometrical and probabilistic constraints. **Journal of Computational Chemistry** 28, 1943-52

1169. Dietrich A and Srinivasan N. (**2007**) The optimal age to start a revolution. **Journal of Creative Behavior** 41, 54-74

1170. Bengani H, Ganapathi M, Singh GP and Brahmachari V. (**2007**) Mining of putative cis-acting elements for chromatin mediated regulation of Hox genes in mammals by *In-silico* analysis. **Journal of Experimental Zoology Part B: Molecular and Developmental Evolution** 308, 384-95

1171. Shekar M, Karunasagar I. And Karunasagar I. (**2007**) Abundance, composition and distribution of simple sequence repeats and dinucleotide compositional bias within WSSV genomes. **Journal of Genetics** 86, 69-73

1172. Gayen K and Venkatesh KV. (**2007**) A phenomenological model to represent the kinetics of growth by *Corynebacterium glutamicum* for lysine production. **Journal of Industrial Microbiology and Biotechnology** 34, 363-372

1173. Devi Pukhrambam Grihanjali, Pal Sudipta, Banerjee Raja and Dasgupta Dipak. (2007) Association of antitumor antibiotics, Mithramycin And Chromomycin, with Zn(II). **Journal of Inorganic Biochemistry** 101, 127-137

1174. Gupta S, Sinha S, Chhibber M and Surolia A. (2007) Design of Mechanism Based Inhibitors of Transthyretin Amyloidosis: Studies with Biphenyl Ethers and New Structural Templates. **Journal of Medicinal Chemistry** 50, 5589-5599

1175. Kumar G, Parasuraman P, Sharma SK, Banerjee T, Karmodiya K, Surolia N and Surolia A. (2007) Discovery of a Rhodanine Class of Compounds as Inhibitors of *Plasmodium falciparum* Enoyl-Acyl Carrier Protein Reductase. **Journal of Medicinal Chemistry** 50, 2665-2675

1176. Kumar S, Prasanna P, Kumar G, Karmodiya K, Surolia N and Surolia A. (2007) Green Tea Catechins Potentiate Triclosan Binding to Enoyl-ACP Reductase from *Plasmodium falciparum* (PfENR). **Journal of Medicinal Chemistry** 50, 765-775

1177. Shaikh SA and Jayaram B. (**2007**) A Swift all-atom energy based computational protocol to predict DNA ligand binding affinity and ΔTm. **Journal of Medicinal Chemistry** 50, 2240-2244

1178. Sau K, Gupta SK, Sau S, Mandal SC and Ghosh TC. (**2007**) Studies on synonymous codon and amino acid usage biases in the broad-host range bacteriophage KVP40. **Journal of Microbiology** 45, 58-63

1179. Chandra BR, Yogavel M and Sharma A. (**2007**) Structural analysis of ABC-family periplasmic zinc binding protein provides new insights into mechanism of ligand uptake and release. **Journal of Molecular Biology** 367, 970-982

1180. Das M, Kobayashi M, Yamada Y, Sreeramulu S, Ramakrishnan C, Wakatsuki S, Kato R and Varadarajan R. (2007) Design of Disulfide-linked Thioredoxin Dimers and Multimers Through Analysis of Crystal Contacts. **Journal of Molecular Biology** 372, 1278-92

1181. Krishna R, Prabu JR, Manjunath GP, Datta S, Chandra NR, Muniyappa K and Vijayan M. (**2007**) Snapshots of RecA protein involving movement of the C-domain and different conformations of the DNA-binding loops: crystallographic and comparative analysis of 11 structures of *Mycobacterium smegmatis* RecA. **Journal of Molecular Biology** 367, 1130-1144

1182. Patel RY and Balaji PV. (**2007**) Fold recognition and comparative modeling of human beta3GalT I,I, IV, V and VI and beta3GalNAcT I: prediction of residues conferring acceptor substrate specificity. **Journal of Molecular Graphics and Modelling** 26, 255-268

1183. Sekhar P Nataraj, Amrutha R Naga, Sangam Shubhada, Verma Desh Pal Singh and Kavi Kishor PB. (**2007**) Biochemical characterization, homology modeling and docking studies of ornithine δ-aminotransferase - an important enzyme in proline biosynthesis of plants. **Journal of Molecular Graphics and Modelling** 26, 709-719

1184. Joshi RR and Samant VV. (**2007**) Bayesian Data Mining of Protein Domains Gives Efficient Predictive Algorithm and New Insight. **Journal of Molecular Modelling** 13, 275-282

1185. Rawal RK, Kumar A, Siddiqi MI and Katti SB. (**2007**) Molecular Docking Studies on 4- Thiazolidinones as HIV-1 RT Inhibitors. **Journal of Molecular Modelling** 13, 155-161

1186. Shagufta, Ashutosh K, Gautam P and Siddiqi MI. (**2007**) CoMFA and CoMSIA based 3D-QSAR Analysis of Diaryloxy methano phenanthrene Analogues as Anti-tuberculosis Agents. **Journal of Molecular Modelling** 13, 99-109

1187. Greenbaum JA, Andersen PH, Blythe M, Bui H H, Cachau RE, Crowe J, Davies M, Kolaskar AS, Lund O, Morrison S, Mumey B, Ofran Y, Pellequer JL, Pinilla C, Ponomarenko JV, Raghava GP, Van Regenmortel M H, Roggen, EL , Sette A, Schlessinger A, Sollner J, Zand M and Peters B. (**2007**) Towards a consensus on datasets and evaluation metrics for developing B-cell epitope prediction tools. **Journal of Molecular Recognition** 20, 75-82

1188. Sujatha MS, Sasidhar YU and Balaji PV. (**2007**) MP2/6-311++G (d, p) study on galactosearomatic residue analog complexes in different position-orientations of the saccharide relative to

aromatic residues. **Journal of Molecular Structure** 814, 11-24

1189. Padmashri SK and Sikdar SK. (**2007**) Glutamate pretreatment affects Ca (2+) signaling in processes of astrocyte pairs. **Journal of Neurochemistry** 100, 105-117

1190. Murthy A, Ray S, Stephanie MS, Elizabeth GP, Schall JD and Thompson KG. (**2007**) Frontal eye field contributions to rapid corrective saccades. **Journal of Neurophysiology** 97, 1457-1469

1191. Patel S, Balaji PV and Sasidhar YU. (**2007**) The sequence TGAAKAVALVL from glyceraldehyde- 3-phosphate dehydrogenase displays structural ambivalence and interconverts between alpha-helical and beta-hairpin conformations mediated by collapsed conformational states. **Journal of Peptide Science** 13, 314-326

1192. Rajendran L, Samiyappan R, Raguchander T and Saravanakumar R. (**2007**) Endophytic bacteria mediate plant resistance against cotton bollworm. **Journal of Plant Interactions** 2, 1-10

1193. Gupta N, Shankernarayan NP and Dharmalingam K. (**2007**) Serum proteome of leprosy patients undergoing erythema nodosum leprosum reaction: regulation of expression of the isoforms of haptoglobin. **Journal of Proteome Research** 6, 3669-79

1194. Hassan MI, Kumar V, Kashav T, Alam N, Singh TP and Yadav S. (**2007**) Proteomic approach for purification of seminal plasma proteins involved in tumor proliferation. **Journal of Separation Science** 30, 1979-88

1195. Gupta S, Bisht SS, Kukreti R, Jain S and Brahmachari SK. (**2007**) Boolean network analysis of a neurotransmitter signaling pathway. **Journal of Theoretical Biology** 244, 463-469

1196. Sinha A, Singh C, Parmar D and Singh MP. (**2007**) Proteomics in clinical interventions: achievements and limitations in biomarker development. **Life Sciences** 80, 1345-54

1197. Das UN and Rao AA. (**2007**) Gene expression profile in obesity and type 2 *diabetes mellitus*. **Lipids in Health and Disease** 6, 35

1198. Nandel FS and Saini A. (**2007**) Conformational Study of Short Peptoid Models for Future Applications as Potent Antimicrobial Compounds. **Macromolecular Theory and Simulations** 16, 295-303

1199. Singh SK, Dessalew N and Bharatam PV. (**2007**) 3D-QSAR CoMFA study on oxindole derivatives as cyclin dependent kinase 1 (CDK1) and cyclin dependent kinase 2 (CDK2) inhibitors. **Medicinal Chemistry** 3, 75-84

1200. Divya D, Sarvind MT and Ravishankar R. (**2007**) Identification of inhibitors of *M. tuberculosis* Lysine 3-aminotransferase by Virtual screening. **Medicinal Chemistry Research** 15,181

1201. Divya D, Srivastava Sandeep K, Vanda K, Tripathi Rama P and Ravishankar R. (**2007**) Novel specific inhibitors of NAD+ -dependent DNA ligase (Rv3014c) identified from virtual screening. **Medicinal Chemistry Research** 15, 93

1202. Kumar A, Saeed U and Siddiqi MI. (**2007**) Molecular Docking and 3-D QSAR Studies of Human Mitotic Kinesin Eg5 Inhibitors. **Medicinal Chemistry Research** 15,243

1203. Singh SK and Sundar Ram N. (**2007**) Theoretical Studies on Cyclin

Dependent Kinase (CDK4) Inhibitors and drug receptor interaction analysis. **Medicinal Chemistry Research** 15, 367-369

1204. Srinivasan N. (**2007**) Cognitive Neuroscience of Creativity: EEG based Approaches. **Methods** 42, 109-116

1205. Shanker A, Singh A and Sharma V. (**2007**) In *silico* mining in expressed sequences of Neurospora crassa for identification and abundance of microsatellites. **Microbiological Research** 162, 250-256

1206. Bhushan D, Pandey A, Choudhary MK, Datta A, Chakraborty S and Chakraborty N. (**2007**) Comparative proteomics analysis of differentially expressed proteins in chickpea extracellular matrix during dehydration stress. **Molecular & Cellular Proteomics** 6, 1868-84

1207. Ramasamy G, Gupta D, Mohmmed A and Chauhan VS. (**2007**) Characterization and localization of *Plasmodium falciparum* homolog of prokaryotic ClpQ/HslV protease. **Molecular and Biochemical Parasitology** 152,139-148

1208. Gaur RK. (**2007**) Helicase: mystery of progression. **Molecular Biology and Evolution Report** 34, 161-4

1209. Nagarajan T, Vanderleyden J and Tripathi AK. (2007) Identification of salt stress inducible genes that control cell envelope related functions in *Azospirillum brasilense* Sp7. **Molecular Genetics & Genomics** 278, 43-51

1210. Das SK, Pathak RR, Choudhury D and Raghuram N. (**2007**) Genomewide computational analysis of nitrate response elements in rice and Arabidopsis. **Molecular Genetics and Genomics** 278, 519-25

1211. Vani J, Jeyakani J, Chandra NR, Nayak R and Shaila MS. (**2007**) Peptidomimetics of antigen are present in variable region of heavy and light chains of anti-idiotypic antibody and function as surrogate antigens for perpetuation of immunological memory. **Molecular Immunology** 44, 3345-3354

1212. Kanagavalli J, Eswari PJ, Krishnadas SR, Krishnaswamy S and Sundaresan P. (**2007**) *In vitro* and *in vivo* study on the secretion of the Gly367Arg mutant myocilin protein. **Molecular Vision** 13, 1161-1168

1213. Bajaj K and Bhaumik B. (**2007**) Attentional modulation of tilt aftereffect caused by cholinergic basal forebrain projections. **Neural Inf. Proc. Lett. Rev** 11, 101-108

1214. Bajaj K and Bhaumik B. (**2007**) Adaptation-induced suppression and facilitation: Effect of intra- and extracellular ionic disturbances. **Neurocomputing** 10, 1695-1701

1215. Archak S, Meduri E, Kumar PS and Nagaraju J. (**2007**) InSatDb: a microsatellite database of fully sequenced insect genomes. **Nucleic Acids Research** 35, D36-9

1216. Goyal K, Mohanty D and Mande SC. (**2007**) PAR-3D: A server to predict protein active site residues. **Nucleic Acids Research** 35, W503-5

1217. Kumar N and Mohanty D. (**2007**) MODPROPEP: a program for knowledge-based modeling of protein-peptide complexes. **Nucleic Acids Research** 35, W549-55

1218. Tina KG, Bhadra R and Srinivasan N. (**2007**) PIC: Protein Interactions Calculator. **Nucleic Acids Research** 35, W473-6

1219. Vishnoi A, Roy R and Bhattacharya A. (**2007**) Comparative analysis of bacterial genomes: identification of divergent regions in mycobacterial strains using an anchor-based approach. **Nucleic Acids Research** 35, 3654-67

1220. Phale PS, Basu A, Majhi PD, Deveryshetty J, Vamsee-Krishna C and Shrivastava R. (**2007**) Metabolic diversity in bacterial degradation of aromatic compounds. **OMICS** 11, 252-79

1221. Singh N, Almeida R, Kothari H, Kumar P, Mandal G, Chatterjee M, Venkatachalam S, Govind MK, Mandal SK and Sundar S. (**2007**) Differential gene expression analysis in antimony-unresponsive Indian kala azar (visceral leishmaniasis) clinical isolates by DNA microarray. **Parasitology** 134, 777-87

1222. Alam MT, Das MK, Dev V, Ansari MA and Sharma YD. (**2007**) Identification of two cryptic species in the Anopheles (Cellia) annularis complex using ribosomal DNA PCR-RFLP. **Parasitology Research** 100, 943-948

1223. Tandon V, Prasad PK, Chatterjee A and Bhutia PT. (**2007**) Surface fine topography and PCR-based determination of metacercaria of Paragonimus sp. from edible crabs in Arunachal Pradesh, Northeast India. **Parasitology Research** 102, 21-28

1224. Karmakar R and Bose I. (**2007**) Positive feedback, stochasticity and genetic competence. **Physical Biology** 4, 29-37

1225. Maithreye R and Somdatta S. (**2007**) Propagation of extrinsic perturbation in a negatively autoregulated pathway. **Physical Biology** 4, 48-59,

1226. Hariharan N, Ding M and Rangarajan G. (**2007**) Mitigating the effects of measurement noise on Granger causality. **Physical Review** E75, 031123:1-10

1227. Rajesh S, Sudeshna S and Somdata S. (**2007**) Synchronization in coupled cells with activatorinhibitor pathways. **Physical Review** E75, 011906

1228. Thakur V, Azad RK and Ramaswamy R. (**2007**) Markov models of Genome segmentation. **Physical Review** E, 75, 011915

1229. Narayan A, Sachdeva P, Sharma K, Saini AK, Tyagi AK and Singh Y. (**2007**) Serine threonine protein kinases of mycobacterial genus: phylogeny to function. **Physiol. Genomics** 29, 66-75

1230. Tripathi P, Leggio LL, Mansfeld J, Ulbrich-Hofmann R and Kayastha AM. (**2007**) α-amylase from mung beans (*Vigna radiata*) – Correlation of biochemical properties and tertiary structure by homology modelling. **Phytochemistry** 68,1623-1631

1231. Vij S and Tyagi AK. (**2007**) Emerging trends in the functional genomics of the abiotic stress response in crop plants. **Plant Biotechnology Journal** 5, 361-80

1232. Singla B, Tyagi AK, Khurana JP and Khurana P. (**2007**) Analysis of expression profile of selected genes expressed during auxin-induced somatic embryogenesis in leaf base system of wheat (*Triticum aestivum*) and their possible interactions. **Plant Molecular Biology** 65, 677-92

1233. Jain M, Nijhawan A, Arora R, Agarwal P, Ray S, Sharma P, Kapoor S, Tyagi AK and Khurana JP. (**2007**) F-box proteins in rice, Genome-wide analysis, classification, temporal and spatial gene expression during panicle and seed development, and regulation by light and

abiotic stress. **Plant Physiology** 143, 1467-1483

1234. Ghosh SK, Bhattacharjee A, Jha JK, Mondal AK, Maiti MK, Basu A, Ghosh D, Ghosh S and Sen SK. (**2007**) Characterization and cloning of a stearoyl/oleoyl specific fatty acyl-acyl carrier protein thioesterase from the seeds of *Madhuca longifolia* (latifolia). **Plant Physiology and Biochemistry** 45, 887-97

1235. Amrutha R Naga, Sekhar P Nataraj, Varshney RK and Kishor PB Kavi. (**2007**) Genome-wide analysis and identification of genes related to potassium transporter families in rice (*Oryza sativa L*). **Plant Science** 173, 708-721

1236. Bajaj K, Madhusudhan MS, Adkar BV, Chakrabarti P, Ramakrishnan C, Sali A and Varadarajan R. (**2007**) Stereochemical criteria for prediction of the effects of proline mutations on protein stability. **PLoS Computational Biology** 3, e241

1237. Pavithra SR, Kumar R and Tatu U. (**2007**) Systems analysis of chaperone networks in the malarial parasite *Plasmodium falciparum*. **PLoS Computational Biology** 3, 1701-1715

1238. Suryavanshi GW and Dixit NM. (**2007**) Emergence of recombinant forms of HIV: dynamics and scaling. **PLoS Computational Biology** 3, 2003-18

1239. Srividhya KV, Alaguraj V, Poornima G, Kumar D, Singh GP, Raghavenderan L, Katta AV, Mehta P and Krishnaswamy S. (**2007**) Identification of prophages in bacterial genomes by dinucleotide relative abundance difference. **PLoS One** 2, e1193

1240. Verkhedkar K, Raman K, Chandra N and Vishveshwara S. (**2007**) Metabolome based reaction graphs of *M. tuberculosis* and *M. leprae*: A comparative network analysis. **PLoS ONE** 2, e881

1241. Wani AA, Ahanger SH, Bapat SA, Rangrez AY, Hingankar N, Suresh CG, Barnabas S, Patole MS and Shouche YS. (**2007**) Analysis of mitochondrial DNA sequences in childhood encephalomyopathies reveals new disease-associated variants. **PLoS One** 2, e942

1242. Malathy SSM and Ponnuswamy MN . (**2007**) Molecular basis behind the substrate specificity of Polygalacturonase through computational study. **Polymer** 48, 910-916

1243. Chakrabarti P and Bhattacharyya R. (**2007**) Geometry of nonbonded interactions involving planar groups in proteins. **Progress in Biophysics and Molecular Biology** 95, 83-137

1244. Anamika K and Srinivasan N. (**2007**) Comparative kinomics of Plasmodium organisms: unity in diversity. **Protein and Peptide Letters** 14, 509-17

1245. Anishettt S and Pennathur G. (**2007**) Distribution of tripeptides in MHC binding peptides. **Protein and Peptide Letters** 14, 552-6

1246. Dash BP, Mukherjee S, Suhas VL and Chandra N. (**2007**) Interaction profiling of T-cell epitopes with MHC-class I molecules. **Protein and Peptide Letters** 14, 557-64

1247. Ghate AD, Bhagwat BU, Bhosle SG, Gadepalli SM and Kulkarni-Kale UD. (**2007**) Characterization of antibody-binding sites on proteins: development of a knowledgebase and its applications in improving epitope prediction. **Protein and Peptide Letters** 14(6), 531-5

1248. Gopalakrishnan K, Sheik SS, Ranjani CV, Udayakumar A and Sekar K. (**2007**) Conformational Angles DataBase (CADB-3.0). **Protein and Peptide Letters** 14, 665-8

1249. Gopalakrishnan K, Sowmiya G, Sheik SS and Sekar K. (**2007**) Ramachandran plot on the web (2.0). **Protein and Peptide Letters** 14, 669-71

1250. Gupta A, Gandhimathi A, Sharma P and Jayaram B. (**2007**) ParDOCK: All atom energy based Monte Carlo docking protocol for protein-ligand complexes. **Protein and Peptide Letters** 14, 632-46

1251. Joshi RR. (**2007**) Peptide vaccine models using statistical data mining. **Protein and Peptide Letters** 14, 536-42

1252. Joshi RR and Manda C. (**2007**) Statistics of catalytic domain sequences in protein kinases vs non-kinases. **Protein and Peptide Letters** 14, 518-527

1253. Kaur H, Garg A and Raghava, GPS. (**2007**) PEPstr: A *de novo* method for tertiary structure prediction of small bioactive peptides. **Protein and Peptide Letters** 14, 626-30

1254. Kumar A and Ghosh I. (**2007**) Mapping selectivity and specificity of active site of plasmepsins from *Plasmodium falciparum* using molecular interaction field approach. **Protein and Peptide Letters** 14, 569-74

1255. Mishra N, Kumar M and Raghava GPS. (**2007**) Support vector machine based method for predicting Glutathione S-transferases proteins. **Protein and Peptide Letters** 6, 575-580

1256. Ozarkar AD, Prakash D, Deobagkar DN and Deobagkar DD. (**2007**) Prediction of B cell and T cell epitopes of DBLalpha domain in *Plasmodium falciparum* malaria vaccine candidate var gene. **Protein and Peptide Letters** 14, 528-30

1257. Ramakrishnan C, Lakshmi B, Kurien A, Devipriya D and Srinivasan N. (**2007**) Structural compromise of disallowed conformations in peptide and protein structures. **Protein and Peptide Letters** 14, 672-82

1258. Singh DD, Chandran D, Jeyakani J and Chandra N. (**2007**) Scanning the Genome of *Mycobacterium tuberculosis* to Identify Potential Lectins. **Protein and Peptide Letters** 14, 683-91

1259. Khushiramani R, Girisha SK, Karunasagar I and Karunasagar I. (**2007**) Cloning and expression of an outer membrane protein ompTS of *Aeromonas hydrophila* and study of immunogenicity in fish. **Protein Expression and Purification** 51, 303-307

1260. Anamika K, Bhattacharya A and Srinivasan N. (2007) Analysis of the protein kinome of *Entamoeba histolytica*. **Proteins: Structure, Function and Bioinformatics** 71, 995-1006

1261. Hansia P, Dev S, Surolia A and Vishveshwara S. (**2007**) Insight into the Early Stages of Thermal Unfolding of Peanut Agglutinin by Molecular Dynamics Simulations. **Proteins: Structure, Function and Bioinformatics** 69, 32-42

1262. Jain T and Jayaram B. (**2007**) A computational protocol for predicting the binding affinities of zinc containing metalloprotein-ligand complexes. **Proteins: Structure, Function and Bioinformatics** 67, 1167-1178

1263. Kulkarni K, Katiyar S, Surolia A, Vijayan M and Suguna K. (2007) Generation of Blood Group Specificity: New Insights from Structural Studies on the Complexes of A - and B - Reactive Saccharides with Basic Winged Bean Agglutinin. **Proteins: Structure, Function and Bioinformatics** 68, 762-769

1264. Saha RP, Bhattacharyya R and Chakrabarti P. (**2007**) Interaction geometry involving planar groups in protein-protein interfaces. **Proteins: Structure, Function and Bioinformatics** 67, 84-97

1265. Srivastava SK, Dube D, Vandna K, Jha AK, Hajela K and Ravishankar R. (**2007**) NAD+ - dependent DNA ligas (Rv3014c) from *Mycobacterium tuberculosis*: Novel structure-function relationship and identification of a specific inhibitor. **Proteins: Structure, Function and Bioinformatics** 69, 97-111

1266. Kumar M, Gromiha MM and Raghava GPS. (**2007**) Prediction of RNA binding sites in a protein using SVM and PSSM profile. **Proteins: Structure, Function and Bioinformatics** 71, 189-94

1267. Gupta SK, Sisodia BS, Sinha S, Hajela K, Naik S, Shasany AK and Dube A. (**2007**) Proteomic approach for identification and characterization of novel immunostimulatory proteins from soluble antigens of *Leishmania donovani* promastigotes. **Proteomics** 7, 816-23

1268. Nampoothiri LP, Neelima PS and Rao AJ. (**2007**) Proteomic profiling of forskolin-induced differentiated BeWo cells: an in-vitro model of cytotrophoblast differentiation. **Reproductive BioMedicine Online** 14, 477-87

1269. Bagchi A and Ghosh TC. (2007) Homology modeling and molecular dynamics study of the interactions of SoxY and SoxZ: The central player of biochemical oxidation of sulfur anions in Pseudaminobacter salicylatoxidans. **Research Journal of Microbiology** 2, 569-576

1270. Bagchi A and Ghosh TC. (**2007**) Structural insight into the functionality of the transcriptional regulator SoxR from *Paracoccus pantotrophus* in sulfur oxidation operon. **Research Journal of Microbiology** 2, 735-741

1271. Kim Sul-Min, Bowers Peter M, Debnath Pal, Strong Michael, Terwilliger Thomas C, Kaufmann Markus and Eisenberg David. (2007) Functional Linkages can Reveal Protein Complexes for Structure Determination. **Structure** 15, 1079-1089

1272. Jayasree D, Rao JV, Krishna Rao DV, Kumar KK, Kavi Kishor PB, Nagarajaram HA, Y. Prameela Devi and Narasu M Lakshmi. (**2007**) 3D structural modeling for procatechate 3,4 dioxygenase from Pseudomonas cepacia based on template of M chain from *P. aeruginosa*. **The Bioscan** 2, 1-7

1273. Arora Neelima , Mallikarjuna Chari UVN , Banerjee Amit Kumar and Murty USN. (**2007**) A computational approach to explore *Plasmodium falciparum* 3D7 Chorismate Synthase. **The Internet Journal of Genomics and Proteomics** 3 (1)

1274. Banerjee Amit Kumar and Murty USN. (**2007**) Extracting the significant descriptors by 2D QSAR and docking efficiency of NRTI drugs: A Molecular Modeling Approach. **The Internet Journal of Genomics and Proteomics** 2 (2)

1275. Murty USN and Arora Neelima. (**2007**) Prioritization of Malaria endemic zones in Arunachal Pradesh: A novel application of self organizing maps (SOM). **The Internet Journal of Tropical Medicine** Volume 4, (1)

1276. Avi Z, Pravin PK, Usha R, Yael L, Abraham L, Tzahi A, Moshe L and Yedidya G. (**2007**) Production of siRNA targeted against TYLCV coat protein transcripts leads to silencing of its expression and resistance to the virus. **Translational Research** 16, 385-398

1277. Sharma PC, Grover A and Kahl G. (**2007**) Mining microsatellites in eukaryotic genomes. **Trends in Biotechnology** 25, 490-8

1278. Baruah C, Deka J and Sharma DK. (**2007**) Sequence analysis and structure prediction of GTP-binding protein for characterization of non-diapausing silkworm *Bombyx mori*. **Tropical Zoology** (4), 91-98

1279. Vindal V, Ranjan S and Ranjan A. (**2007**) *In silico* analysis and characterization of GntR family of regulators from *Mycobacterium tuberculosis*. **Tuberculosis** 87, 242-7

1280. Khushiramani R, Girisha SK, Karunasagar I and Karunasagar I. (**2007**) Protective efficacy of recombinant OmpTS protein of *Aeromonas hydrophila* in Indian major carp. **Vaccine** 25, 1157-1158

1281. Parida R, Shaila MS, Mukherjee S, Chandra NR and Nayak R. (**2007**) Computational analysis of proteome of H5N1 avian influenza virus to define T cell epitopes with vaccine potential. **Vaccine** 25, 7530-9

1282. Shaila MS, Nayak R, Prakash SS, Georgousakis M, Brandt E, McMillan DJ, Batzloff MR, Pruksakorn S, Good MF and Sriprakash KS. (**2007**) Comparative *In silico* analysis of two vaccine candidates for group A *Streptococcus* predicts that they both may have similar safety profiles. **Vaccine** 25, 3567-73

1283. Kulkarni-Kale U, Ojha J, Manjari S, Deobagkar DD, Mallya AD, Dhere RM and Kapre SV. (**2007**) Mapping antigenic diversity & strain-specificity of mumps virus: a bioinformatics approach. **Virology** 359, 436-446

2008

1284. Kanaujia SP and Sekar K. (**2008**) Structures and molecular-dynamics studies of three active-site mutants of bovine pancreatic phospholipase A (2). **Acta Crystallographica: Section D-Biological Crystallography** D64, 1003-1011

1285. Kulkarni KA, Katiyar S, Surolia A, Vijayan M and Suguna K. (**2008**) Structure and sugar-specificity of basic winged-bean lectin: structures of new disaccharide complexes and a comparative study with other known disaccharide complexes of the lectin. **Acta Crystallographica: Section D-Biological Crystallography** D64, 730-737

1286. Sabitha K, Reddy MVV and Jamil Kaiser. (**2008**) GST genotypes in head and neck cancer patients and its clinical implications. **African Journal of Biotechnology** 7, 5

1287. Sethi D, Garg A and Raghava GPS. (**2008**) DPROT: Prediction of Disordered Proteins using Evolutionary Information. **Amino Acids** 35, 599-605

1288. Singh B, Gautam SK, Verma V, Kumar M and Singh B. (**2008**) Metagenomics in animal gastrointestinal ecosystem:

Potential biotechnological prospects. **Anaerobe** 14, 138-44

1289. Chaerkady R and Pandey A. (**2008**) Applications of proteomics to lab diagnosis. **Annual Review of Pathology** 3, 485-98

1290. Gautam P, Shankar J, Madan T, Sirdeshmukh R, Sundaram CS, Gade WN, Basir SF and Sarma PU. (**2008**) Proteomic and transcriptomic analysis of *Aspergillus fumigatus* on exposure to amphotericin B. **Antimicrobial Agents and Chemotherapy** 52, 4220-7

1291. Rajendran L, Karthikeyan G, Raguchander T and Samiyappan R. (**2008**) Cloning and Sequencing of Novel *Endophytic Bacillus* sublitis from Coconut for the management of Basal Stem Rot Disease. **Asian Journal of Plant Pathology** 2, 1-14

1292. Malik SS, Luthra A, Srivastava SK, Ramachandran R. (**2008**) *Mycobacterium tuberculosis* UsfX (Rv3287c) exhibits novel nucleotide binding and hydrolysis properties. **Biochemical & Biophysical Research Communications** 375, 465-70

1293. Singh GP and Dash D. (**2008**) How expression level influences the disorderness of proteins. **Biochemical & Biophysical Research Communications** 371, 401-4

1294. Tyagi S, Vaz C, Gupta V, Bhatia R, Maheshwari S, Srinivasan A and Bhattacharya A. (**2008**) CID-miRNA : a web server for prediction of novel miRNA precursors in human genome. **Biochemical & Biophysical Research Communications** 372, 831-4

1295. Mangrauthia Satendra K, Parameswari B, Jain RK and Praveen Shelly. (**2008**) Role of genetic recombination in the molecular architecture of Papaya ringspot virus. **Biochemical Genetics** 46, 835-846

1296. Nejatizadeh A, Stobdan T, Malhotra N and Pasha MA. (**2008**) The genetic aspects of pre-eclampsia: achievements and limitations. **Biochemical Genetics** 46, 451-479

1297. Krishnan A, Hariharan R, Nair SA and Pillai MR. (**2008**) Fluoxetine mediates G0/G1 arrest by inducing functional inhibition of cyclin dependent kinase subunit (CKS)1. **Biochemical Pharmacology** 75, 1924-34

1298. Rajasekaran R, Priya Doss CG, Sudandiradoss C, Ramanathan K and Sethumadhavan R. (**2008**) *In silico* analysis of structural and functional consequences in p16INK4A by deleterious nsSNPs associated CDKN2A gene in malignant melanoma. **Biochimie** 90, 1523-9

1299. Bhattacharya A and De RK. (**2008**) Divisive Correlation Clustering Algorithm (DCCA) for grouping of genes: detecting varying patterns in expression profiles. **Bioinformatics** 24, 1359-66

1300. Choudhury A and Lahiri A. (**2008**) *Arabidopsis thaliana* regulatory element analyzer. **Bioinformatics** 24, 2263-4

1301. Alladi SM, Shinde Santosf P, Ravi V, Murthy US. (**2008**) Colon cancer prediction with genetic profiles using intelligent techniques. **Bioinformation** 3, 130-3

1302. Arul L, Benita G, Sudhakar D, Thayumanavan B and Balasubramanian P. (**2008**) â-glucuronidase of family-2 glycosyl hydrolase: A missing member in plants. **Bioinformation** 3, 194-197

1303. Babu PA, Puppala SS, Aswini SL, Vani MR, Kumar CN and Prasanna T. (**2008**)

A database of natural products and chemical entities from marine habitat. **Bioinformation** 3, 142-3

1304. Banerjee N, Sarani R, Ranjani CV, Sowmiya G, Michael D, Balakrishnan N and Sekar K. (**2008**) Algorithm to find distant repeats in a single protein sequence. **Bioinformation** 3, 28-32

1305. Biswas S, Guharoy M and Chakrabarti P. (**2008**) Structural segments and residue propensities in protein-RNA interfaces: comparison with protein-protein and protein-DNA complexes. **Bioinformation** 2, 422-427

1306. Danishuddin and Khan AU. (**2008**) Analysis of PB2 protein from H9N2 and H5N1 avian flu virus. **Bioinformation** 3, 41-6

1307. J FP and Deepika VL. (**2008**) Implications from predictions of HLA-DRB1 binding peptides in the membrane proteins of *Corynebacterium diphtheriae*. **Bioinformation** 3, 111-3

1308. Khan SN, Khan AU. (**2008**) An *In silico* approach to map the binding site of doxorubicin on hemoglobin. **Bioinformation** 2, 401-4

1309. Arul L, Benita G and Balasubramanian P. (**2008**) Functional insight for â-glucuronidase in *Escherichia coli* and Staphylococcus sp. RLH1. **Bioinformation** 2, 339-343

1310. Naik PK, Mittal VK and Gupta S. (**2008**) RetroPred: A tool for prediction, classification and extraction of non-LTR retrotransposons (LINEs & SINEs) from the genome by integrating PALS, PILER, MEME and ANN. **Bioinformation** 2, 263-70

1311. Rehna EA, Sanjeev K, Singh and Dharmalingam K. (**2008**) Comparison of Homology Modeled 3D Structure of *Mycobacterium leprae* 18kDa Small Heat Shock Protein and its Mutant. **Bioinformation** 3, 230-234

1312. Singh TR. (**2008**) Mitochondrial gene rearrangements: new paradigm in the evolutionary biology and systematics. **Bioinformation** 3, 95-7

1313. Sridhar J and Rafi ZA. (**2008**) Functional annotations in bacterial genomes based on small RNA signatures. **Bioinformation** 2, 284-295

1314. Subha K and Kumar GR. (**2008**) Assessment for the identification of better HDAC inhibitor class through binding energy calculations and descriptor analysis. **Bioinformation** 3, 218-22

1315. Subramaniam S, Mehrotra M and Gupta D. (**2008**) Virtual high throughput screening (vHTS) – A perspective. **Bioinformation** 3, 14

1316. Vetrivel U and Pilla K. (**2008**) Open discovery: An integrated live Linux platform of Bioinformatics tools. **Bioinformation** 3, 144-6

1317. Tripathi P, Hofmann H, Kayastha AM and Ulbrich-Hofmann R. (**2008**) Conformational stability and integrity of α-amylase from mung beans: Evidence of kinetic intermediate in GdnCl induced unfolding. **Biophysical Chemistry** 137, 95-99

1318. Krishnan L, Sahni G, Kaur KJ, Salunke DM. (**2008**) Role of antibody paratope conformational flexibility in the manifestation of molecular mimicry. **Biophysical Journal** 94, 1367-76

1319. Singhal P, Jayaram B, Dixit SB and Beveridge DL. (**2008**) Prokaryotic gene finding based on physicochemical characteristics of codons calculated from

molecular dynamics simulations. **Biophysical Journal** 94, 4173-83

1320. Ansari MZ, Sharma J, Gokhale RS and Mohanty D. (**2008**) *In silico* analysis of methyltransferase domains involved in biosynthesis of secondary metabolites. **BMC Bioinformatics** 9, 454

1321. Garg A and Gupta D. (**2008**) VirulentPred: a SVM based prediction method for virulent proteins in bacterial pathogens. **BMC Bioinformatics** 9, 62

1322. Garg A and Raghava GPS. (**2008**) ESLpred2: Improved Method for Predicting Subcellular Localization of Eukaryotic Proteins. **BMC Bioinformatics** 9, 503

1323. Gowthaman U, Jayakanthan M and Sundar D. (**2008**) Molecular docking studies of dithionitrobenzoic acid and its related compounds to protein disulfide isomerase: computational screening of inhibitors to HIV-1 entry. **BMC Bioinformatics** 9 (Suppl 12):S14

1324. Reddy CC, Shameer K, Offmann BO and Sowdhamini R. (**2008**) PURE: a webserver for the prediction of domains in unassigned regions in proteins. **BMC Bioinformatics** 9, 281

1325. Verma R, Tiwari A, Kaur S, Varshney GC and Raghava GP. (**2008**) Identification of proteins secreted by malaria parasite into erythrocyte using SVM and PSSM profiles. **BMC Bioinformatics** 9, 201

1326. Yeturu K and Chandra N. (**2008**) PocketMatch: a new algorithm to compare binding sites in protein structures. **BMC Bioinformatics** 9, 543

1327. Kamesh N, Aradhyam GK, Manoj N. (**2008**) The repertoire of G protein-coupled receptors in the sea squirt *Ciona intestinalis*. **BMC Evolutionary Biology** 8, 129

1328. Oswal N, Sahni N, Bhattacharya A, Komath S and Muthuswamy R. (**2008**) Unique motifs identify PIG-A protein from glycosyltransferases of GT4 family. **BMC Evolutionary Biology** 8, 168

1329. Agrawal S, Dimitrova N, Nathan P, Udayakumar K, Lakshmi SS, Sriram S, Manjusha N, Sengupta U. (**2008**) T2D-Db: an integrated platform to study the molecular basis of Type 2 diabetes. **BMC Genomics** 9, 320

1330. Arunkumar KP, Tomar A, Daimon T, Shimada T, Nagaraju J. (**2008**) WildSilkbase: an EST database of wild silkmoths. **BMC Genomics** 9, 338

1331. Chatterjee R, Chaudhuri K and Chaudhuri P. (**2008**) On detection and assessment of statistical significance of Genomic Islands. **BMC Genomics** 9, 150

1332. Gaur M, Puri N, Manoharlal R, Rai V, Mukhopadhayay G, Choudhury D and Prasad R. (**2008**) MFS transportome of the human pathogenic yeast *Candida albicans*. **BMC Genomics** 3, 579

1333. Lata S and Raghava GPS. (**2008**) PRRDB: A comprehensive database of Pattern-Recognition Receptors and their ligands. **BMC Genomics** 9, 180

1334. Panjabi P, Jagannath A, Bisht NC, Padmaja KL, Sharma S, Gupta V, Pradhan AK and Pental D. (**2008**) Comparative mapping of *Brassica juncea* and *Arabidopsis thaliana* using Intron Polymorphism (IP) markers: homoeologous relationships, diversification and evolution of the A, B and C Brassica genomes. **BMC Genomics** 9, 113

1335. Tripathi LP and Sowdhamini R. (**2008**) Genome-wide survey of prokaryotic serine proteases: analysis of distribution and domain architectures of five serine protease families in prokaryotes. **BMC Genomics** 9, 549

1336. Vishnoi A, Srivastava A, Roy R and Bhattacharya A. (**2008**) MGDD: *Mycobacterium tuberculosis* genome divergence database. **BMC Genomics** 9, 373

1337. Raman K and Chandra N. (**2008**) *Mycobacterium tuberculosis* interactome analysis unravels potential pathways to drug resistance. **BMC Microbiolgy** 8, 234

1338. Dasgupta B and Chakrabarti P. (**2008**) Pi-Turns: types, systematics and the context of their occurrence in protein structures. **BMC Structure Biology** 8, 39

1339. Raman K, Yeturu K and Chandra N. (**2008**) targetTB: a target identification pipeline for *Mycobacterium tuberculosis* through an interactome, reactome and genome-scale structural analysis. **BMC System Biology** 2, 109

1340. Awasthi G, Singh S, Dash AP and Das A. (**2008**) Genetic characterization and evolutionary inference of TNF-alpha through computational analysis. **Brazilian Journal of Infectious Diseases** 12, 374-9

1341. Vyas N, Goswami D, Manonmani A, Sharma P, Ranganath HA, VijayRaghavan K, Shashidhara LS, Sowdhamini R and Mayor S. (**2008**) Nanoscale organization of hedgehog is essential for long-range signaling. **Cell** 133, 1214-27

1342. Ghosh P, Vracko M, Chattopadhyay AK and Bagchi MC. (**2008**) On application of constitutional descriptors for merging of quinoxaline data sets using linear statistical methods. **Chemical Biology & Drug Design** 72, 155-62

1343. Chaerkady R, Thuluvath PJ, Kim MS, Nalli A, Vivekanandan P, Simmers J, Torbenson M and Pandey A. (**2008**) O Labeling for a Quantitative Proteomic Analysis of Glycoproteins in Hepatocellular Carcinoma. **Clinical proteomics** 4, 137-155

1344. Jagadeesh Selvam N, Kumaravadivel N, Gopikrishnan A, Kumar K Bharathi, Ravikesavan R and Boopathi N Manikanda. (**2008**) Identification of a novel drought resistance gene from *Gossypium hirsutum* L. var. KC3. **Communications in Biometry and Crop Science** 4, 9-13

1345. Rajasekaran R, Doss George Priya C, Sudandiradoss C, Ramanathan K, Purohit R and Sethumadhavan R. (**2008**) Effect of deleterious nsSNP on the HER2 receptor based on stability and binding affinity with herceptin: a computational approach. **Comptes Rendus Biologies** 331, 409-17

1346. Sudandiradoss C, Priya Doss CG, Rajasekaran R, Ramanathan K, Purohit R and Sethumadhavan R. (**2008**) Investigations on the interactions of scorpion neurotoxins with the predicted structure of D1 dopamine receptor by protein-protein docking method. A bioinformatics approach. **Comptes Rendus Biologies** 331, 489-99

1347. Bafana A and Chakrabarti T. (**2008**) Lateral gene transfer in phylogeny of azoreductase enzyme. **Computational Biology and Chemistry** 32, 191-7

1348. Banerjee AK, Kiran K, Murty USN, Venkateswarlu Ch. (**2008**) Classification and identification of mosquito species using artificial neural networks.

Computational biology and chemistry 32, 442-427

1349. Dusthackeer A, Hassan VN and Kumar V. (**2008**) Tape measure protein having MT3 motif facilitates phage entry into stationary phase cells of *Mycobacterium tuberculosis*. **Computational Biology and Chemistry** 32, 367-369

1350. Sreekanth R, Pattabhi Vasantha and Rajan SS. (**2008**) Characterization of alpha helices interacting with nucleic acids. **Computational Biology and Chemistry** 32, 378

1351. Sudandiradoss C, George Priya, Doss C, Rajasekaran R, Purohit R, Ramanathan K and Sethumadhavan R. (**2008**) Analysis of binding residues between scorpion neurotoxins and D2 dopamine receptor: a computational docking study. **Computers in Biology and Medicine** 38, 1056-67

1352. Madhusmita S, Singh H, Karlapalem K and Mitra A. (**2008**) A real valued Genetic Algorithm for generating native like structure of small globular protein. **Conf Proc IEEE Eng Med Biol Soc** 2008, 1359-62

1353. Gomase VS and Tagore S. (**2008**) Cytomics. **Current Drug Metabolism** 9, 263-6

1354. Gomase VS and Tagore S. (**2008**) Kinomics. **Current Drug Metabolism** 9, 255-8

1355. Gomase VS and Tagore S. (**2008**) RNAi--a tool for target finding in new drug development. **Current Drug Metabolism** 9(3):241-4

1356. Gomase VS and Tagore S. (**2008**) Species scaling and extrapolation. **Current Drug Metabolism** 9, 193-198

1357. Gomase VS and Tagore S. (**2008**) Transcriptomics. **Current Drug Metabolism** 9, 245-249

1358. Gomase VS, Changbhale SS, Patil SA and Kale KV. (**2008**) Metabolomics. **Current Drug Metabolism** 9, 89-98

1359. Gomase VS, Kale KV, Tagore S, Hatture SR. (**2008**) Proteomics: technologies for protein analysis. **Current Drug Metabolism** 9, 213-20

1360. Gomase VS, Tagore S. (**2008**) Epigenomics. **Current Drug Metabolism** 9, 232-7

1361. Gomase VS, Tagore S. (**2008**) Toxicogenomics. **Current Drug Metabolism** 9(3):250-4

1362. Gomase VS, Tagore S and Kale KV. (**2008**) Microarray: an approach for current drug targets. **Current Drug Metabolism** 9, 221-31

1363. Gomase VS, Tagore S, Changbhale SS and Kale KV. (**2008**) Clonetics. **Current Drug Metabolism** 9, 190-2

1364. Gomase VS, Tagore S, Changbhale SS and Kale KV. (**2008**) Pharmacogenomics. **Current Drug Metabolism** 9, 207-12

1365. Gomase VS, Tagore S, Kale KVand Bhiwgade DA. (**2008**) Oncogenomics. **Current Drug Metabolism** 9, 199-206

1366. Kumari S, Kumar A, Samant M, Singh N and Dube A. (**2008**) Discovery of novel vaccine candidates and drug targets against visceral leishmaniasis using proteomics and transcriptomics. **Current Drug Targets** 9, 938-47

1367. Adane L and Bharatam PV. (**2008**) Modelling and informatics in the analysis of *P. falciparum* DHFR enzyme

inhibitors. **Current Medicinal Chemistry** 15, 1552-69

1368. Rao AA, Reddy CS, Sridhar GR, Annapurna A, Hanuman T, Prameela M, Suresh K, Prasannalaxmi S and Das UN. (**2008**) Enhanced butyrylcholinesterase activity may be the common link in triggering low-grade systemic inflammation and decrease in cognitive function in D*iabetes mellitus* and Alzheimer's disease. **Current Nutrition & Food Science** 4, 213-216

1369. Rao AA, Satyanarayana KVV, Lavanya G, Das UN. (**2008**) Computational biological analysis reveals a role for nitric oxide synthase and adiponectin in the pathobiology of insulin resistance syndrome and coronary artery disease. **Current Nutrition & Food Science** 4, 155-157

1370. Rao AA, Srinivas K, Rajender R, Das UN. (**2008**) Prediction of butyrylcholinesterase function through domain analysis and protein-protein interaction. **Current Nutrition & Food Science** 4, 176-184

1371. Kumar S, Kumar A and Dixit VK. (**2008**) Direct detection and analysis of vacA genotypes and cagA gene of *Helicobacter pylori* from gastric biopsies by a novel multiplex polymerase chain reaction assay. **Diagnostic Microbiol. Infectious Dis** 62, 366-373

1372. Pradeep B, Shekar M, Gudkovs N and Karunasagar I. (**2008**) Genotyping of white spot syndrome virus prevalent in shrimp farms of India. **Diseases Of Aquatic Organisms** 78, 189-198

1373. Sharma P, Kumar J, Garg G, Kumar, A, Patowary A, Karthikeyan G, Ramakrishnan L, Brahmachari V and Sengupta S. (**2008**) Detection of altered global DNA methylation in coronary artery disease patients. **DNA and Cell Biology** 27, 357-3

1374. Mukhopadhyay P, Basak S and Ghosh TC. (**2008**) Differential Selective Constraints Shaping Codon Usage Pattern of Housekeeping and Tissue Specific Homologous Genes of rice and Arabidopsis. **DNA Research** 15, 347-356

1375. Hosseini A, Ranade SH, Ghosh I and Khandekar P. (**2008**) Simple sequence repeats in different genome sequences of Shigella and comparison with high GC and AT-rich genomes. **DNA Sequencing** 19, 167-176

1376. Banerjee Amit Kumar, Arora Neelima and Murty USN. (**2008**) Classification and Regression Tree Analysis for Deriving Variable Importance of Parameters Influencing Average Flexibility of CaMK Kinase Family. **Electronic Journal of Biology** 4, 27-33

1377. Mascarenhas NM and Ghoshal N. (**2008**) An efficient tool for identifying inhibitors based on 3D-QSAR and docking using feature-shape pharmacophore of biologically active conformation--a case study with CDK2/cyclin A. **European Journal of Medicinal Chemistry** 43, 2807-18

1378. Sarma R, Sinha S, Ravikumar M, Kishore Kumar M and Mahmood SK. (**2008**) Pharmacophore modeling of diverse classes of p38 MAP kinase inhibitors. **European Journal of Medicinal Chemistry** 43, 2870-6

1379. Khan SN, Islam B, Yennamalli R, Sultan A, Subbarao N and Khan AU. (**2008**) Interaction of mitoxantrone with human serum albumin: spectroscopic and molecular modeling studies. **European Journal of Pharmaceutical Sciences** 35, 371-82

1380. Hemalatha M. and Vivekanandan K. (**2008.**) A simple statistical model for probabilistic motif discovery in multiple aligned sequences. **European Journal of Scientific Research** 193, 608-613

1381. MR Sharma, Polavarapu R, Roseman D, Patel V, Eaton E, Kishor PB Kavi and Nanji AA. (**2008**) Increased severity of alcoholic liver injury in female verses male rats: A microarray analysis. **Experimental and Molecular Pathology** 84, 46-58

1382. Singh V and Singh DD. (**2008**) Leishmania major: genome analysis for identification of putative adhesin-like and other surface proteins. **Experimental Parasitology** 118, 139-45

1383. Subramanian K, Raghavan S, Bhat Rajan A, Das S, Bajpai Dikshit J, Kumar R, Narasimha MK, Nalini R, Radhakrishnan R and Raghunathan S. (**2008**) A systems biology based integrative framework to enhance the predictivity of *in vitro* methods for drug-induced liver injury. **Expert Opinion Drug Safety** 7, 647-62

1384. Arya R, Bhattacharya A and Saini KS. (**2008**) Dictyostelium discoideum--a promising expression system for the production of eukaryotic proteins. **FEBS Journal** 22, 4055-66

1385. Jain M, Tyagi AK and Khurana JP. (**2008**) Genome-wide identification, classification, evolutionary expansion and expression analyses of homeobox genes in rice. **FEBS Journal** 275, 2845-61

1386. Mandal S and Bhattacharyya D. (**2008**) Two L-amino acid oxidase isoenzymes from Russell's viper (Daboia russelli russelli) venom with different mechanisms of inhibition by substrate analogs. **FEBS Journal** 275, 2078-95

1387. Vindal V, Ashwantha Kumar E and Ranjan A. (**2008**) Identification of operator sites within the upstream region of the putative mce2R gene from mycobacteria. **FEBS Letters** 582, 1117-22

1388. Dolai S, Yadav RK, Pal S, and Adak S. (**2008**) Leishmania major ascorbate peroxidase overexpression protects cells against reactive oxygen species-mediated cardiolipin oxidation. **Free Radical Biology and Medicine** 45, 1520-9

1389. Jagatha B, Mythri RB, Vali S and Bharath MM. (**2008**) Curcumin treatment alleviates the effects of glutathione depletion *in vitro* and *in vivo* : therapeutic implications for Parkinson's disease explained via *In silico* studies. **Free Radical Biology and Medicine** 44, 907-17

1390. George Priya Doss C, Sudandiradoss C, Rajasekaran R, Choudhury P, Sinha P, Hota P, Batra UP and Rao S. (**2008**) Applications of computational algorithm tools to identify functional SNPs. **Functional & Integrative Genomics** 8, 309-16

1391. Sarkar C and Maitra A. (**2008**) Deciphering the cis-regulatory elements of co-expressed genes in PCOS by *In silico* analysis. **Gene** 408, 72-84

1392. Shankar J and Tuteja R. (**2008**) UvrD helicase of *Plasmodium falciparum*. **Gene** 410, 223-33

1393. Manikandan K, Pal D, Ramakumar S, Brener NE, Iyengar SS and Seetharaman G. (**2008**) Functionally important segments in proteins dissected using Gene Ontology and geometric clustering of peptide fragments. **Genome Biology** 9, R52

1394. Paul S, Bag SK, Das S, Harvill ET and Dutta C. (**2008**) Molecular signature of hypersaline adaptation: insights from genome and proteome composition of halophilic prokaryotes. **Genome Biology** 9, R70

1395. George Priya Doss C, Rajasekaran R, Sudandiradoss C, Ramanathan K, Purohit R and Sethumadhavan R. (**2008**) A novel computational and structural analysis of nsSNPs in CFTR gene. **Genomic Medicine** 2, 23-32

1396. Sudandiradoss C and Sethumadhavan R. (**2008**) *In silico* investigations on functional and haplotype tag SNPs associated with congenital long QT syndromes (LQTSs). **Genomic Medicine** 2, 55-67

1397. Umamaheswari A, Pradhan D, Priyadrshini IV and Subramanyam G. (**2008**) *In silico* Putative Drug targets in *Leptospira interrogans* and Homology Modeling of UDP-N-acetylglucosamine 1-carboxyvinyltransferase Mur A. **Genomic Medicine** 2, 295

1398. Damodaran D, Jeyakani J, Chauhan A, Kumar N, Chandra NR and Surolia A. (**2008**) CancerLectinDB: a database of lectins relevant to cancer. **Glycoconjugate Journal** 25, 191-8

1399. Stobdan T, Karar J and Pasha MA. (**2008**) High altitude adaptation: genetic perspectives. **High Altitude Medicine & Biology** 9, 140-7

1400. Nallathambi Jeyabalan, Laissue Paul, Batista Frank, Benayoun Bérénice A, Lesaffre Corinne, Moumné Lara, Pandaranayaka PJ Eswari, Usha Kim, Krishnaswamy S, Sundaresan Periasamy and Veitia Reiner A. (**2008**) Differential Functional Effects of Novel Mutations of the Transcription Factor FOXL2 in BPES Patients. **Human Mutation** 29, E123-131

1401. Anand S, Anbarasu A and Sethumadhavan R. (**2008**) Influence of C-H...pi hydrogen bonds in interleukins. ***In silico* Biology** 8, 261-73

1402. Choudhury A and Lahiri A. (**2008**) TRABAS: a database for transcription regulation by ABA signaling. ***In silico* Biology** 8, 511-516

1403. Garg A and Raghava GPS. (**2008**) A machine learning based method for the prediction of secretory proteins using amino acid composition, their order and similarity-search. ***In silico* Biology** 8, 129-40

1404. Jayaraman S and Shah K. (**2008**) Comparative studies on inhibitors of HIV protease: a target for drug design. ***In silico* Biology** 8, 427-47

1405. Krishnadev O and Srinivasan N. (**2008**) A data integration approach to predict host-pathogen protein-protein interactions: application to recognize protein interactions between human and a malarial parasite. ***In silico* Biology** 8, 235-50

1406. Kumar M, Thakur V and Raghava GPS. (**2008**) COPid: composition based protein identification. ***In silico* Biology** 8,121-8

1407. Pundhir S, Vijayvargiya H and Kumar A. (**2008**) PredictBias: a server for the identification of genomic and pathogenicity islands in prokaryotes. ***In silico* Biology** 8, 223-34

1408. Sandhu KS, Pandey S, Maiti S and Pillai B. (**2008**) GASCO: genetic algorithm simulation for codon optimization. ***In silico* Biology** 8, 187-92

1409. Sengupta D, Verma D and Naik PK. (**2008**) Docking-MM-GB/SA and ADME screening of HIV-1 NNRTI

inhibitor: nevirapine and its analogues. ***In silico*** **Biology** 8, 275-89

1410. Sharma B. (**2008**) Structure and mechanism of a transmission blocking vaccine candidate protein Pfs25 from P. falciparum: a molecular modeling and docking study. ***In silico*** **Biology** 8, 193-206

1411. Sharma V, Gupta P and Dixit A. (**2008**) *In silico* identification of putative drug targets from different metabolic pathways of Aeromonas hydrophila. ***In silico*** **Biology** 8, 331-8

1412. Vidya N, Vadivukkarasi B, Manivannan G and Anbarasu K. (**2008**) Molecular modeling and docking studies of glutamate racemase in *Vibrio* vulnificus CMCP6. ***In silico*** **Biology** 8,471-83

1413. Mondal UK, Sur S, Bothra AK and Sen A. (**2008**) Comparative analysis of codon usage patterns and identification of predicted highly expressed genes in five Salmonella genomes. **Indian journal of medical microbiology** 26, 313-21

1414. Balaji S, Bhat AI and Eapen SJ. (**2008**) A phylogenetic reexamination of Cucumber mosaic virus isolates based on 1a,2a,3a and 3b Proteins. **Indian Journal of Virology** 19, 17-25

1415. Anand S, Anbarasu A and Sethumadhavan R. (**2008**) Non-classical hydrogen bonds in interleukins: the role of C-H...O interactions. **International Journal of Biological Macromolecules** 43, 468-73

1416. Malik A, Arif SA, Ahmad S and Sunderasan E. (**2008**) A molecular and *In silico* haracterization of Hev b 4, a glycosylated latex allergen. **International Journal of Biological Macromolecules** 42, 185-90

1417. Purohit R, Rajasekaran R, Sudandiradoss C, George Priya ,Doss C, Ramanathan K and Rao S. (**2008**) Studies on flexibility and binding affinity of Asp25 of HIV-1 protease mutants. **International Journal of Biological Macromolecules** 42, 386-391

1418. Padmavathi GV, Sekhar P Nataraj, Kishor PB Kavi, Shah VK and Saralakumari D. (**2008**) Homology modeling and docking studies of human G-protein coupled receptor involved in taste perception. **International Journal of Integrative Biology** 2, 15-26

1419. Sundheep RL, Arul P, Nagarajan and Balasubramanian P. (**2008**) Sprome: A database on promoters of abiotic stress inducible genes in rice. **International Journal of Integrative Biology** 2, 153-156

1420. Baruah C and Sharma DK. (**2008**) Comparative modelling and sequence analyses of Apoptosis-preventing protein from *Bombyx mori* nuclear polyhedrosis virus (BmNPV). **Journal of Applied Bioscience & Biotechnology** 4, 30-35

1421. Deka J, Baruah C and Sharma DK. (**2008**) Zymogram and *In silico* analyses of Alpha-amylase from non-diapausing silkworm *Bombyx mori*. **Journal of Applied Bioscience & Biotechnology** 4,15-20

1422. Joseph B, Mertins S, Stoll R, Schar J, Umesha KR, Luo Q, Muller-Altrock S and Goebal W. (**2008**) Glycorol-Metabolism and prf A activity in *Listeria monocytogenes*. **Journal of Bacteriology** 190, 5412-5430

1423. Ghosh R, Chhabra A, Phatale PA, Samrat SK, Sharma J, Gosain A, Mohanty D, Saran S and Gokhale RS. (**2008**) Dissecting functional role of polyketide synthases in dictyostelium

discoideum: Biosynthesis of differentiation regulating factor MPBD. **Journal of Biological Chemistry** 283, 11348-54

1424. George Priya Doss C, Sudandiradoss C, Rajasekaran R, Purohit R, Ramanathan K and Sethumadhavan R. (**2008**) Identification and structural comparison of deleterious mutations in nsSNPs of ABL1 gene in chronic myeloid leukemia: a bio-informatics study. **Journal of Biomedical Informatics** 41, 607-12

1425. Mahalakshmi A, Sujatha K and Shenbagarathai R. (**2008**) Molecular modeling and characterization of B.t. LDC-9 and B.t. cytolytic proteins. **Journal of Biomolecular modeling Structure and Dynamics** 26,375-386

1426. Bagchi A and Ghosh TC. (**2008**) Structural interaction between DsrE, DsrF and DsrH in Dsr operon. **Journal of Biomolecular Structure and Dynamics** 25, 517-524

1427. Chattopadhyaya R and Pal A. (**2008**) Three-dimensional Models of NB-ARC Domains of Disease Resistance Proteins in Tomato, Arabidopsis, and Flax. **Journal of Biomolecular Structure and Dynamics** 25, 357-372

1428. Kahali B, Basak S and Ghosh TC. (**2008**) Delving deeper into the unexpected correlation between gene expressivity and codon usage bias of *Escherichia coli* genome. **Journal of Biomolecular Structure and Dynamics** 25, 655-61

1429. Mallick B, Ghosh Z and Chakrabarti J. (**2008**) Structural determinants characteristic to AARS subclasses and tRNA-splicing endonuclease in eukaryotes. **Journal of Biomolecular Structure and Dynamics** 26, 223-234

1430. Mondal UK, Das B, Ghosh TC, Sen A and Bothra AK. (**2008**) Nucleotide triplet based molecular phylogeny of class I and class II aminoacyl t-RNA synthetase in three domain of life process: bacteria, archaea, and eukarya. **Journal of Biomolecular Structure and Dynamics** 26, 321-8

1431. Sonavane UB, Ramadugu SK and Joshi RR. (**2008**) Study of early events in the protein folding of villin headpiece using molecular dynamics simulation. **Journal of Biomolecular Structure and Dynamics** 26, 203-214

1432. Subramaniam S, Mohmmed A and Gupta D. (**2008**) Molecular modeling studies of the interaction between *Plasmodium falciparum* HslU and HslV subunits. **Journal of Biomolecular Structure and Dynamics** 26,473

1433. Achary MS and Nagarajaram HA. (**2008**) Comparative docking studies of CYP1b1 and its PCG associated mutant forms. **Journal of Biosciences** 33, 699–713

1434. Khan Muhummadh and Jamil Kaiser. (**2008**) Research Clustering cancer metasignature genes: Identification of cellular profiles of neoplastic and undifferentiated stages of cancer. **Journal of BioTechnology** 3,11 –17

1435. Mascarenhas NM and Ghoshal N. (**2008**) Combined ligand and structure based approaches for narrowing on the essential physicochemical characteristics for CDK4 inhibition. **Journal of Chemical Information and Modeling** 48, 1325-36

1436. Kunyarat D, Paiboon S, Umesha KR, Karunasagar I, Thewarac L, Christen RS, Hanne S and Maria VJ. (**2008**) Improvement of PCR for Detection of *Opisthorchis viverrini* DNA in human

stool samples. **Journal of Clinical Microbiology** 46, 366–368

1437. Prasad PA and Gautham N. (**2008**) A new peptide docking strategy using a mean field technique with mutually orthogonal Latin square sampling. **Journal of Computer-Aided Molecular Design** 22, 815-29

1438. Hemalatha M. and Vivekanandan K. (**2008.**) A distributed and parallel clustering algorithm for massive biological data. **Journal of Convergence and Information Technology** 34, 84-88

1439. Bajaj R, Mohanty S, Dash AP and Das A. (**2008**) Fine-scale genetic characterization of *Plasmodium falciparum* chromosome 7 encompassing the antigenic var and the drug-resistant pfcrt genes. **Journal of Genetics** 87, 59-64

1440. Daisy P, James Eliza and Savarimuthu Ignacimuthu. (**2008**) Influence of *Costus speciosus* (Koen.) Sm Rhizome extracts on biochemical parameters in STZ induced Diabetic rats. **Journal of Health Science** 54, 1-7

1441. Krishnan L, Lomash S, Raj BP, Kaur KJ and Salunke DM. (**2008**) Paratope plasticity in diverse modes facilitates molecular mimicry in antibody response. **Journal of Immunology** 178, 7923-31

1442. Kalia VC and Purohit HJ. (**2008**) Microbial diversity and genomics in aid of bioenergy. **Journal of Industrial Microbiology and Biotechnology** 35, 403-19

1443. Jayashree B, Rajgopal S, Hoisington D, Prasanth VP and Chandra S. (**2008**) WebStruct and VisualStruct: Web interfaces and visualization for Structure software implemented in a cluster environment. **Journal of Integrative Bioinformatics** 5, 89

1444. Mitra CK and Milanesi L. (**2008**) An unusal distribution of 6-nt sequences near the transcription start site. **Journal of Integrative Bioinformatics** 5, 103

1445. Verma A, Halder K, Halder R, Yadav VK, Rawal P, Thakur RK, Mohd F, Sharma A and Chowdhury S. (**2008**) Genome-wide computational and expression analyses reveal G-quadruplex DNA motifs as conserved cis-regulatory elements in human and related species. **Journal of Medicinal Chemistry** 51, 5641-9

1446. Polley S, Guha S, Roy NS, Kar S, Sakaguchi K, Chuman Y, Swaminathan V, Kundu T and Roy S. (**2008**) Differential recognition of phosphorylated transactivation domains of p53 by different p300 domains. **Journal of Molecular Biology** 376, 8-12

1447. Ravi Shashi Nayana M, Sekhar Y Nataraja, Harita Nandyala, Bairy Santhosh Kumar Muttineni Ravikumar and Mahmood SK. (**2008**) Insight into the structural requirements of proton pump inhibitors based on CoMFA and CoMSIA studies. **Journal of Molecular Graphics and modeling** 27, 233-43

1448. Sabitha Kotra, Kishore Kumar Madala and Kaiser Jamil. (**2008**) Homology Models of the Mutated EGFR and their Response towards Quinazolin Analogues. **Journal of Molecular Graphics and modeling** 27, 244-254

1449. Dureja H, Gupta S and Madan AK. (**2008**) Predicting anti-HIV-1 activity of 6-arylbenzonitriles: computational approach using superaugmented eccentric connectivity topochemical indices. **Journal of Molecular Graphics and Modelling** 26, 1020-9

1450. Kundu S and Roy D. (**2008**) Temperature-induced unfolding pathway of a type III antifreeze protein: insight from molecular dynamics simulation. **Journal of Molecular Graphics and Modelling** 27, 88-94

1451. Sekhar Y Nataraja, Shashi Nayana M. Ravi, Sivakumari N, Muttineni Ravikumar and Mahmood SK. (**2008**) 3D-QSAR and molecular docking studies of 1,3,5-triazene-2,4-diamine derivatives against r-RNA: Novel bacterial translation inhibitors. **Journal of Molecular Graphics and Modelling** 26, 1338-1352

1452. Suresh PS, Kumar A, Kumar R and Singh VP. (**2008**) An *In silico* approach to bioremediation: laccase as a case study. **Journal of Molecular Graphics and Modelling** 26, 845-9

1453. Vijayan RS and Ghoshal N. (**2008**) Structural basis for ligand recognition at the benzodiazepine binding site of GABAA alpha 3 receptor, and pharmacophore-based virtual screening approach. **Journal of Molecular Graphics and Modelling** 27, 286-298

1454. Gupta A, Ray S, Kapoor S and Khare SK. (**2008**) Solvent-stable *Pseudomonas aeruginosa* PseA protease gene: identification, molecular characterization, phylogenetic and bioinformatic analysis to study reasons for solvent stability. **Journal of Molecular Microbiology and Biotechnology** 15, 234-243

1455. Chandramoorthi GD, Piramanayagam S and Marimuthu P. (**2008**) An *In silico* approach to high altitude pulmonary edema - Molecular modeling of human beta2 adrenergic receptor and its interaction with Salmeterol & Nifedipine. **Journal of Molecular Modeling** 14, 849-856

1456. Chopra Madhu, Gupta Ruby, Gupta Swati and Saluja Daman. (**2008**) Molecular Modeling Study on Chemically Diverse Series of Cycloogenase-2 Selective Inhibitors: Generation of Predictive Pharmacophore Model using Catalyst. **Journal of Molecular Modeling** 14,1087–1099

1457. Singh A, Kushwaha HR and Sharma P. (**2008**) Molecular modelling and comparative structural account of aspartyl beta-semialdehyde dehydrogenase of *Mycobacterium tuberculosis* (H37Rv). **Journal of Molecular Modeling** 14, 249-63

1458. Khan SN, Islam B, Yennamalli R, Zia Q, Subbarao N and Khan AU. (**2008**) Characterization of doxorubicin binding site and drug induced alteration in the functionally important structural state of oxyhemoglobin. **Journal of Pharmaceutical and Biomedical Analysis** 48, 1096-104

1459. Mangrauthia Satendra K , Jain RK and Shelly Praveen. (**2008**) Sequence Motifs Comparisons Establish A Functional Portrait Of A Multifunctional Protein HC-Pro From Papaya Ring Spot Potyvirus. **Journal of Plant Biochemistry & Biotechnology** 17, 201-204

1460. Rajesh MK, Subaharan K, Sathish Kumar, K., Ritto Paul, Bobby paul, Sreesmitha V and George V Thomas. (**2008**) A comparative study of insect odorant protein binding (OBP) genes and isolation of a partial OBP gene from coconut red palm weevil, *Rhynchophorus ferrugineus* F. **Journal of Plantation Crops** 36, 418-424

1461. Sreesmitha V, Rajesh MK, Subaharan K, Kumar Sathish K and Thomas George V. (**2008**) Homology modeling and docking studies in an odorant binding

protein from palm weevil. **Journal of Plantation Crops** 36, 430-434

1462. Agrawal L, Chakraborty S, Jaiswal DK, Gupta S, Datta A and Chakraborty N. (**2008**) Comparative proteomics of tuber induction, development and maturation reveal the complexity of tuberization process in potato (*Solanum tuberosum* L). **Journal of Proteome Research** 7, 3803-17

1463. Chaerkady R, Harsha HC, Nalli A, Gucek M, Vivekanandan P, Akhtar J, Cole RN, Simmers J, Schulick RD, Singh S, Torbenson M, Pandey A and Thuluvath PJ. (**2008**) A quantitative proteomic approach for identification of potential biomarkers in hepatocellular carcinoma. **Journal of Proteome Research** 7, 4289-98

1464. Gowthaman U and Agrewala JN. (**2008**) *In silico* tools for predicting peptides binding to HLA-class II molecules: more confusion than conclusion. **Journal of Proteome Research** 7, 154-63

1465. Harsha HC, Jimeno A, Molina H, Mihalas AB, Goggins MG, Hruban RH, Schulick RD, Kamath U, Maitra A, Hidalgo M and Pandey A. (**2008**) Activated epidermal growth factor receptor as a novel target in pancreatic cancer therapy. **Journal of Proteome Research** 7, 4651-8

1466. Kush A and Raghava GPS. (**2008**) AC2DGel: Analysis and Comparison of 2D Gels. **Journal of Proteomics & Bioinformatics** 1, 43-46

1467. Anwar T and Khan AU. (**2008**) Identification of a point mutation causing splitting of antigenic domain in M1 protein of H5N1 strain from 2006 outbreak in India. **Journal of proteomics and Bioinformatics** 1, 302-306

1468. Banerjee Amit Kumar, Arora Neelima, Pranitha Varakantham and Murty USN. (**2008**) Exploring the Interplay of Sequence and Structural Features in Determiming the Flexibility of AGC Kinase Protein Family: A Bioinformatics Approach. **Journal of Proteomics and Bioinformatics** 1, 77-89

1469. Salahuddin P and Khan AU. (**2008**) Proteolytic Enzymes Database. **Journal of proteomics and Bioinformatics** 1, 109-111

1470. Kalidas Y and Chandra N. (**2008**) PocketDepth: a new depth based algorithm for identification of ligand binding sites in proteins. **Journal of Structural Biology** 161, 31-42

1471. Martis RL, Singh SK, Gromiha MM and Santhosh C. (**2008**) Role of cation-pi interactions in single chain 'all-alpha' proteins. **Journal of Theoretical Biology** 250, 655-62

1472. Rakshit S and Ananthasuresh GK. (**2008**) An amino acid map of inter-residue contact energies using metric multi-dimensional scaling. **Journal of Theoretical Biology** 250, 291-7

1473. Veluraja K and Seethalakshmi AN. (**2008**) Dynamics of sialyllewisa in aqueous solution and Prediction of the structure of sialyllewisa – SelectinE complex. **Journal of Theoretical Biology** 252, 15-23

1474. Mondal S and Mukhopadhyay C. (**2008**) Molecular level investigation of organization in ternary lipid bilayer: a computational approach. **Langmuir** 24,10298-305

1475. Bhowmick PP, Khushiramani R, Raghunath P, Karunasagar I and Karunasagar I. (**2008**) Molecular typing of *Vibrio parahaemolyticus* isolated

from seafood harvested along the south-west coast of India. **Letters in Applied Microbiology** 46, 198–204

1476. Chaudhuri R, Ahmed S, Ansari FA, Singh HV and Ramachandran S. (**2008**) MalVac: database of malarial vaccine candidates. **Malaria Journal** 7, 184

1477. Vinod Chandra S.S., Gopakumar G, and Achuthsankar S Nair. (**2008**) Biolets: Statistical Approach to Biological Random Sequence Generation. **Malaysian Journal of Computer Science** 21, 116-121

1478. Rajasekaran R, Sudandiradoss C, George Priya Doss C, Singh A and Sethumadhavan R. (**2008**) Computational detection of deleterious SNPs and their effect on sequence and structural level of the VHL gene. **Mammalian Genome** 19, 654-61

1479. Singh Sanjeev Kumar and Dessalew Nigus. (**2008**) 3D-QSAR CoMFA and CoMSIA study on Benzodipyrazoles as CDK2 Inhibitors. **Medicinal Chemistry** 4, 2008, 313-321

1480. Chaitra MG, Shaila MS and Nayak R. (**2008**) Detection of interferon gamma-secreting CD8+ T lymphocytes in humans specific for three PE/PPE proteins of *Mycobacterium tuberculosis*. **Microbes and Infection** 10, 858-67

1481. Mathivanan S and Pandey A. (**2008**) Human Proteinpedia as a resource for clinical proteomics. **Molecular & Cellular Proteomics** 7, 2038-47

1482. Pandey A, Chakraborty S, Datta A and Chakraborty N. (**2008**) Proteomics approach to identify dehydration responsive nuclear proteins from chickpea (*Cicer arietinum* L). **Molecular & Cellular Proteomics** 7, 88-107

1483. Agrawal V, Gupta B, Banerjee UC and Roy N. (**2008**) A method for construction, cloning and expression of intron-less gene from unannotated genomic DNA. **Molecular Biotechnology** 40, 217-23

1484. Ananthi S, Chitra T, Bini R, Prajna NV, Lalitha P and Dharmalingam K. (**2008**) Comparative analysis of the tear protein profile in mycotic keratitis patients. **Molecular Vision** 14, 500-7

1485. Aishwarya V and Sharma PC. (**2008**) UgMicroSatdb: database for mining microsatellites from unigenes. **Nucleic Acids Research** 36, D53-6

1486. Paila U, Kondam R and Ranjan A. (**2008**) Genome bias influences amino acid choices: analysis of amino acid substitution and re-compilation of substitution matrices exclusive to an AT-biased genome. **Nucleic Acids Research** 36, 6664-75

1487. Sai Lakshmi S and Agrawal S. (**2008**) PiRNABank: a web resource on classified and clustered Piwi-interacting RNAs. **Nucleic Acids Research** 36, D173-7

1488. Yadav VK, Abraham JK, Mani P, Kulshrestha R and Chowdhury S. (**2008**) QuadBase: genome-wide database of G4 DNA--occurrence and conservation in human, chimpanzee, mouse and rat promoters and 146 microbes. **Nucleic Acids Research** 36, D381-5

1489. Somvanshi P, Singh V and Seth PK. (**2008**) Prediction of epitopes in hemagglutinin and neuraminidase proteins of influenza A virus H5N1 strain: a clue for diagnostic and vaccine development. **OMICS** 12, 61-9

1490. Mamatha G, Srilekha S, Meenakshi S and Kumaramanickavel G. (**2008**) Screening of the RPE65 gene in the

Asian Indian patients with leber congenital amaurosis. **Ophthalmic Genetics** 29, 73-8

1491. Prasad PK, Tandon V, Biswal DK, Goswami L and Chatterjee A. (**2008**) Molecular identification of the Indian liver fluke, Fasciola (Trematoda: Fasciolidae) based on the ribosomal internal transcribed spacer regions. **Parasitology Research** 103, 1247-55

1492. Bhargava P, Mishra Y, Srivastava AK, Narayan OP and Rai LC. (**2008**) Excess copper induces anoxygenic photosynthesis in *Anabaena doliolum*: a homology based proteomic assessment of its survival strategy. **Photosynthesis Research** 96, 61-74

1493. Rajesh S, Raveendran M and Manickam A. (**2008**) Prediction of 3 dimensional structure of EMV1, a group 1 late embryogenesis abundant protein of *Vigna radiata* Wilczek. **Plant Omics** 1, 17–25

1494. Nijhawan A, Jain M, Tyagi AK and Khurana JP. (**2008**) Genomic survey and gene expression analysis of the basic leucine zipper transcription factor family in rice. **Plant Physiology** 146, 333-50

1495. Kaur H, Shukla RK, Yadav G, Chattopadhyay D and Majee M. (**2008**) Two divergent genes encoding L-myo-inositol 1-phosphate synthase1 (CaMIPS1) and 2 (CaMIPS2) are differentially expressed in chickpea. **Plant, Cell and Environment** 31, 1701-1716

1496. Chopra T, Banerjee S, Gupta S, Yadav G, Anand S, Surolia A, Roy RP, Mohanty D and Gokhale RS. (**2008**) Novel intermolecular iterative mechanism for biosynthesis of mycoketide catalyzed by a bimodular polyketide synthase. **PLoS Biology** 6(7):e163

1497. Hegde SR, Manimaran P and Mande SC. (**2008**) Dynamic changes in protein functional linkage networks revealed by integration with gene expression data. **PLoS Computational Biology** 4, e1000237

1498. Ramakrishnan N and Bhalla US. (**2008**) Memory switches in chemical reaction space. **PLoS Computational Biology** 4, e1000122

1499. Sathyapriya R, Vijayabaskar MS and Vishveshwara S. (**2008**) Insights into protein-DNA interactions through structure network analysis. **PLoS Computational Biology** 4, e1000170

1500. Siddharthan R. (**2008**) PhyloGibbs-MP: module prediction and discriminative motif-finding by Gibbs sampling. **PLoS Computational Biology** 4, e1000156

1501. Sonavane S and Chakrabarti P. (**2008**) Cavities and atomic packing in protein structures and interfaces. **PLoS Computational Biology** 4, e1000188

1502. Weber C, Blazquez S, Marion S, Ausseur C, Vats D, Krzeminski M, Rigothier S, Maroun RC, Bhattacharya A and Guillen N. (**2008**) Bioinformatics and functional analysis of an *Entamoeba histolytica* mannosyltransferase necessary for parasite complement resistance and hepatical infection. **PLoS Neglected Tropical Diseases** 2, e165

1503. Kalita MK ,Nandal UK, Pattnaik A, Sivalingam A, Ramasamy G, Kumar M, Raghava GPS and Gupta D. (**2008**) CyclinPred: a SVM-based method for predicting cyclin protein sequences. **PLoS ONE** 3, e2605

1504. Purushothaman S, Gupta G, Srivastava R, Vasanthakumar GR and Surolia A. (**2008**) Ligand Specificity Of Group I

Biotin Protein Ligase Of *Mycobacterium tuberculosis*. **PLoS ONE** 3, 2320

1505. Nandi A and Ramaswamy R. (**2008**) Synchronization of Coupled Stochastic Oscillators: The effect of topology. **Pramana- Journal of Physics** 70, 1065–1074

1506. Sowdhamini R, Alva V and Syamala Devi DP. (**2008**) COILCHECK: an interactive server for the analysis of interface regions in coiled coils. **Protein and Peptide Letters** 15, 33-38

1507. Sridhar S and Guruprasad K. (**2008**) Conformational analysis corresponding to intra-chain disulfide bridged peptides in proteins of known three-dimensional structure. **Protein and Peptide Letters** 15, 160-87

1508. Lata S and Raghava GPS. (**2008**) CytoPred: a server for prediction and classification of cytokines. **Protein Engineering, Design and Selection** 21, 279-82

1509. Kaur KJ, Sarkar P, Nagpal S, Khan T and Salunke DM. (**2008**) Structure-function analyses involving palindromic analogs of tritrypticin suggest autonomy of anti-endotoxin and antibacterial activities. **Protein Science** 17, 545-554

1510. Ansari FA, Kumar N, Bala Subramanyam M, Gnanamani M and Ramachandran S. (**2008**) MAAP: malarial adhesins and adhesin-like proteins predictor. **Proteins: Structure, Function and Bioinformatics** 70, 659-66

1511. Arunachalam J and Gautham N. (**2008**) Hydrophobic clusters in protein structures. **Proteins: Structure, Function and Bioinformatics** 71, 2012–2025

1512. Goyal K and Mande SC. (**2008**) Exploiting 3D structural templates for detection of metal-binding sites in protein structures. **Proteins: Structure, Function and Bioinformatics** 70, 1206-18

1513. Manicka S, Peleg Y, Unger T, Albeck S, Dym O, Greenblatt HM, Bourenkov G, Lamzin V, Krishnaswamy S and Sussman JL. (**2008**) Crystal structure of YagE, a putative DHDPS-like protein from *Escherichia coli* K12. **Proteins: Structure, Function and Bioinformatics** 71, 2102-2108

1514. Janin J, Bahadur RP and Chakrabarti P. (**2008**) Protein-protein interaction and quaternary structure. **Quarterly Reviews of Biophysics** 41, 133-180

1515. Khan Muhummadh and Jamil Kaiser. (**2008**) Clustering cancer metasignature genes: Identification of cellular profiles of neoplastic and undifferentiated stages of cancer. **Research Journal of BioTechnology** 3, 11 –17

1516. Chaitra MG, Shaila MS, Chandra NR and Nayak R. (**2008**) HLA-A*0201-restricted Cytotoxic T-cell Epitopes in Three PE/PPE Family Proteins of *Mycobacterium tuberculosis*. **Scandinavian Journal of Immunology** 67, 411-417

1517. Kaushik DK and Sehgal D. (**2008**) Developing antibacterial vaccines in genomics and proteomics era. **Scandinavian Journal of Immunology** 67, 544-52

1518. Soundravally R and Hoti SL. (**2008**) Polymorphisms of the TAP 1 and 2 gene may influence clinical outcome of primary dengue viral infection. **Scandinavian Journal of Immunology** 67, 618-25

1519. Das P, Shaik AP and Jamil K. (**2008**) Cytotoxicity and Genotoxicity induced by the pesticide Acephate on Cultured Human Peripheral Blood Lymphocytes. **The Internet Journal of Toxicology** 5 (2)

1520. Raghava GPS, Hwang DJ and Han JH. (**2008**) ECGpred: Correlation and Prediction of Gene Expression from Nucleotide Sequence. **The Open Bioinformatics Journal** 2, 64-71

1521. Biswas D, Das SK and Roy S. (**2008**) Importance of scaling exponents and other parameters in growth mechanism: an analytical approach. **Theory Biosci** 127, 271-6

1522. Vivona S, Gardy JL, Ramachandran S, Brinkman FSL, Raghava GPS, Flower DR and Filippini F. (**2008**) Computer aided biotechnology: from immunoinformatics to reverse vaccinology. **Trends in Biotechnology** 26, 190

1523. Arturo Medrano-Soto, Debnath Pal and David Eisenberg. (**2008**) Inferring molecular function: contributions from functional linkages. **Trends in Genetics** 24, 587-590

1524. Mitra A, Angamuthu K and Nagaraja V. (**2008**) Genome-wide analysis of the intrinsic terminators of transcription across the genus Mycobacterium. **Tuberculosis** 88, 566-575

1525. Pradeep B, Shekar M, Karunasagar I and Karunasagar I. (**2008**) Characterization of variable genomic regions of Indian white spot syndrome virus. **Virology** 376, 24-30

1526. Sudhakaran R, Syed Musthaq S, Rajesh Kumar S, Sarathi M, and Sahul Hameed AS. (**2008**) Cloning and sequencing of capsid protein of Indian isolate of extra small virus from *Macrobrachium rosenbergii*. **Virus Research** 131, 283-7

1527. Meli R, Prasad A, Patowary A, Lalwani MK, Maini J, Sharma M, Singh AR, Kumar G, Jadhav V, Scaria V and Sivasubbu S. (**2008**) FishMap: a community resource for zebrafish genomics. **Zebrafish** 5, 125-30

2009

1528. Kanaujia SP and Sekar K. (**2009**) Structural and functional role of water molecules in bovine pancreatic phospholipase A (2): a data-mining approach. **Acta Crystallographica: Section D-Biological Crystallography** D65, 74-84

1529. Katre UV and Suresh CG. (**2009**) Features of homotetrameric molecular association in protein crystals. **Acta Crystallographica: Section D-Biological Crystallography** D65, 1-10

1530. Kandathil AJ, Kannangai R, Abraham OC, Pulimood SA, Jensen MA and Sridharan G. (**2009**) A comparison of interpretation by three different HIV type 1 genotypic drug resistance algorithms using sequences from non-clade B HIV type 1 strains. **AIDS Research and Human Retroviruses** 25, 315-8

1531. Raghavan S, Selvaraj P, Swaminathan S and Narendran G. (**2009**) Short communication: association of HLA-A*1101 with resistance and B*4006 with susceptibility to HIV and HIV-TB: an *In silico* analysis of promiscuous T cell epitopes. **AIDS Research and Human Retroviruses** 25, 1023-8

1532. Bhadra S, Bhattacharyya C, Chandra NR and Mian IS. (**2009**) A linear programming approach for estimating the structure of a sparse linear genetic

network from transcript profiling data. **Algorithms for Molecular Biology** 24;4:5

1533. Biswas B, Narmadha G, Choudhary M, French FS, Hall SH and Yenugu S. (**2009**) Identification of Toll-like receptors in the rat (Rattus norvegicus): messenger RNA expression in the male reproductive tract under conditions of androgen variation. **American Journal of Reproductive Immunology** 62, 243-52

1534. Venugopal A, Chaerkady R and Pandey A. (**2009**) Application of mass spectrometry-based proteomics for biomarker discovery in neurological disorders. **Annals of Indian Academy of Neurology** 12, 3-11

1535. Suryanaryana MU, Srinivasa Rao M and Arunachalam N. (**2009**) Bayesian network approach for prediction of Japanese encephalitis vectors in Kurnool district of Andhra Pradesh, India. **Applied Artificial Intelligence** 23, 828–834

1536. Anand S, Anbarasu A and Sethumadhavan R. (**2009**) Exploring the C-H...O interactions in glycoproteins. **Applied Biochemistry and Biotechnology** 159, 343-54

1537. Bansal Seema , Prija Ponnan, Raj Hanumantharao G, Weintraub Susan T, Chopra Madhu, Kumari Ranju, Saluja D, Kumar Ajit , Tyagi Tapesh K and Singh Prabhjot et al. (**2009**) Autoacetylation of Purified Calreticulin Transacetylase Utilizing Acetoxycoumarin as the Acetyl Group Donor. **Applied Biochemistry and Biotechnology** 157, 285–29

1538. Malaviya A and Gomes J. (**2009**) Rapid screening and isolation of a fungus for sitosterol to androstenedione biotransformation. **Applied Biochemistry and Biotechnology** 158, 374-86

1539. Sridhar J, Sekar K and Rafi ZA. (**2009**) CsrA interacting small RNAs in Haemophilus spp genomes: a theoretical analysis. **Archives of Microbiology** 191, 451-9

1540. Mangrauthia S, Parameswari KB, Praveen S and Jain Rakesh Kumar. (**2009**) Comparative genomics of Papaya ringspot virus pathotypes P and W from India. **Archives of Virology** 154, 727–730

1541. Mukherjee A, Dutta D, Ghosh S, Bagchi P, Chattopadhyay S, Nagashima S, Kobayashi N, Dutta P, Krishnan T, Naik TN and Chawla-Sarkar M. (**2009**) Full genomic analysis of a human group A rotavirus G9P[6] strain from Eastern India provides evidence for porcine-to-human interspecies transmission. **Archives of Virology** 154, 733-46

1542. Nagashima S, Kobayashi N, Paul SK, Alam MM, Chawla-Sarkar M and Krishnan T. (**2009**) Characterization of full-length VP4 genes of OP354-like P[8] human rotavirus strains detected in Bangladesh representing a novel P[8] subtype. **Archives of Virology** 154, 1223-31

1543. Nambaru L, Meenakumari B, Swaminathan R and Rajkumar T. (**2009**) Prognostic significance of HPV physical status and integration sites in cervical cancer. **Asian Pacific Journal of Cancer Prevention** 10, 355-60

1544. Banerjee R and Roy D. (**2009**) Codon usage and gene expression pattern of Stenotrophomonas maltophilia R551-3 for pathogenic mode of living. **Biochemical & Biophysical Research Communications** 390, 177-81

1545. Kumar S, Kumar A and Dixit VK. (**2009**) Evidences showing association of interleukin polymorphisms with increased risk of gastric cancer in an Indian population. **Biochemical & Biophysical Research Communications** 387, 456-460

1546. Kumar S, Sarkar A and Sundar D. (**2009**) Controlling aggregation propensity in A53T mutant of alpha-synuclein causing Parkinsons' disease. **Biochemical & Biophysical Research Communications** 387, 305-309

1547. Pratibha Mehta Luthra, Rakesh Kumarn and Amresh Prakash. (**2009**) Demethoxycurcumin induces Bcl-2 mediated G2/M arrest and apoptosis in human glioma U87 cells. **Biochemical & Biophysical Research Communications** 384, 421–425

1548. Sinha NK, Roy A, Das B, Das S and Basak S. (**2009**) Evolutionary complexities of swine flu H1N1 gene sequences of 2009. **Biochemical & Biophysical Research Communications** 390, 349-51

1549. Saraswathy KN, Kiranmala N, Murry B, Sinha E, Saksena D, Kaur H, Sachdeva MP and Kalla AK. (**2009**) A genomic insight into diversity among tribal and nontribal population groups of Manipur, India. **Biochemical Genetics** 47, 694-706

1550. Prabu JR, Thamotharan S, Khanduja JS, Chandra NR, Muniyappa K and Vijayan M. (**2009**) Crystallographic and modelling studies on *Mycobacterium tuberculosis* RuvA- Additional role of RuvB-binding domain and inter species variability. **Biochimica et Biophysica Acta** 1794, 1001-1009

1551. Mukherjee D, Saha RP and Chakrabarti P. (**2009**) Structural and unfolding features of HlyT, a tetrameric LysR type transcription regulator of *Vibrio cholerae*. **Biochimica et Biophysica Acta - Biomembranes** 1794, 1134-1141

1552. Shameer K, Nagarajan P, Gaurav K and Sowdhamini R. (**2009**) 3PFDB--a database of best representative PSSM profiles (BRPs) of protein families generated using a novel data mining approach. **BioData Mining** 2, 8

1553. Ahluwalia Jasmine K, Hariharan Manoj, Bargaje Rhishikesh, Pillai Beena and Brahmachari Vani. (**2009**) Incomplete penetrance and variable expressivity: Is there a microRNA connection? **Bioessays** 31, 981-92

1554. Bandyopadhyay S and Mitra R. (**2009**) TargetMiner: microRNA target prediction with systematic identification of tissue-specific negative examples. **Bioinformatics** 25, 2625-2631

1555. Bhattacharya A and De RK. (**2009**) Bi-correlation clustering algorithm for determining a set of co-regulated genes. **Bioinformatics** 25, 2795-801

1556. Das S, Vishnoi A and Bhattacharya A. (**2009**) ABWGAT: Anchor based whole genome analysis tool. **Bioinformatics** 25, 3319-20

1557. Joshi RR. (**2009**) Statistical Mining of Gene Protein Databanks. **Bioinformatics** Springer, New York (ISBN-10:1402088795)

1558. Kandasamy K, Keerthikumar S, Raju R, Keshava Prasad TS, Ramachandra YL, Mohan S and Pandey A. (**2009**) PathBuilder- open source software for annotating and developing pathway resources. **Bioinformatics** 25, 2860-2

1559. Monzoorul Haque M, Ghosh TS, Komanduri D, Mande SS. (**2009**) SOrt-ITEMS: Sequence orthology based

approach for improved taxonomic estimation of metagenomic sequences. **Bioinformatics** 25, 1722-1730

1560. Ramana J and Gupta D. (**2009**) ProtVirDB: a database of protozoan virulent proteins. **Bioinformatics** 25, 1568-9

1561. Arora N, Banerjee A, Mutyala S and Murty U. (**2009**) Comparative characterization of commercially important xylanase enzymes. **Bioinformation** 3, 446-53

1562. Babu PA, Kumar PS, Padmaja P, Roa TK and Chitti S. (**2009**) MIC database: a collection of antimicrobial compounds from literature. **Bioinformation** 4, 75-7

1563. Barh D, Kumar A and Misra AN. (**2009**) Genomic Target Database (GTD): A database of potential targets in human pathogenic bacteria. **Bioinformation** 4, 50-51

1564. Bera I and Ray S. (**2009**) A study of interface roughness of heteromeric obligate and non-obligate protein-protein complexes. **Bioinformation** 4, 210-5

1565. Bobby P, Balaji S, Sathyanath V and Santhosh J Eapen. (**2009**) JUZBOX: A web server for extracting biomedical words from the protein sequence. **Bioinformation** 4, 179-181

1566. Chandrasekar A, Riju A, Sithara K, Anoop S and Eapen SJ. (**2009**) Identification of single nucleotide polymorphism in ginger using expressed sequence tags. **Bioinformation** 4, 119-22

1567. Danishuddin M, Khan SN and Khan AU. (**2009**) Phylogenetic analysis of surface proteins of novel H1N1 virus isolated from 2009 pandemic. **Bioinformation** 4, 94-7

1568. Dhar Priyanka , Ganguli Sayak and Datta Abhijit. (**2009**) Targeting pseudoknots in H5N1 hemagglutinin using designed aptamers. **Bioinformation** 4, 193-196

1569. Khan AU. (**2009**) The Influenza-A mystery: insight from Bioinformatics resources and analysis. **Bioinformation** 4, 52

1570. Kumar GR, Subazini TK, Subha K, Rajadurai CP, Prabakar L. (**2009**) CanGeneBase (CGB)--a database on cancer related genes. **Bioinformation** 3, 422-4

1571. Kushwaha SK and Shakya M. (**2009**) PINAT1.0: protein interaction network analysis tool. **Bioinformation** 3, 419-21

1572. Mishra H, Singh N, Lahiri T and Misra K. (**2009**) A comparative study on the molecular descriptors for predicting drug-likeness of small molecules. **Bioinformation** 3, 384-8

1573. Pallipalayam Periyasamy K, Lakshmi PT, Dwibedi CK and Annamalai A. (**2009**) A database for human Y chromosome protein data. **Bioinformation** 4, 184-6

1574. Prasad PK, Tandon V, Biswal D K, Goswami L M and Chatterjee A. (**2009**) Use of sequence motifs as barcodes and secondary structures of internal transcribed spacer 2 (ITS2, rDNA) for identification of the Indian liver fluke, Fasciola (Trematoda: Fasciolidae). **Bioinformation** 3, 314-320

1575. Priya PL and Shanmughavel P. (**2009**) A docking model of human ribonucleotide reductase with flavin and phenosafranine. **Bioinformation** 4, 123-6

1576. Rathi B, Sarangi AN and Trivedi N. (**2009**) Genome subtraction for novel target definition in *Salmonella typhi*. **Bioinformation** 4, 143-50

1577. Salahuddin P and Khan AU. (**2009**) Identification of mutations at the antigenic and glycosylation sites in hemagglutinin protein of H5N1 strain. **Bioinformation** 4, 30-5

1578. Sen N, Mishra M, Khan F, Meena A and Sharma A. (**2009**) D-MATRIX: a web tool for constructing weight matrix of conserved DNA motifs. **Bioinformation** 3, 415-8

1579. Shankar R, Kataria B and Mukerji M. (**2009**) Finding Alu in primate genomes with AF-1. **Bioinformation** 3, 287-8

1580. Sharma A, Roy S, Tripathi KP, Roy P, Mishra M, Khan F, Meena A. (**2009**) Predicted metal binding sites for phytoremediation. **Bioinformation** 4, 66-70

1581. Shrivastava S, Poddar R, Shukla P and Mukhopadhyay K. (**2009**) Study of codon bias perspective of fungal xylanase gene by multivariate analysis. **Bioinformation** 3, 425-429

1582. Singh A and Sivaprasad CV. (**2009**) Functional interpretation of APN receptor from M. sexta using a molecular model. **Bioinformation** 3, 321-5

1583. Singh DV and Misra K. (**2009**) Curcuminoids as inhibitors of thioredoxin reductase: a receptor based pharmacophore study with distance mapping of the active site. **Bioinformation** 4, 187-92

1584. Singh V, Praveen V, Khan F and Tripathi CK. (**2009**) Phylogenetics of an antibiotic producing Streptomyces strain isolated from soil. **Bioinformation** 4, 53-8

1585. Singh Vinay Kumar, Ambwani Sonu, Marla Soma S and Kumar Anil. (**2009**) Development of Cry-Bt identifier. **Bioinformation** 4 , 182-183

1586. Singh VK, Ambwani S, Marla S, Kumar A. (**2009**) Cry-Bt identifier: a biological database for PCR detection of Cry genes present in transgenic plants. **Bioinformation** 4, 182-3

1587. Somvanshi P and Seth PK. (**2009**) Predicted RNA secondary structures for the conserved regions in dengue virus. **Bioinformation** 3, 435-9

1588. Veluchamy A, Mary S, Acharya V, Mehta P, Deva T and Krishnaswamy S. (**2009**) HNHDb: a database on pattern based classification of HNH domains reveals functional relevance of sequence patterns and domain associations. **Bioinformation** 4, 80-3

1589. Vetrivel U, Subramanian N and Pilla K. (**2009**) InPACdb--Indian plant anticancer compounds database. **Bioinformation** 4, 71-4

1590. Yadav V, Prakash S, Srivastava S, Verma PC, Gupta V, Basu V and Rawat AK. (**2009**) Identification of Comamonas species using 16S rRNA gene sequence. **Bioinformation** 3, 381-3

1591. Kaistha SD and Sinha R. (**2009**) Homology modeling of phosphoryl thymidine kinase of enterohemorrhagic *Escherichia coli* OH: 157. **Bioinformation.** 3, 240-3

1592. Saranya N and Selvaraj S. (**2009**) Variation of protein binding cavity volume and ligand volume in protein-ligand complexes. **Bioorganic &**

Medicinal Chemistry Letters 19, 5769-72

1593. Snehlata, Vats Ishwar Dutt, Chopra Madhu, Biswas Parbati and Pasha Santosh. (**2009**) Effect of Varying Chain Length between P1 and P1' Position of Tripeptidomimics on Activity of Angiotensin Converting Enzyme Inhibitors. **Bioorganic & Medicinal Chemistry Letters** 19, 4364 – 4366,

1594. Kaushik S, Mohanty D and Surolia A. (**2009**) Role of metal ions in substrate recognition and stability of Concanavalin A: A molecular dynamics study. **Biophysical Journal** 96, 21-34

1595. Bandyopadhyay P and Kuntz ID. (**2009**) Computational investigation of kinetics of cross-linking reactions in proteins: importance in structure prediction. **Biopolymers** 91, 68-77

1596. Harihar B and Selvaraj S. (**2009**) Refinement of the long-range order parameter in predicting folding rates of two-state proteins. **Biopolymers** 91, 928-35

1597. Zoraida BS, Arock M, Ronald BS and Ponalagusamy R. (**2009**) A novel generalized design methodology and realization of Boolean operations using DNA. **Biosystems** 97, 146-53

1598. Agarwal SM and Srivastava PK. (**2009**) Human intronless disease associated genes are slowly evolving. **BMB Rep** 42, 356-60

1599. Ahmed F, Ansari HR and Raghava, GPS. (**2009**) Prediction of guide strand of microRNAs from its sequence and secondary structure. **BMC Bioinformatics** 10, 105

1600. Bhardwaj A, Mukerji M, Sharma S, Paul J, Gokhale CS, Srivastava AK, Tiwari S. (**2009**) MtSNPscore: a combined evidence approach for assessing cumulative impact of mitochondrial variations in disease. **BMC Bioinformatics** 10 Suppl 8:S7

1601. Chauhan JS, Mishra NK and Raghava GPS. (**2009**) Identification of ATP binding residues of a protein from its primary sequence. **BMC Bioinformatics** 10, 434

1602. Dharan S and Nair AS. (**2009**) Biclustering of gene expression data using reactive greedy randomized adaptive search procedure. **BMC Bioinformatics** 10 Suppl 1:S27

1603. Hariharan M, Scaria V and Brahmachari SK. (**2009**) dbSMR: a novel resource of genome-wide SNPs affecting microRNA mediated regulation. **BMC Bioinformatics** 10, 108

1604. Kumar M and Raghava GPS. (**2009**) Prediction of Nuclear Proteins using SVM and HMM Models. **BMC Bioinformatics** 10, 22

1605. Pal A, Bahadur RP, Ray PS and Chakrabarti P. (**2009**) Accessibility and partner number of protein residues, their relationship and a webserver, ContPlot for their display. **BMC Bioinformatics** 10, 103

1606. Ramana J and Gupta D. (**2009**) LipocalinPred: a SVM-based method for prediction of lipocalins. **BMC Bioinformatics** 10, 445

1607. Singh P, Bandyopadhyay P, Bhattacharya S, Krishnamachari A and Sengupta S. (**2009**) Riboswitch detection using profile hidden Markov models. **BMC Bioinformatics** 10, 325

1608. Anamika K, Garnier N and Srinivasan N. (**2009**) Functional diversity of human protein kinase splice variants marks

significant expansion of human kinome. **BMC Genomics** 10, 622

1609. Bhatt TK, Kapil C, Khan S, Jairajpuri MA, Sharma V, Santoni D, Silvestrini F, Pizzi E and Sharma A. (**2009**) A genomic glimpse of aminoacyl-tRNA synthetases in malaria parasite *Plasmodium falciparum*. **BMC Genomics** 10, 644

1610. Iengar P and Joshi NV. (**2009**) Identification of putative regulatory motifs in the upstream regions of co-expressed functional groups of genes in *Plasmodium falciparum*. **BMC Genomics** 10, 18

1611. Jayakanthan M, Muthukumaran J, Chandrasekar S, Chawla K, Punetha A and Sundar D. (**2009**) Zif-BASE: a database of zinc finger proteins and associated resource. **BMC Genomics** 10, 421

1612. Kushwaha HR, Singh AK, Sopory SK, Singla-Pareek SL and Pareek A. (**2009**) Genome wide expression analysis of CBS domain containing proteins in *Arabidopsis thaliana* (L.) Heynh and *Oryza sativa L.* reveals their developmental and stress regulation. **BMC Genomics** 10, 200

1613. Maulik A, Ghosh H, Basu S. (**2009**) Comparative study of protein-protein interaction observed in PolyGalacturonase-Inhibiting Proteins from *Phaseolus vulgaris* and Glycine max and PolyGalacturonase from *Fusarium moniliforme*. **BMC Genomics** 10 Suppl 3:S19

1614. Mishra PC, Kumar A and Sharma A. (**2009**) Analysis of small nucleolar RNAs reveals unique genetic features in malaria parasites. **BMC Genomics** 10, 68

1615. Patil DP, Atanur S, Dhotre DP, Anantharam D, Mahajan VS, Walujkar SA, Chandode RK, Kulkarni GJ, Ghate PS, Srivastav A, Dayananda KM, Gupta N, Bhagwat B, Joshi RR, Mourya DT, Patole MS and Shouche YS. (**2009**) Generation, annotation, and analysis of ESTs from midgut tissue of adult female Anopheles stephensi mosquitoes. **BMC Genomics** 10, 386

1616. Prasad PK, Tandon V, Biswal DK, Goswami LM and Chatterjee A. (**2009**) Phylogenetic reconstruction using secondary structures and sequence motifs of ITS2 rDNA of Paragonimus westermani (Kerbert, 1878) Braun, 1899 (Digenea: Paragonimidae) and related species. **BMC Genomics** 10 (Suppl 3), S25

1617. Rashid M, Singla D, Sharma A, Kumar M and Raghava GPS. (**2009**) Hmrbase: a database of hormones and their receptors. **BMC Genomics** 10, 307

1618. Thakur S, Jha S, Roy-Barman S and Chattoo B. (**2009**) Genomic resources of Magnaporthe oryzae (GROMO): a comprehensive and integrated database on rice blast fungus. **BMC Genomics** 10, 316

1619. Arora PK, Kumar, M, Chauhan A Raghava GPS and Jain RK. (**2009**) OxDBase: A database of oxygenases involved in biodegradation. **BMC Research Notes** 2, 67

1620. Jayashree B, Bhanuprakash A, Jami A, Reddy PS, Nayak S and Varshney RK. (**2009**) Perl module and PISE wrappers for the integrated analysis of sequence data and SNP features. **BMC Research Notes** 2:92

1621. Lata S, Bhasin M and Raghava GPS. (**2009**) MHCBN 4.0: A database of MHC/TAP binding peptides and T-cell epitopes. **BMC Research Notes** 2, 61

1622. Bahadur RP and Chakrabarti P. (**2009**) Discriminating the native structure from decoys using scoring functions based on the residue packing in globular proteins. **BMC Structural Biology** 9, 76

1623. Marathe A, Karandur D and Bansal M. (**2009.**) Small Local Variations in B-Form DNA Lead to a Large Variety of Global Geometries Which Can Accommodate Most DNA-Binding Protein Motifs. **BMC Structural Biology** 9, 24

1624. Pidugu LS, Maity K, Ramaswamy K, Surolia N and Suguna K. (**2009**) Analysis of proteins with the 'hot dog' fold: prediction of function and identification of catalytic residues of hypothetical proteins. **BMC Structure Biology** 9:37

1625. Singh H and Ahmad S. (**2009**) Context dependent reference states of solvent accessibility derived from native protein structures and assessed by predictability analysis. **BMC Structure Biology** 9, 25

1626. Mohammad F, Singh P and Sharma A. (**2009**) A Drosophila systems model of pentylenetetrazole induced locomotor plasticity responsive to antiepileptic drugs. **BMC Systems Biology** 3, 11

1627. Nandi A, Vaz C, Bhattacharya A and Ramaswamy R. (**2009**) miRNA-regulated dynamics in circadian models. **BMC Systems Biology** 3, 45

1628. Raman K and Chandra N. (**2009**) Flux balance analysis of biological systems: applications and challenges. **Brief Bioinform** 10, 435-449

1629. Kashyap MK, Marimuthu A, Kishore CJ, Peri S, Keerthikumar S, Prasad TS, Mahmood R, Rao S, Ranganathan P, Sanjeeviah RC, Vijayakumar M, Kumar KV, Montgomery EA,Kumar RV and Pandey A. (**2009**) Genomewide mRNA profiling of esophageal squamous cell carcinoma for identification of cancer biomarkers. **Cancer Biology and Therapy** 8, 36-46

1630. Shukla S, Pranay A, D'Cruz AK, Chaturvedi P, Kane SV and Zingde SM. (**2009**) Immunoproteomics reveals that cancer of the tongue and the gingivobuccal complex exhibit differential autoantibody response. **Cancer Biomark** 5, 127-35

1631. Ullah MF and Aatif M. (**2009**) The footprints of cancer development: Cancer biomarkers. **Cancer Treatment Reviews** 35, 193-200

1632. Ajmani S, Karanam S and Kulkarni SA. (**2009**) Rationalizing protein-ligand interactions for PTP1B inhibitors using computational methods. **Chemical Biology & Drug Design** 74, 582-95

1633. Eliza J, Daisy P, Ignacimuthu S and Duraipandiyan V. (**2009**) Antidiabetic and antilipidemic effect oferemanthin from *Costus speciosus* (Koen ex. Retz.)Sm. in streptozotocin-induced diabetic rats. **Chemico-Biological Interactions** 182, 67-72

1634. Kumari N, Narayan OP and Rai LC. (**2009**) Understanding butachlor toxicity in Aulosira *fertilissima* using physiological, biochemical and proteomic approaches. **Chemosphere** 77, 1501-7

1635. Sinha A, Srivastava N, Singh S, Singh AK, Bhushan S, Shukla R and Singh MP. (**2009**) Identification of differentially displayed proteins in cerebrospinal fluid of Parkinson's disease patients: a proteomic approach. **Clinica Chimica Acta** 400, 14-20

1636. Pimprikar PS, Joshi SS, Kumar AR, Zinjarde SS and Kulkarni SK. (**2009**) Influence of biomass and gold salt concentration on nanoparticle synthesis by the tropical marine yeast *Yarrowia lipolytica* NCIM 3589. **Colloids Surf B Biointerfaces** 74, 309-16

1637. Tuteja R. (**2009**) Identification and bioinformatics characterization of translation initiation complex eIF4F components and poly(A)-binding protein from *Plasmodium falciparum*. **Communicative & Integrative Biology** 2, 245-60

1638. Padhi R, Bhardhwaj JR. (**2009**) An adaptive drug delivery design using neural networks for effective treatment of infectious diseases: a simulation study. **Comput Methods Programs Biomed** 94, 207-22

1639. Gupta V, Mathur S, Solanke AU, Sharma MK, Kumar R, Vyas S, Khurana P, Khurana JP, Tyagi AK and Sharma AK. (**2009**) Genome analysis and genetic enhancement of tomato. **Critical Reviews in Biotechnology** 29, 152-81

1640. Singh V and Somvanshi P. (**2009**) Homology modeling of adenosine A2A receptor and molecular docking for exploration of appropriate potent antagonists for treatment of Parkinson's disease. **Current Aging Science** 2, 127-34

1641. Barh D, Kumar A, Chatterjee S and Liloglou T. (**2009**) Molecular features, markers, drug targets and prospective therapeutics in cardiac myxoma. **Current Cancer Drug Targets** 9, 705-716

1642. Ganjewala D, Kumar S and Luthra R. (**2009**) An account of cloned genes of Methyl-erythritol-4-phosphate pathway of isoprenoid biosynthesis in plants. **Current Drug Metabolism** 11 Suppl 1:i35-45

1643. Pandey RC, Datta D, Mukerjee R, Srinivasan A, Mahalingam S and Sawaya BE. (**2009**) HIV-1 Vpr: a closer look at the multifunctional protein from the structural perspective. **Current HIV Res** 7, 114-28

1644. Latha Prema K, Soni Ravinda, Khan Mahejibin, Marla Soma S and Goel Reeta. (**2009**) Exploration of CSP genes from temperate and glacier soils of the Indian Himalayas and *In silico* analysis of encoding proteins. **Current Microbiology** 58, 343-348

1645. Rajasekaran R and Rao S. (**2009**) Comparative binding analysis of monoclonal antibodies against native and mutant type in ErbB2 receptor: a theoretical modeling approach. **Current Pharmaceutical Biotechnology** 10, 701-8

1646. Ghosh D, Sinha S, Chatterjee A and Nandagopal K. (**2009**) A study of GluK1 kainate receptor polymorphisms in Down syndrome reveals allelic non-disjunction at 1173(C/T). **Disease Markers** 27, 45-54

1647. Keerthikumar S, Bhadra S, Kandasamy K, Raju R, Ramachandra YL, Bhattacharyya C, Imai K, Ohara O, Mohan S and Pandey A. (**2009**) Prediction of candidate primary immunodeficiency disease genes using a support vector machine learning approach. **DNA Research** 16, 345-351

1648. Roymondal U, Das S and Sahoo S. (**2009**) Predicting gene expression level from relative codon usage bias: an application to *Escherichia coli* genome. **DNA Research** 16, 13-30

1649. B-Rao C, Subramanian J and Sharma SD. (**2009**) Managing protein flexibility

in docking and its applications. **Drug Discovery Today** 14, 394-400

1650. Kelkar A and Deobagkar D. (**2009**) A novel method to assess the full genome methylation profile using monoclonal antibody combined with the high throughput based microarray approach. **Epigenetics** 4, 415-20

1651. Banerji A and Ghosh I. (**2009**) A new computational model to study mass inhomogeneity and hydrophobicity inhomogeneity in proteins. **European Biophysics Journal** 38, 577-87

1652. Chowdhury Paul, Schmid SS, Hartmann A and Tripathi AK. (**2009**) Diversity of 16S-rRNA and nifH genes derived from rhizosphere soil and roots of an endemic drought tolerant grass, Lasiurus sindicus. **European Journal of Soil Biology** 45, 114-122

1653. Sharma S, Singh G, Chavan HD and Dey CS. (**2009**) Proteomic analysis of wild type and arsenite-resistant *Leishmania donovani*. **Experimental Parasitology** 123, 369-76

1654. Chandra N. (**2009**) Computational Systems Approach for Drug Target Discovery. **Expert Opinion on Drug Discovery** 4, 1221-1236

1655. Somasundaram K, Nijaguna MB and Kumar DM. (**2009**) Serum proteomics of glioma: methods and applications. **Expert Review of Molecular Diagnostics** 9, 695-707

1656. Brahma A, Banerjee N and Bhattacharyya D. (**2009**) UDP-galactose 4-epimerase from Kluyveromyces fragilis--catalytic sites of the homodimeric enzyme are functional and regulated. **FEBS Journal** 276, 6725-6740

1657. Taviani E, Grim CJ, Chun J, Huq A and Colwell RR. (**2009**) Genomic analysis of a novel integrative conjugative element in *Vibrio cholerae*. **FEBS Letters** 583, 3630-6

1658. Kaur S, Mishra MN and Tripathi AK. (**2009**) Regulation of expression and biochemical characterization of a β-class carbonic anhydrase from the plant growth-promoting rhizobacterium, *Azospirillum brasilense* Sp7. **FEMS Microbiology Letters** 299, 149-158

1659. Parmar T, Gadkar-Sable S, Savardekar L, Katkam R, Dharma S, Meherji P, Puri CP and Sachdeva G. (**2009**) Protein profiling of human endometrial tissues in the midsecretory and proliferative phases of the menstrual cycle. **Fertility and Sterility** 92, 1091-103

1660. Kumari S, Sabharwal VP, Kushwaha HR, Sopory SK, Singla-Pareek SL and Pareek A. (**2009**) Transcriptome map for seedling stage specific salinity stress response indicates a specific set of genes as candidate for saline tolerance in *Oryza sativa L.* **Functional & Integrative Genomics** 9, 109–123

1661. Ratna Karan, Sneh L Singla-Pareek and Ashwani Pareek. (**2009**) Histidine kinase and response regulator genes as they relate to salinity tolerance in rice. **Functional & Integrative Genomics** 9, 411-417

1662. Kahali B, Ahmad S and Ghosh TC. (**2009**) Exploring the evolutionary rate differences of party hub and date hub proteins in *Saccharomyces cerevisiae* protein-protein interaction network. **Gene** 429, 18-22

1663. Manna B, Bhattacharya T, Kahali B and Ghosh TC. (**2009**) Evolutionary constraints on hub and non-hub proteins in human protein interaction network:

insight from protein connectivity and intrinsic disorder. **Gene** 434, 50-55

1664. Podder S, Mukhopadhyay P, Ghosh TC. (**2009**) Multifunctionality dominantly determines the rate of human housekeeping and tissue specific interacting protein evolution. **Gene** 439,11-6

1665. Singh A, Sahi C and Grover A. (**2009**) Chymotrypsin protease inhibitor gene family in rice: Genomic organization and evidence for the presence of a bidirectional promoter shared between two chymotrypsin protease inhibitor genes. **Gene** 428, 9-19

1666. Sen B, Singh AS, Sinha S, Chatterjee A, Ahmed S, Ghosh S and Usha R. (**2009**) Family-based studies indicate association of Engrailed 2 gene with autism in Indian population. **Genes, Brain and Behavior** 9, 248-255

1667. Arunkumar KP, Mita K and Nagaraju J. (**2009**) The silkworm Z chromosome is enriched in testis-specific genes. **Genetics** 182, 493-501

1668. Alam M, Mahajan M, Raziuddin M, Singh TP and Yadav S. (**2009**) Proteomics-based approach for identification and purification of human phosphate binding apolipoprotein from amniotic fluid. **Genetics and Molecular Research** 8, 929-937

1669. Chavali S, Ghosh S and Bharadwaj D. (**2009**) Hemophilia B is a quasi-quantitative condition with certain mutations showing phenotypic plasticity. **Genomics** 94, 433-7

1670. Mitra A, Angamuthu K, Jayashree HV and Nagaraja V. (**2009**) Occurrence, divergence and evolution of intrinsic terminators across eubacteria. **Genomics** 94, 110 -116

1671. Danishuddin M and Khan AU. (**2009**) Phylogenetic analysis of Neuraminidase gene of H5N1 strains prevalent in chickens during 2006 bird flu outbreak in two regions of Maharashtra (India). **Genomics Proteomics and Bioinformatics** 7, 57-61

1672. Katiyar A, Lenka SK, Lakshmi K, Chinnusamy V and Bansal KC. (**2009**) *In silico* characterization and homology modeling of thylakoid-bound ascorbate peroxidase from a drought tolerant wheat cultivar. **Genomics Proteomics Bioinformatics** 7, 185-93

1673. Danishuddin M and Khan AU. (**2009**) Phylogenetic analysis of the neuraminidase gene reveals that the H5N1 strains prevalent in chickens during 2006 bird flu outbreaks in two regions of Maharashtra, India are genetically different. **Genomics, Proteomics & Bioinformatics** 7, 57-61

1674. Ghoshal A, Mukhopadhyay S, Demine R, Forgber M, Jarmalavicius S, Saha B, Sundar S, Walden P and Mandal C. (**2009**) Detection and characterization of a sialoglycosylated bacterial ABC-type phosphate transporter protein from patients with visceral leishmaniasis. **Glycoconjugate Journal** 26, 675-89

1675. Roy P, Bhattacharya G, Banerjee D, Chandra S, Ghosh M, Choudhuri U, Das M and Dasgupta UB. (**2009**) Hb Sallanches [alpha104(G11)Cys-->Tyr, TGC>TAC] occurs frequently on the Indian subcontinent. **Hemoglobin** 33, 486-91

1676. Faridi RM, Das V, Tripthi G, Talwar S, Parveen F and Agrawal S. (**2009**) Influence of activating and inhibitory killer immunoglobulin-like receptors on predisposition to recurrent miscarriages. **Human Reproduction** 24, 1758-64

1677. Gupta R, Mittal A, Singh K, Narang V and Roy S. (**2009**) Time-series approach to protein classification problem: WaVe-GPCR: wavelet variant feature for identification and classification of GPCR. **IEEE Eng Med Biol Mag** 28, 32-37

1678. Gopakumar G and Nair Achuthsankar S. (**2009**) Fractality of numeric and symbolic sequences. **IEEE Potentials** 29, 36-39

1679. Ray SS, Bandyopadhyay S and Pal SK. (**2009**) Combining multisource information through functional-annotation-based weighting: gene function prediction in yeast. **IEEE Trans Biomed Eng** 56, 229-36

1680. Maulik U, Mukhopadhyay A and Bandyopadhyay S. (**2009**) Finding multiple coherent biclusters in microarray data using variable string length multiobjective genetic algorithm. **IEEE Trans Inf Technol Biomed** 13, 969-75

1681. Ahmed F, Kumar M and Raghava GPS. (**2009**) Prediction of polyadenylation signals in human DNA sequences using nucleotide frequencies. ***In silico*** **Biology** 9, 135-48

1682. Barh D and Kumar A. (**2009**) *In silico* Identification of candidate drug and vaccine targets from various pathways in *Neisseria* gonorrhoeae. ***In silico*** **Biology** 9, 225-231

1683. Garg P, Sharma V, Chaudhari P and Roy N. (**2009**) SubCellProt: predicting protein subcellular localization using machine learning approaches. ***In silico*** **Biology** 9, 35-44

1684. Pralay Mitra, Riddhiman Dhar and Debnath Pal. (**2009**) Interface of apoptotic protein complexes has distinct properties. ***In silico*** **Biology** 9, 365-378

1685. Rao A, Yeleswarapu SJ, Raghavendra G, Srinivasan R and Bulusu G. (**2009**) PlasmoID: A *P. falciparum* protein information discovery tool. ***In silico*** **Biology** 9, 195-202

1686. Roy A, Srinivasan N and Gowri VS. (**2009**) Molecular and structural basis of drift in the functions of closely-related homologous enzyme domains: implications for function annotation based on homology searches and structural genomics. ***In silico*** **Biology** 9, S41-55

1687. Sathesh-Kumar S, Sridhar J and Rafi ZA. (**2009**) sRNAbase: A web resource for small RNAs in Enterobacteriaceae. ***In silico*** **Biology** 9, 0035

1688. Singh TR and Pardasani KR. (**2009**) *In silico* analysis of evolutionary patterns in restriction endonucleases. ***In silico*** **Biology** 9, 45-53

1689. Balakrishnan M, Jeyakumar S, Srivastava RC, Sujatha T and Mayank Pokhriyal. (**2009**) Database design for animal genetic resources of Andaman and Nicobar Islands. **Indian journal of animal Sciences** 79, 100-105

1690. Chauhan P and Shakya M. (**2009**) Modeling signaling pathways leading to wrinkle formation: identification of theskin aging target. **Indian Journal of Dermatology, Venereology and Leprology** 75, 463-8

1691. Awasthi G, Dash AP and Das A. (**2009**) Characterization & evolutionary analysis of human CD36 gene. **Indian Journal of Medical Research** 129, 534-41

1692. Mohanty S, Saklani S and Mahajan M. (**2009**) *In silico* characterization of genetic homology in nuclear-encoded apicoplast-targeted genes between *Plasmodium falciparum* & *P. vivax*.

Indian Journal of Medical Research 129, 520-4

1693. Nagaraj VA, Arumugam R, Chandra NR, Prasad D, Rangarajan PN and Padmanaban G. (**2009**) Localisation of *Plasmodium falciparum* uroporphyrinogen III decarboxylase of the heme-biosynthetic pathway in the apicoplast and characterisation of its catalytic properties. **International Journal for Parasitology** 39, 559-68

1694. Shanker A, Sharma V and Daniell H. (**2009**) A novel index to identify unbiased conservation between proteomes. **International Journal of Integrative Biology** 7, 32-38

1695. Gupta G, Vishveshwara S and Surolia A. (**2009**) Stability of dimeric interface in banana lectin: Insight from molecular dynamics simulations. **IUBMB Life** 61, 252-260

1696. Dwevedi A and Kayastha AM. (**2009**) A β-Galactosidase from Pea (Pisum sativum L.) seeds (PsBGAL): Purification, stabilization, catalytic energetics, conformational heterogeneity and its significance. **Journal of Agricultural and Food Chemistry** 57, 7086-7096

1697. Baruah C and Sharma DK. (**2009**) Sequence analysis and structure prediction of two type III secretion system proteins: hrpH and hrpY of *Ralstonia solanacearum*. **Journal of Applied Bioscience & Biotechnology** 5, 19-24

1698. Maiti B, Raghunath P and Karunasagar I. (**2009**) Cloning and expression of an outer membrane protein OmpW of *Aeromonas hydrophila* and study of its distribution in Aeromonas spp. **Journal of Applied Microbiology** 107, 1157-67

1699. Thakur A and Thakur M. (**2009**) Chem-bioinformatics: QSTR studies on TIBO derivatives. **Journal of Biochemical and Molecular Toxicology** 23, 166-71

1700. Riju A, Sithara K, Suja S Nair, Shamina A and Santhosh J Eapen. (**2009**) *In silico* Screening Major Spice Phytochemicals for their Novel Biological Activity and Pharmacological Fitness. **Journal of Bioequivalence & Bioavailability** 1, 063-073

1701. Chandrasekar A, Riju A, Sithara K, Anoop S, Santhosh J Eapen. (**2009**) Single *nucleotide* polymorphisms (SNPs) and indels in expressed sequence tag libraries of turmeric (*Curcuma longa* L.). **Journal of Bioinformatics** 10, 224-232

1702. Mukhopadhyay A, Maulik U and Bandyopadhyay S. (**2009**) A novel coherence measure for discovering scaling biclusters from gene expression data. **Journal of Bioinformatics and Computational Biology** 7, 853-68

1703. Yadav G, Prasad RL, Jha BK, Rai V, Bhakuni V and Datta K. (**2009**) Evidence for inhibitory interaction of hyaluronan-binding protein 1 (HABP1/p32/gC1qR) with *Streptococcus* pneumoniae hyaluronidase. **Journal of Biological Chemistry** 284, 3897-905

1704. De RK and Ghosh A. (**2009**) Interval based fuzzy systems for identification of important genes from microarray gene expression data: Application to carcinogenic development. **Journal of Biomedical Informatics** 42, 1022-8

1705. Doss CG and Sethumadhavan R. (**2009**) Investigation on the role of nsSNPs in HNPCC genes - a bioinformatics approach. **Journal of Biomedical Science** 16, 42

1706. Dubey S, Idicula-Thomas S, Anwaruddin M, Saravanan C, Varma RR and Maitra A. (**2009**) A novel 9-bp insertion detected in steroid 21-hydroxylase gene (CYP21A2): prediction of its structural and functional implications by computational methods. **Journal of Biomedical Science** 16, 3

1707. Singh R, Saxena A and Singh H. (**2009**) Identification of group specific motifs in beta-lactamase family of proteins. **Journal of Biomedical Science** 16, 109

1708. Ayyasamy Mahalakshmi and Rajaiah Shenbagarathai. (**2009**) *In silico* structural analysis of parasporin 2 protein sequences of non – toxic *Bacillus thuringiensis*. **Journal of Biomedical Science and Engineering** 3, 415-21

1709. Santosh PS, Arora N, Sarma P, Pal-Bhadra M and Bhadra U. (**2009**) Interaction map and selection of microRNA targets in Parkinson's disease-related genes. **Journal of Biomedicine and Biotechnology** 2009, 363145

1710. Sujatha K, Mahalakshmi A, Solaiman Daniel K and Shenbagarathai R. (**2009**) Sequence analysis structure prediction and functional validation of PhaC1 / PhaC2 genes of Pseudomonas sp. LDC-25 and its importance in PHA accumulation. **Journal of Biomolecular modeling structure and Dynamics** 26, 771-779

1711. Achary MS and Nagarajaram HA. (**2009**) Effects of Disease Causing Mutations on the Essential Motions in Proteins. **Journal of Biomolecular Structure and Dynamics** 26, 609-624

1712. Das S, Mukherjee R, Sahoo S, Thakkar R and Chakrabarti J. (**2009**) Structural clones of UAG decoding RNA. **Journal of Biomolecular Structure and Dynamics** 27, 381-390

1713. Marathe A and Bansal M. (**2009**) Structural Polymorphism of the Nucleosomal DNA and Implications for Protein Binding. **Journal of Biomolecular Structure and Dynamics** 26, 925-926

1714. Mishra S. (**2009**) Function prediction of Rv0079, a hypothetical *Mycobacterium tuberculosis* DosR regulon protein. **Journal of Biomolecular Structure and Dynamics** 27, 283-92

1715. Mishra S and Sinha S. (**2009**) Immunoinformatics and modeling perspective of T cell epitope-based cancer immunotherapy: a holistic picture. **Journal of Biomolecular Structure and Dynamics** 27(3):293-306

1716. Parthiban M, Rajasekaran MB, Ramakumar S and Shanmughavel P. (**2009**) Molecular modeling of human pentameric alpha (7) neuronal nicotinic acetylcholine receptor and its interaction with its agonist and competitive antagonist. **Journal of Biomolecular Structure and Dynamics** 26, 535-47

1717. Sharma P, Sharma S, Mitra A and Singh H. (**2009**) A theoretical study on interaction of small gold clusters Au(n) (n = 4, 6, 8) with xDNA base pairs. **Journal of Biomolecular Structure and Dynamics** 27, 65-82

1718. Vinekar R and Ghosh I. (**2009**) Determination of phosphorylation sites for NADP-specific isocitrate dehydrogenase from *Mycobacterium tuberculosis*. **Journal of Biomolecular Structure and Dynamics** 26, 741-54

1719. Kumar KK, Chowdary MV, Mathew S, Rao L, Krishna CM and Kurien J. (**2009**) Protein profile study of breast-tissue

homogenates by HPLC-LIF. **Journal of Biophotonics** 2, 313-21

1720. Das S, Yennamalli RM, Vishnoi A, Gupta P and Bhattacharya A. (**2009**) Single-*nucleotide* variations associated with *Mycobacterium tuberculosis* KwaZulu-Natal strains. **Journal of Biosciences** 34, 397-404

1721. Sarani R, Udayaprakash NA, Subashini R, Mridula P, Yamane T and Sekar K. (**2009**) Large cryptic internal sequence repeats in protein structures from Homo sapiens. **Journal of Biosciences** 34, 103-12

1722. Balakrishnan M and Srivastava RC. (**2009**) Protein structural Modelling of Acetylgutamate Kinase from *Leptospira interrogans* and docking studies of N-Acetyl-L-Glutamate, IUP. **Journal of Biotechnology** 3, 7-16

1723. Sabitha K, Vardhan VishnuReddy M and Jamil Kaiser. (**2009**) Mutations in XRCC1 gene altering the genetic risks of head and neck cancer patients International. **Journal of cancer research** 5, 58-68

1724. Vijayan RS, Bera I, Prabu M, Saha S and Ghoshal N. (**2009**) Combinatorial library enumeration and lead hopping using comparative interaction fingerprint analysis and classical 2D QSAR methods for seeking novel GABA(A) alpha(3) modulators. **Journal of Chemical Information and Modeling** 49, 2498-511

1725. Vijayan RS, Prabu M, Mascarenhas NM and Ghoshal N. (**2009**) Hybrid structure-based virtual screening protocol for the identification of novel BACE1 inhibitors. **Journal of Chemical Information and Modeling** 49, 647-57

1726. Viji SN, Prasad PA and Gautham N. (**2009**) Protein-ligand docking using mutually orthogonal Latin squares (MOLSDOCK). **Journal of Chemical Information and Modeling** 49, 2687-94

1727. Ramya L and Gautham N. (**2009**) Effects of Hydration on the Conformational Energy Landscape of the Pentapeptide Met-Enkephalin. **Journal of Chemical Theory and Computation** 5, 2180–2190

1728. Suresh B. Mudunuri, Allam Appa Rao, S Pallamsetty, Priyatosh Mishra and Nagarajaram HA. (**2009**) VMD: Viral Microsatellite Database - A Comprehensive Resource for All Viral Microsatellite. **Journal of Computer Science and Systems Biology** 22, 283

1729. Afroz Alam M and Naik PK. (**2009**) Molecular modelling evaluation of the cytotoxic activity of podophyllotoxin analogues. **Journal of Computer-Aided Molecular Design** 23, 209-25

1730. Guharoy M and Chakrabarti P. (**2009**) Empirical estimation of the energetic contribution of individual interface residues in structures of protein-protein complexes. **Journal of Computer-Aided Molecular Design** 23, 645-654

1731. Yennamalli R, Subbarao N, Kampmann T, McGeary RP, Young PR and Kobe B. (**2009**) Identification of novel target sites and an inhibitor of the dengue virus E protein. **Journal of Computer-Aided Molecular Design** 23, 333-41

1732. Riju A, Rajesh MK, Sherin PTPF, Chandrasekar A, Apsara SE and Arunachalam V. (**2009**) Mining of expressed sequence tag libraries of cocao for microsatellite markers using five computational tools. **Journal of Genetics** 88, 217-225

1733. Riju Aikkal, Rajesh MK, Sherin PTPF, Chandrasekar A, Apshara Elain S

and Arunachalam Vadivel . (**2009**) Mining expressed sequence tag libraries of cacao for microsatellite markers using five computational tools. **Journal of Genetics** 88, 217-225

1734. Bankar AV, Kumar AR and Zinjarde SS. (**2009**) Removal of chromium (VI) ions from aqueous solution by adsorption onto two marine isolates of *Yarrowia lipolytica*. **Journal of Hazardous Materials** 170, 487-94

1735. Pasha Abjal Shaik and Kaiser Jamilxz. (**2009**) Individual susceptibility and genotoxicity in workers exposed to hazardous materials like lead. **Journal of Hazardous Materials** 168, 918-24

1736. Gadgil S. (**2009**) Watson-Crick pairing, the Heisenberg group and Milnor invariants. **Journal of Mathematical Biology** 59, 123-42

1737. Gupta RK, Thakur TS, Desiraju GR and Tyagi JS. (**2009**) Structure-based design of DevR inhibitor active against nonreplicating *Mycobacterium tuberculosis*. **Journal of Medicinal Chemistry** 52, 6324-6334

1738. Maiti B, Raghunath P, Karunasagar I and Karunasagar I. (**2009**) Typing of clinical and environmental strains of Aeromonas 1 spp. using two PCR based methods and whole cell protein analysis. **Journal of Microbiology Methods** 78, 312-318

1739. Dave VP, Kaul D, Sharma Y and Bhattacharya R. (**2009**) Functional genomics of blood cellular LXR-alpha gene in human coronary heart disease. **Journal of Molecular and Cellular Cardiology** 46, 536-44

1740. Biswas KH, Shenoy AR, Dutta A and Visweswariah SS. (**2009**) The evolution of guanylyl cyclases as multidomain proteins: conserved features of kinase-cyclase domain fusions. **Journal of Molecular Evolution** 68, 587-602

1741. Alam MA and Naik PK. (**2009**) Applying linear interaction energy method for binding affinity calculations of podophyllotoxin analogues with tubulin using continuum solvent model and prediction of cytotoxic activity. **Journal of Molecular Graphics and Modelling** 27, 930-43

1742. Das M and Basu G. (**2009**) Coulomb energies of protein-protein complexes with monopole-free charge distributions. **Journal of Molecular Graphics and Modelling** 27, 846-51

1743. Khan MA, Kesharwani MK, Bandyopadhyay T and Ganguly B. (**2009**) Solvolysis of chemical warfare agent VX is more efficient with hydroxylamine anion: a computational study. **Journal of Molecular Graphics and Modelling** 28, 177-82

1744. Kundu S and Roy D. (**2009**) Comparative structural studies of psychrophilic and mesophilic protein homologues by molecular dynamics simulation. **Journal of Molecular Graphics and Modelling** 27, 871-80

1745. Nataraj Sekhar P, Ananda Reddy L, Marc De Maeyer, Praveen Kumar K, Srinivasulu YS, Sunitha MSL, Sphoorthi ISN, Jayashree GPL, Srikanth V, Maruthi Rao A, Kothekar VS and Kavi Kishor PB. (**2009**) Genome wide analysis and comparative docking studies of new diaryl furan derivatives against human cyclooxygenase-2, lipoxygenase, thromboxane synthase and prostacyclin synthase enzymes involved in inflammatory pathway. **Journal of Molecular Graphics and Modelling** 28, 313-329

1746. Sharma M, Khanna S, Bulusu G and Mitra A. (**2009**) Comparative modeling

of thioredoxin glutathione reductase from *Schistosoma mansoni*: a multifunctional target for antischistosomal therapy. **Journal of Molecular Graphics and Modelling** 27, 665-75

1747. Singh V and Somvanshi P. (**2009**) Computational modeling analyses of RNA secondary structures and phylogenetic inference of evolutionary conserved 5S rRNA in the prokaryotes. **Journal of Molecular Graphics and Modelling** 27, 770-6

1748. Dhananjeyan KJ, Sivaperumal R, Paramasivan R, Thenmozhi V and Tyagi BK. (**2009**) *In-silico* homology modeling of three isoforms of insect defensins from the dengue vector mosquito, Aedes aegypti (Linn., 1762). **Journal of Molecular Modeling** 15, 507-14

1749. Rao Nishi K, Singh Sanjeev K and Yadav Arpita. (**2009**) An *Ab initio* quantum mechanical drug designing procedure: Applications to design of balanced dual ACE/NEP inhibitors. **Journal of Molecular modeling** 5, 417

1750. Sharma P, Sharma S, Chawla M and Mitra A. (**2009**) Modeling the noncovalent interactions at the metabolite binding site in purine riboswitches. **Journal of Molecular Modeling** 15, 633-49

1751. Sharma S, Sharma P, Singh H and Balint-Kurti GG. (**2009**) Design of laser pulses for selective vibrational excitation of the N6-H bond of adenine and adenine-thymine base pair using optimal control theory. **Journal of Molecular Modeling** 15, 623-31

1752. Natara Pagadala NS, Arha Manish, Reddy PS, Kumar Ranadheer, Sirisha VL, Prashant S, Reddy K J, Khan Bashir, Rawal SK and Kavi Kishor PB. (**2009**) Phylogenetic analysis, homology modeling, molecular dynamics and docking studies of caffeoyl–CoA-O-methyl transferase (CCoAOMT 1 and 2) isoforms isolated from subabul (*Leucaena leucocephala*). **Journal of Molecular Modelling** 15, 203-221

1753. Suresh P and Pitchumani K. (**2009**) Novel photohydration of transstilbenes and trans-anethole inside cyclodextrin nanocavity in aqueous medium. **Journal of Photochemistry and Photobiology A** 206, 40-45

1754. Jagadeesan Premanandh, Balakrishnan Priya, Dharmar Prabaharan and Lakshmanan Uma. (2009) Genetic heterogeneity of the marine cyanobacterium Leptolyngbya valderiana (Pseudanabaenaceae) evidenced by RAPD molecular markers and 16S rDNA sequence data. **Journal of Plankton** Research 31, 1141-1150

1755. Chaerkady R, Kerr CL, Marimuthu A, Kelkar DS, Kashyap MK, Gucek M, Gearhart JD and Pandey A. (**2009**) Temporal analysis of neural differentiation using quantitative proteomics. **Journal of Proteome Research** 8, 1315-1326

1756. Rao PV, Reddy AP, Lu X, Dasari S, Krishnaprasad A, Biggs E, Roberts CT and Nagalla SR. (**2009**) Proteomic identification of salivary biomarkers of type-2 diabetes. **Journal of Proteome Research** 8, 239-45

1757. Sharma V, Singh BP, Gaur SN, Pasha S and Arora N. (**2009**) Bioinformatics and immunologic investigation on B and T cell epitopes of Cur l 3, a major allergen of *Curvularia lunata*. **Journal of Proteome Research** 8, 2650-5

1758. Daisy P, Sasikala R and Ambika A. (**2009**) Analysis of Binding Properties of Phosphoinositide 3-kinase Through *In silico* Molecular Docking. **Journal of**

Proteomics & Bioinformatics 2, 274-284

1759. Karthikeyan Ramaswamy, Mohamed Sadiq, Sridhar V and Nagasuma Chandra. (**2009**) Support Vector Machine Classifier for Predicting Drug Binding to P-glycoprotein. **Journal of Proteomics & Bioinformatics** 2, 193-201

1760. Murty U, Banerjee A and Arora N. (**2009**) An *In silico* Approach to Cluster CAM Kinase Protein Sequences. **Journal of Proteomics & Bioinformatics** 02, 97 – 107

1761. Radhakrishnan EK, Sivakumar KC and Soniya EV. (**2009**) Molecular Characterization of Novel form of Type III Polyketide Synthase from Zingiber Officinale Rosc. and its Analysis using Bioinformatics Method. **Journal of Proteomics & Bioinformatics** 2, 310-315

1762. Pal A, Bhattacharyya R, Dasgupta M, Mandal S and Chakrabarti P. (**2009**) IntGeom: a server for the calculation of the interaction geometry between planar groups in proteins. **Journal of Proteomics Bioinformatics** 2, 60-63

1763. Banerjee A, Arora N and Murty U. (**2009**) Structural model of the *Plasmodium falciparum* Thioredoxin reductase:a novel target for antimalarial drugs. **Journal of vector borne diseases** 46, 171-183

1764. Khushiramani R, Girisha SK, Karunasagar I and Karunasagar I. (**2009**) Evaluation of a digoxigenin-labelled probe for detection of Aeromonas spp. **Letters in Applied Microbiology** 48, 383-385

1765. Jayakanthan M, Wadhwa G, Madhan Mohan T, Arul L, Balasubramanian P and Sundar D. (**2009**) Computer aided drug design for cancer-causing H-Ras P21 Mutant Protein. **Letters in Drug Design and Discovery** 6, 14-20

1766. Gangwar D, Kalita MK, Gupta D, Chauhan VS and Mohmmed A. (**2009**) A systematic classification of *Plasmodium falciparum* P-loop NTPases: structural and functional correlation. **Malaria Journal** 8, 69

1767. Gill J, Chitnis CE and Sharma A. (**2009**) Structural insights into chondroitin sulphate A binding Duffy-binding-like domains from *Plasmodium falciparum*: implications for intervention strategies against placental malaria. **Malaria Journal** 8, 67

1768. Balaji S and Chempakam B. (**2009**) Pharmacokinetics Prediction and Drugability Assessment of Diphenylheptanoids from Turmeric (*Curcuma longa* L). **Medicinal Chemistry,** 5, 130-138

1769. Jha PN and Kumar Ashok. (**2009**) Characterization of novel plant growth promoting endophytic bacterium Achromobacter xylosoxidans from wheat plant. **Microbial Ecology** 58, 179-188

1770. Singh M, Mukherjee P, Narayanasamy K, Arora R, Sen SD, Gupta S, Natarajan K and Malhotra P. (**2009**) Proteome analysis of *Plasmodium falciparum* extracellular secretory antigens at asexual blood stages reveals a cohort of proteins with possible roles in immune modulation and signaling. **Molecular & Cellular Proteomics** 8, 2102-18

1771. Sharma K, Mishra AK and Misra RS. (**2009**) Identification and characterization of differentially expressed genes in the resistance reaction in taro infected with *Phytophthora colocasiae*. **Molecular**

Biology and Evolution Report 36, 1291-7

1772. Anurag M and Dash D. (**2009**) Unraveling the potential of intrinsically disordered proteins as drug targets: application to *Mycobacterium tuberculosis*. **Molecular Biosystems** 5, 1752-7

1773. Raman K, Vashisht R and Chandra NR. (**2009**) Strategies for efficient disruption of metabolism in *Mycobacterium tuberculosis* from network analysis. **Molecular Biosystems** 5, 1740-1751

1774. Tyagi N, Krishnadev O and Srinivasan N. (**2009**) Prediction of protein-protein interactions between *Helicobacter pylori* and a human host. **Molecular Biosystems** 5, 1630-5

1775. Vani J, Chatterjee J, Shaila MS, Nayak R and Chandra NR. (**2009**) Structural basis for the function of anti-idiotypic antibody in immune memory. **Molecular Immunology** 46, 1250-1255

1776. Das B, Pal RR, Bag S and Bhadra RK. (**2009**) Stringent response in *Vibrio cholerae*: genetic analysis of spoT gene function and identification of a novel (p)ppGpp synthetase gene. **Molecular Microbiology** 72, 380-398

1777. Reich D, Thangaraj K, Patterson N, Price AL and Singh L. (**2009**) Reconstructing Indian population history. **Nature** 461, 489-94

1778. Arora P, Goyal A, Natarajan V, Rajakumara E, Verma P, Gupta R, Malikmohamed Y, Trivedi O, Mohanty D, Tyagi A, Sankaranarayanan R and Gokhale RS. (**2009**) Mechanistic and functional insights into fatty acid activation in *Mycobacterium tuberculosis*. **Nature Chemical Biology** 5, 166-73

1779. Guhathakurta S, Singh AS, Ghosh S, Sinha S, Chatterjee A, and Usha R. (**2009**) Analysis of HTR2A gene: Association study with autism spectrum disorder in the Indian population and investigation of the gene expression in peripheral blood leucocytes. **Neurochemistry International** 55, 754-759

1780. Luthra PM, Prakash A, Barodia SK, Kumari R, Mishra CB and Kumar JBS. (**2009**) *In silico* study of naphtha [1, 2-d] thiazol-2-amine with adenosine A2A receptor and its role in antagonism of haloperidol-induced motor impairments in mice. **Neuroscience Letters** 463, 215-218

1781. George Priya Doss C and Rao S. (**2009**) Impact of single *nucleotide* polymorphisms in HBB gene causing haemoglobinopathies: *In silico* analysis. **New Biotechnology** 25, 214-219

1782. Ghosh Z, Mallick B and Chakrabarti J. (**2009**) Cellular versus viral microRNAs in host-virus interaction. **Nucleic Acids Research** 37, 1035-48

1783. Kandasamy K, Keerthikumar S, Goel R, Mathivanan S, Patankar N, Shafreen B, Renuse S, Pawar H, Ramachandra YL, Acharya PK, Ranganathan P, Chaerkady R, Keshava Prasad TS and Pandey A. (**2009**) Human Proteinpedia: a unified discovery resource for proteomics research. **Nucleic Acids Research** 37, D773-81

1784. Keerthikumar S, Raju R, Kandasamy K, Hijikata A, Ramabadran S, Balakrishnan L, Ahmed M, Rani S, Selvan LD, Somanathan DS, Ray S, Bhattacharjee M, Gollapudi S, Ramachandra YL, Bhadra S, Bhattacharyya C, Imai K, Nonoyama S, Kanegane H, Miyawaki T, Pandey A, Ohara O, Mohan S. (**2009**) RAPID: Resource of Asian Primary

Immunodeficiency Diseases. **Nucleic Acids Research** 37, D863-7

1785. Keshava Prasad TS Goel R, Kandasamy K, Keerthikumar S, Kumar S, Mathivanan S, Telikicherla D, Raju R, Shafreen B, Venugopal A, Balakrishnan L, Marimuthu A, Banerjee S, Somanathan DS, Sebastian A, Rani S, Ray S, Harrys Kishore CJ, Kanth S, Ahmed M, Kashyap MK, Mohmood R, Ramachandra YL, Krishna V, Rahiman BA, Mohan S, Ranganathan P, Ramabadran S, Chaerkady R and Pandey A. (**2009**) Human Protein Reference Database--2009 update. **Nucleic Acids Research** 37, D767-72

1786. Sharma D, Mohanty D and Surolia A. (**2009**) RegAnalyst: a web interface for the analysis of regulatory motifs, networks and pathways. **Nucleic Acids Research** 37, W193-201

1787. Shridhar S, Chattopadhyay D and Yadav G. (**2009**) PLecDom: a program for identification and analysis of plant lectin domains. **Nucleic Acids Research** 37, W452-8

1788. Sonavane S and Chakrabarti P. (**2009**) Cavities in protein-DNA and protein-RNA interfaces. **Nucleic Acids Research** 37, 4613-4620

1789. Verma A, Yadav VK, Basundra R, Kumar A and Chowdhury S. (**2009**) Evidence of genome-wide G4 DNA-mediated gene expression in human cancer cells. **Nucleic Acids Research** 37, 4194-204

1790. Sridhar J, Sathesh Kumar S and Rafi ZA. (**2009**) Small RNA identification in Enteroabcteriaceae using synteny and genomic backbone retention II. **OMICS** 13, 261-284

1791. Goswami LM, Prasad PK, Tandon V and Chatterjee A. (**2009**) Molecular Characterization of Gastrodiscoides hominis (Platyhelminthes: Trematoda: Digenea) inferred from ITS rDNA sequence analysis. **Parasitology Research** 104, 1485-1490

1792. Mishra Y, Chaurasia N and Rai LC. (**2009**) Heat pretreatment alleviates UV-B toxicity in the cyanobacterium *Anabaena doliolum*: A proteomic analysis of cross tolerance. **Photochemistry and Photobiology** 85, 824-33

1793. Agrawal A, Sinha A, Ahmad T, Aich J, Singh P, Sharma A and Ghosh B. (**2009**) Maladaptation of critical cellular functions in asthma: bioinformatic analysis. **Physiol Genomics** 40, 1-7

1794. Nayak Spurthi N, Jayashree Balaji, Upadhyaya Hari D, Hash C Tom, Kishor PB Kavi, Debasis Chattopadhyay, Lina María Rodriquez, Matthew W Blair, Michael Baum, Kenneth McNally, Dominique This, Hoisington David A and Varshney Rajeev K. (**2009**) Isolation and sequence analysis of DREB2A homologues in three cereals and two legume species. **Plant Science** 177, 460-467

1795. Sengupta S and Majumder AL. (**2009**) Insight into the salt tolerance factors of a wild halophytic rice, *Porteresia coarctata*: a physiological and proteomic approach. **Planta** 229, 911-29

1796. Kapoor K, Rehan M, Kaushiki A, Pasrija R, Lynn AM and Prasad R. (**2009**) Rational mutational analysis of a multidrug MFS transporter CaMdr1p of *Candida albicans* by employing a membrane environment based computational approach. **PLoS Computational Biology** 5, e1000624

1797. Yadav G, Gokhale RS and Mohanty D. (**2009**) Towards Prediction of Metabolic Products of Polyketide Synthases: An *In*

silico Analysis. **PLoS Computational Biology** 5, e1000351

1798. Agarwal G, Rajavel M, Gopal B and Srinivasan N. (**2009**) Structure-based phylogeny as a diagnostic for functional characterization of proteins with a cupin fold. **PLoS One** 4, e5736

1799. Ahmed N. (**2009**) A flood of microbial genomes do we need more? **PLoS One** 4, e5831

1800. Banerji A and Ghosh I. (**2009**) Revisiting the myths of protein interior: studying proteins with mass-fractal hydrophobicity-fractal and polarizability-fractal dimensions. **PLoS One** 4, e7361

1801. Guruharsha KG, Ruiz-Gomez M, Ranganath HA, Siddharthan R and Vijayraghavan K. (**2009**) The complex spatio-temporal regulation of the Drosophila myoblast attractant gene duf/kirre. **PLoS One** 4, e6960

1802. Kanagasabai V and Gautham N. (**2009**) An estimate of the numbers and density of low-energy structures (or decoys) in the conformational landscape of proteins. **PLoS One** 4(4): e5148

1803. Kelkar A, Thakur V, Ramaswamy R and Deobagkar D. (**2009**) Characterisation of inactivation domains and evolutionary strata in human X chromosome through Markov segmentation. **PLoS One** 4, e7885

1804. Mallick B, Ghosh Z and Chakrabarti J. (**2009**) MicroRNome analysis unravels the molecular basis of SARS infection in bronchoalveolar stem cells. **PLoS One** 4, e7837

1805. Mani P, Yadav VK, Das SK and Chowdhury S. (**2009**) Genome-wide analyses of recombination prone regions predict role of DNA structural motif in recombination. **PLoS One** 4, e4399

1806. Sandhya S, Rani SS, Pankaj B, Govind MK, Offmann B, Srinivasan N and Sowdhamini R. (**2009**) Length variations amongst protein domain superfamilies and consequences on structure and function. **PLoS One** 4, e4981

1807. Saraswathi R, Pait Chowdhury R, Williams SM, Ghatak P and Chatterji D. (**2009**) The mycobacterial MsDps2 protein is a nucleoid-forming DNA binding protein regulated by sigma factors sigma and sigma. **PLoS One** 4, e8017

1808. Sengupta U, Ukil S, Dimitrova N and Agrawal S. (**2009**) Expression-based network biology identifies alteration in key regulatory pathways of type 2 diabetes and associated risk/complications. **PLoS One** 4, e8100

1809. Sharma A, Kumar M, Aich J, Hariharan M, Brahmachari SK, Agrawal A and Ghosh B. (**2009**) Posttranscriptional regulation of interleukin-10 expression by hsa-miR-106a. **Proceedings of the National Academy of Sciences of the USA** 106, 5761-6

1810. Aparoy P, Chatterjee M, Guruprasad L and Reddanna P. (**2009**) Structure prediction of neuroendocrine convertase -2: a potential target in various cancers. **Protein and Peptide Letters** 16, 383-391

1811. Joshi RR, Hira U and Suri D. (**2009**) Gibbs sampling shows possibilities of B-cell epitope signatures. **Protein and Peptide Letters** 16, 1393-8

1812. Mohanty S and Srinivasan N. (**2009**) Identification of "missing" metabolic proteins of *Plasmodium falciparum*: a bioinformatics approach. **Protein and Peptide Letters** 16, 961-8

1813. Rajasekaran R and Sethumadhavan R. (**2009**) Exploring the structural stability of a potential antifungal peptide through computational analysis. **Protein and Peptide Letters** 16, 1386-92

1814. Lata S and Raghava GPS. (**2009**) Prediction and classification of chemokines and their receptors. **Protein Engineering, Design, and Selection** 22, 441-4

1815. Banerjee R, Chattopdhayaya S and Basu G. (**2009**) Conformational preferences of a short Aib/Ala-based water-soluble peptide as a function of temperature. **Proteins: Structure, Function and Bioinformatics** 76, 184-200

1816. Biswas S, Guharoy M and Chakrabarti P. (**2009**) Dissection, residue conservation, and structural classification of protein-DNA interfaces. **Proteins: Structure, Function and Bioinformatics** 74,643-654

1817. Sharma Alok, Sekar K and Vijayan M. (**2009**) Structure, dynamics, and interactions of jacalin. Insights from molecular dynamics simulations examined in conjunction with results of X- ray studies. **Proteins: Structure, Function and Bioinformatics** 77, 760-777

1818. Saveetha K, Karthiba L, Raveendran M, Saravanakumar D, Suresh S, Raguchander T, Balasubramani P and Samiyappan R. (**2009**) Understanding the molecular basis of plant growth promotional effect of *Pseudomonas fluorescens* on rice through protein profiling. **Proteome Science** 7, 47

1819. Kundal R and Raghava GPS. (**2009**) RSLpred: an integrative system for predicting subcellular localization of rice proteins combining compositional and evolutionary information. **Proteomics** 9, 2324-2342

1820. Maurya DK, Sundaram CS and Bhargava P. (**2009**) Proteome profile of the mature rat olfactory bulb. **Proteomics** 9, 2593-9

1821. Srivastava M, Singh H and Naik PK. (**2009**) Application of the linear interaction energy method for rational design of artemisinin analogues as haeme polymerisation inhibitors. **SAR and QSAR in Environmental Research** 20, 327-55

1822. Banerjee Amit Kumar, Arora Neelima and Murty Upadhyayula Suryanarayana. (**2009**) Clustering and Classification of Anopheline Spacer Sequences using Self Organizing Maps. **The Internet Journal of Genomics and Proteomics** 7 (1)

1823. Rathi B and Sarangi AN. (**2009**) Function assignment to influenza B virus proteins using Support Vector Machine: A clue for vaccine development. **The Internet Journal of Genomics and Proteomics** 4, 2

1824. Sarangi AN and Rathi BA. (**2009**) Support Vector Machine Approach for assigning novel function to HPV Proteins. **The Internet Journal of Infectious Diseases** 7, 2

1825. Shaik AP, Khan M and Jamil K. (**2009**) Phylogenetic analysis of ALAD and MGP genes related to lead toxicity. **Toxicology and Industrial Health** 25, 403-409

1826. Bhardwaj A, Bhartiya D, Kumar N, Open Source Drug Discovery Consortium and Scaria V. (**2009**) TBrowse: an integrative genomics map of *Mycobacterium tuberculosis*. **Tuberculosis (Edinb)** 89, 386-387

1827. Shaik Abjal Pasha, Jamil Kaiser and Das Prabhavathy. (**2009**) CYP1A1 polymorphisms and risk of prostate cancer: a meta-analysis. **Urology journal** 6, 78-86

1828. Nagarajan AG, Balasundaram SV, Janice J, Karnam G, Eswarappa SM and Chakravortty D. (**2009**) SopB of *Salmonella enterica* serovar Typhimurium is a potential DNA vaccine candidate in conjugation with live attenuated bacteria. **Vaccine** 27, 2804-2811

1829. Sohal JS, Sheoran N, Narayanasamy K, Brahmachari V, Singh S and Subodh S. (**2009**) Genomic analysis of local isolate of *Mycobacterium avium* subspecies paratuberculosis. **Veterinary Microbiology** 134, 375-382

1830. Das S, Laxminarayana SV, Chandra N, Ravi V and Desai A. (**2009**) Heat shock protein 70 on Neuro2a cells is a putative receptor for Japanese encephalitis virus. **Virology** 385, 47-57

1831. Kumar S, Ansari FA and Scaria V. (**2009**) Prediction of viral microRNA precursors based on human microRNA precursor sequence and structural features. **Virology Journal** 6, 129

1832. Borah BK, Johnson AM, Sai Gopal DV and Dasgupta I. (**2009**) Sequencing and computational analysis of complete genome sequences of Citrus yellow mosaic badna virus from acid lime and pummelo. **Virus Genes** 39, 137-40

2010

1833. Kurup K and Natarajan J. (**2010**) Analysis of disordered regions in Protein kinase subfamilies of Homo sapiens and Coenorhabditis elegans. **ACM Proceedings of International Symposium on Biocomputing, (ISB 2010)** http://doi.acm.org/10.1145/1722024.1722028

1834. Gupta Prabuddha, Haryadi Rajeswari, Muthu Arumugam, Mishra Saurabh, Bhagavat Raghu, Anand Praveen, Chandra Nagasuma, Srinivasan Ramanujam, Indi Shantinath and Ajitkumar Parthasarathi. (**2010**) *Mycobacterium tuberculosis* FtsZ requires at least one arginine residue at the C-terminal end for polymerisation in vitro. **Acta Biochimica et Biophysica Sinica** 42, 58-69

1835. Arumugham V, Riju A and Arunachalam V. (**2010**) Mining of expressed sequence tag (EST) libraries and core *nucleotide* sequence repeats (SSR) in Papaya. **Acta Horticulturae (ISHS)** 851, 197-200

1836. Singh OP, Nanda N, Dev V, Bali P, Sohail M, Mehrunnisa A, Adak T and Dash AP. (**2010**) Molecular evidence of misidentification of *Anopheles minimus* as Anopheles fluviatilis in Assam (India). **Acta Tropica** 113, 241-244

1837. Gromiha MM, Selvaraj S, Jayaram B and Fukui K. (**2010**) Identification and Analysis of Binding Site Residues in Protein Complexes: Energy Based Approach. **Advanced Intelligent Computing Theories and Applications** 6215, 626-633

1838. Mathew AJ, Raj NN, Sugappriya M and Priyadarshini SM. (**2010**) Modeling of ATP-Sensitive Inward Rectifier Potassium Channel 11 and Inhibition Mechanism of the Natural Ligand, Ellagic Acid, Using Molecular Docking. **Advances in Experimental Medicine and Biology** 680, 489-95

1839. Zinjarde SS and Ghosh M. (**2010**) Production of surface active compounds by biocatalyst technology. **Advances in**

Experimental Medicine and Biology 672:289-303

1840. Rajasekaran R and Sethumadhavn R. (**2010**) Exploring the cause of drug resistance by the detrimental missense mutations in KIT receptor: computational approach. **Amino Acids** 39, 651-60

1841. Verma R, Varshney GC and Raghava GPS. (**2010**) Prediction of mitochondrial proteins of malaria parasite using split amino acid composition and PSSM profile. **Amino Acids** 39, 101-10

1842. Shakil Shazi and Khan Asad U. (**2010**) Infected foot ulcers in male and female diabetic patients: a clinico-bioinformative study. **Annals of Clinical Microbiology and Antimicrobials** 9:2

1843. Rajasekaran R and Sethumadhavan R. (**2010**) *In silico* identification of significant detrimental missense mutations of EGFR and their effect with 4-anilinoquinazoline-based drugs. **Applied Biochemistry and Biotechnology** 160, 1723-33

1844. Shanthi V, Ramanathan K, Sethumadhavan R. (**2010**) Exploring the role of C-H....pi interactions on the structural stability of single chain "all-alpha" proteins. **Applied Biochemistry and Biotechnology** 160, 1473-83

1845. Saha P, Raychaudhuri SS, Chakraborty A and Sudarshan M. (**2010**) PIXE analysis of trace elements in relation to chlorophyll concentration in *Plantago ovata Forsk*. **Applied Radiation and Isotopes** 68, 444-9

1846. Banik Sukanta. (**2010**) Phylogenetic analysis of some microsatelite loci of *Plantago ovata Forsk*using MEGA-version 4 software. **Aquatic Resources** pp. 27-31

1847. Ghosh S, Kobayashi N, Nagashima S, Chawla-Sarkar M, Krishnan T, Ganesh B and Naik TN. (**2010**) Molecular characterization of the VP1, VP2, VP4, VP6, NSP1 and NSP2 genes of bovine group B rotaviruses: identification of a novel VP4 genotype. **Archives of Virology** 155, 159-67

1848. Cherian BS and Nair AS. (**2010**) Protein location prediction using atomic composition and global features of the amino acid sequence. **Biochemical & Biophysical Research Communications** 391, 1670-4

1849. Kumar N and Mohanty D. (**2010**) Identification of substrates for Ser/Thr kinases using residue-based statistical pair potentials. **Bioinformatics** 26, 189-97

1850. Mohammed MH, Ghosh TS, Singh NK and Mande SS. (**2010**) SPHINX - An algorithm for taxonomic binning of metagenomic sequences. **Bioinformatics** 27, 22-30

1851. Rangannan V and Bansal M. (**2010**) High-quality annotation of promoter regions for 913 bacterial genomes. **Bioinformatics** 26, 3043-50

1852. Srikantha A, Bopardikar AS, Kaipa KK, Venkataraman P, Lee K, Ahn T and Narayanan R. (**2010**) A fast algorithm for exact sequence search in biological sequences using polyphase decomposition. **Bioinformatics** 26, i414-9.

1853. Banerjee AK, Sunita M, Naveen M and Murty USN. (**2010**) Classification and clustering analysis of pyruvate dehydrogenase enzyme based on their physicochemical properties. **Bioinformation** 4, 456-62

1854. Barh D, Misra AN and Kumar A. (**2010**) A novel strategy of epitope design in *Neisseria* gonorrhoeae. **Bioinformation** 5, 77-85

1855. Basak S, Mukhopadhyay P, Gupta SK, and Ghosh TC. (**2010**) Genomic adaptation of prokaryotic organisms at high temperature. **Bioinformation** 4,352-356

1856. Dey Sanjay Kumar, Ganguli Sayak, Basu Protip, Roy Paushali and Datta Abhijit. (**2010**) Lysine richness in human snurps - possible sites for electrophilic attacks. **Bioinformation** 4, 409-411

1857. Dhar Priyanka, Ganguli Sayak and Datta Abhijit. (**2010**) Molecular modeling of DICER and identification of phosphorylation sites. **Bioinformation** 4,412-416

1858. Farmer R, Gautam B, Singh S, Yadav PK and Jain PA. (**2010**) Virtual screening of AmpC/β-lactamase as target for antimicrobial resistance in *Pseudomonas aeruginosa*. **Bioinformation** 4, 290-294

1859. Katara P, Sharma, N, Sharma S, Khatri I, Kaushik A, Kaushal L and Sharma V. (**2010**) Comparative microarray data analysis for the expression of genes in the pathway of glioma. **Bioinformation** 5, 31-34

1860. Kundu S and Roy D. (**2010**) Structural study of biologically significant ligands with major birch pollen allergen Betv1 by docking and molecular dynamics simulation. **Bioinformation** 4, 326-330

1861. Pitchai Daisy, Manikkam Rajalakshmi, Rajendran Sasikala R and Pitchai Gnanamani. (**2010**) Database on pharmacophore analysis of active principles from medicinal plants. **Bioinformation** 5, 43-45

1862. Ramalingam J, Arul L, Sathishkumar N, Vignesh D, Thiyagarajan K and Samiyappan R . (**2010**) TNAURice: Database on rice varieties released from Tamil Nadu Agricultural University. **Bioinformation** 5, 264- 265

1863. Salahuddin P and Khan AU. (**2010**) Structure-function studies on different structural domains of Nucleoprotein of H1N1 subtype. **Bioinformation** 5, 28-30

1864. Senthilkumar R, Sabarinathan R, Hameed BS, Banerjee N, Chidambarathanu N, Karthik R and Sekar K. (**2010**) FAIR: A server for internal sequence repeats. **Bioinformation** 4, 271-5

1865. Shakil S and Khan AU. (**2010**) Interaction of CTX-M-15 enzyme with cefotaxime: a molecular modelling and docking study. **Bioinformation** 4, 468-472

1866. Singh TR. (**2010**) WebFARM: web server for finite automated restriction mapping. **Bioinformation** 4, 341-343

1867. Tiwari A, Gupta S, Srivastava S, Srivastava R and Rawat AK. (**2010**) A ClpP protein model as tuberculosis target for screening marine compounds. **Bioinformation** 4, 405-8

1868. Vignesh D, Daniel P, Raja N, Balasubramanian P and Arul L. (**2010**) ExSer:A standalone tool to mine protein data bank (PDB) for secondary structural elements. **Bioinformation** 4, 390-391

1869. Bhatt H, Kashyap M and Bhavesh NS. (**2010**) 1H, 13C and 15N NMR assignments of RNA recognizing motifs 1 and 2 of BRUNOL-3 protein from human involved in myotonic dystrophy. **Biomolecular NMR Assignments** 4, 143-5

1870. Fenley Marcia O, Harris Robert C, Jayaram B and Boschitsch Alexander H. (**2010**) Revisiting the Association of Cationic Groove-Binding Drugs to DNA using a Poisson-Boltzmann Approach. **Biophysical Journal** 99, 879-886

1871. Desai C, Pathak H and Madamwar D. (**2010**) Advances in molecular and "-omics" technologies to gauge microbial communities and bioremediation at xenobiotic/anthropogen contaminated sites. **Bioresource Technology** 101, 1558-69

1872. Khan SN, Danishuddin M and Khan AU. (**2010**) Inhibition of transcription factor assembly and structural stability on mitoxantrone binding with DNA. **Bioscience Reports** 30, 331-40

1873. Singh D, Rani R, Rajendran R, Kaur NJ, Pandey A, Chopra P, Jain T, Jain MK, Grover S, Arya R and Saini KS. (**2010**) Human spleen tyrosine kinase (Syk) recombinant expression systems for high-throughput assays. **Biotechnology Journal** 5, 201-12

1874. Sablok G, Gupta PK, Baek JM, Vazquez F and Min XJ. (**2010**) Genome-wide survey of alternative splicing in the grass *Brachypodium distachyon*: a emerging model biosystem for plant functional genomics. **Biotechnology Letters** 33, 629-36

1875. Aggarwal S, Vaz C, Bhattacharya A and Srinivasan A. (**2010**) Prediction of novel precursor miRNAs using a context sensitive hidden Markov model (CSHMM). **BMC Bioinformatics** 11 (Suppl.1): S29

1876. Ansari HR and Raghava GPS. (**2010**) Identification of NAD interacting residues in proteins. **BMC Bioinformatics** 11, 160

1877. Chandra V, Girijadevi R, Nair AS, Pillai SS and Pillai RM. (**2010**) MTar: computational microRNA target prediction architecture for human transcriptome. **BMC Bioinformatics** 11Suppl 1:S2

1878. Chauhan JS, Mishra NK and Raghava GPS. (**2010**) Prediction of GTP interacting residues, dipeptides and tripeptides in a protein from its evolutionary information. **BMC Bioinformatics** 11, 301

1879. Garg A, Tewari R and Raghava GPS. (**2010**) KiDoQ: using docking based energy scores to develop ligand based model for predicting antibacterials. **BMC Bioinformatics** 11, 125

1880. Garg A, Tewari R and Raghava GPS. (**2010**) Virtual Screening of potential drug-like inhibitors against Lysine/DAP pathway of *Mycobacterium tuberculosis*. **BMC Bioinformatics** 11:S53

1881. Guharoy M and Chakrabarti P. (**2010**) Conserved residue clusters at protein-protein interfaces and their use in binding site identification. **BMC Bioinformatics** 11, 286

1882. Khurana P, Gokhale RS and Mohanty D. (**2010**) Genome Scale prediction of substrate specificity for acyl adenylate superfamily of enzymes based on active site residue profiles. **BMC Bioinformatics** 11, 57

1883. Kulkarni VV, Kareenhalli V, Malakar P, Pao LY, Safonov MG and Viswanathan GA. (**2010**) Stability analysis of the GAL regulatory network in *Saccharomyces cerevisiae* and Kluyveromyces lactis. **BMC Bioinformatics** 11 Suppl 1:S43

1884. Lata S, Mishra NK and Raghava GPS. (**2010**) AntiBP2: Improved version of

antibacterial peptide prediction. **BMC Bioinformatics** 11:S19

1885. Mishra NK and Raghava GPS. (**2010**) Prediction of FAD interacting residues in a protein from its primary sequence using evolutionary information. **BMC Bioinformatics** 11:S48

1886. Mitra R, Bandyopadhyay S, Maulik U and Zhang MQ. (**2010**) SFSSClass: an integrated approach for miRNA based tumor classification. **BMC Bioinformatics** 11 Suppl 1:S22

1887. Paragi-Vedanthi P and Doble M. (**2010**) Comparison of PGH2 binding site in prostaglandin synthases. **BMC Bioinformatics** 11 Suppl 1:S51

1888. Shameer K, Madan LL, Veeranna S, Gopal B and Sowdhamini R. (**2010**) PeptideMine--a webserver for the design of peptides for protein-peptide binding studies derived from protein-protein interactomes. **BMC Bioinformatics** 11, 473

1889. Soman Soja Saghar, Sivakumar KC and Sreekumar E. (**2010**) Molecular dynamics simulation studies and *in vitro* site directed mutagenesis of avian beta-defensin Apl_AvBD2. **BMC Bioinformatics** 11(Suppl 1):S7

1890. Sundaramurthy P, Shameer K, Sreenivasan R, Gakkhar S and Sowdhamini R. (**2010**) HORI: a web server to compute Higher Order Residue Interactions in protein structures. **BMC Bioinformatics** 11 Suppl 1:S24

1891. Vijayabaskar MS and Vishveshwara S. (**2010**) Comparative analysis of thermophilic and mesophilic proteins using Protein Energy Networks. **BMC Bioinformatics** 11 Suppl 1:S49

1892. Yeturu K, Utriainen T, Kemp GJ and Chandra N. (**2010**) An automated framework for understanding structural variations in the binding grooves of MHC class II molecules. **BMC Bioinformatics** 11 Suppl 1: S55

1893. Acharya KK, Chandrashekar DS, Chitturi N, Shah H, Malhotra V, Sreelakshmi KS, Deepti H, Bajpai A, Davuluri S, Bora P and Rao L. (**2010**) A novel tissue-specific meta-analysis approach for gene expression predictions, initiated with a mammalian gene expression testis database. **BMC Genomics** 11, 467

1894. Candida Vaz, Ahmad HM, Sharma P, Gupta R, Kumar, L, Kulshreshtha R and Bhattacharya A. (**2010**) Analysis of microRNA transcriptome by deep sequencing of small RNA libraries of peripheral blood. **BMC Genomics** 11 (Suppl. 1): S29

1895. Grover A, Shandilya A, Bisaria VS and Sundar D . (**2010**) Probing the anticancer mechanism of prospective herbal drug Withaferin A on mammals: a case study on human and bovine proteasomes. **BMC Genomics** 11(Suppl 4): S15

1896. Grover A, Shandilya A, Punetha A, Bisaria VS and Sundar D. (**2010**) Inhibition of the NEMO/IKKβ association complex formation, a novel mechanism associated with the NF-κB activation suppression by *Withania sominifera's* key metabolite withaferin-A. **BMC Genomics** 11(Suppl 4): S25

1897. Padmaja SS, Lakshmanan J, Gupta R, Banerjee S, Gautam P and Banerjee S. (**2010**) Identification of Scaffold/Matrix Attachment (S/MAR) like DNA element from the gastrointestinal protozoan parasite *Giardia lamblia*. **BMC Genomics** 11, 386

1898. Panwar B and Raghava GPS. (**2010**) Prediction and classification of aminoacyl tRNA synthetases using

PROSITE domains. **BMC Genomics** 11, 507

1899. Paul S, Dutta A, Bag SK, Das S and Dutta C. (**2010**) Distinct, ecotype-specific genome and proteome signatures in the marine cyanobacteria Prochlorococcus. **BMC Genomics** 11, 103

1900. Sharma A, Chavali S and Tabassum R, Tandon N and Bharadwaj D. (**2010**) Gene prioritization in Type 2 Diabetes using domain interactions and network analysis. **BMC Genomics** 11, 84

1901. Singh SK, Roy S, Choudhury SR and Sengupta DN. (**2010**) DNA repair and recombination in higher plants: insights from comparative genomics of Arabidopsis and rice. **BMC Genomics** 11, 443

1902. Joon M, Bhatia S, Pasricha R, Bose M and Brahmachari V. (**2010**) Functional analysis of an intergenic non-coding sequence within mce1 operon of *M. tuberculosis*. **BMC Microbiolgy** 10, 128

1903. Mishra NK ,Agarwal S and Raghava GPS. (**2010**) Prediction of Cytochrome P450 Isoforms responsible for Metabolizing a Drug Molecule. **BMC Pharmacology** 10, 8

1904. Singla D, Sharma, A, Kaur J, Panwar B and Raghava GPS. (**2010**) BIAdb: a curated database of benzylisoquinoline alkaloids. **BMC Pharmacology** 10, 4

1905. Raju NL, Gnanesh BN, Lekha P, Jayashree B, Pande S, Hiremath PJ, Byregowda M, Singh NK, Varshney RK. (**2010**) The first set of EST resource for gene discovery and marker development in pigeonpea (Cajanus cajan L.). **BMC Plant Biology** 10, 45

1906. Gadkari RA and Srinivasan N. (**2010**) Prediction of protein-protein interactions in dengue virus coat proteins guided by low resolution cryoEM structures. **BMC Structure Biology** 10, 17

1907. Chakraborty S, Kahali B and Ghosh TC. (**2010**) Protein complex forming ability is favored over the features of interacting partners in determining the evolutionary rates of proteins in the yeast protein-protein interaction networks. **BMC System Biology** 4, 155

1908. Kashyap MK, Harsha HC, Renuse S, Pawar H, Sahasrabuddhe NA, Kim MS, Marimuthu A, Keerthikumar S, Muthusamy B, Kandasamy K, Subbannayya Y, Prasad TS, Mahmood R, Chaerkady R, Meltzer SJ, Kumar RV, Rustgi AK and Pandey A. (**2010**) SILAC-based quantitative proteomic approach to identify potential biomarkers from the esophageal squamous cell carcinoma secretome. **Cancer Biology and Therapy** 10, 796-810

1909. Kumar Kalyana, Vamsy Mohana and Jamil Kaiser. (**2010**) Thymidylate synthase gene polymorphisms effecting 5-FU response in breast cancer patients. **Cancer Biomarkers** 6,83-93

1910. Bapat SA, Krishnan A, Ghanate AD, Kusumbe AP and Kalra RS. (**2010**) Gene expression: protein interaction systems network modeling identifies transformation-associated molecules and pathways in ovarian cancer. **Cancer Research** 70(12):4809-19

1911. Ladha J, Donakonda S, Agrawal S, Thota B, Srividya MR, Sridevi S, Arivazhagan A, Thennarasu K, Balasubramaniam A, Chandramouli BA, Hegde AS, Kondaiah P, Somasundaram K, Santosh V and Rao SM. (**2010**) Glioblastoma-specific protein interaction network identifies PP1A and CSK21 as

connecting molecules between cell cycle-associated genes. **Cancer Research** 70, 6437-47

1912. Kumar V. (**2010**) Identification of the conserved spatial position of key active-site atoms in glycoside hydrolase 13 family members. **Carbohydrate Research** 345, 1564-9

1913. Veluraja K, Selvin JF, Venkateshwari S and Priyadarzini TR. (**2010**) 3DSDSCAR--a three dimensional structural database for sialic acid-containing carbohydrates through molecular dynamics simulation. **Carbohydrate Research** 345, 2030-7

1914. Tuteja R. (**2010**) Genome wide identification of *Plasmodium falciparum* helicases: a comparison with human host. **Cell Cycle** 9, 104-20

1915. Shekhar C. (**2010**) Proteomic progress: Bangalore institute becomes a major center of biotech research. **Chemical Biology** 17, 207-8

1916. Pathak D, Srivastava J, Samad R, Parwez I, Kumar S and Ali S. (**2010**) Genome-wide search of the genes tagged with the consensus of 33.6 repeat loci in buffalo *Bubalus bubalis* employing minisatellite-associated sequence amplification. **Chromosome Research** 18, 441-58

1917. Dusane DH, Nancharaiah YV, Zinjarde SS and Venugopalan VP. (**2010**) Rhamnolipid mediated disruption of marine *Bacillus pumilus* biofilms. **Colloids Surf B: Biointerfaces** 81, 242-8

1918. Tuteja R and Mehta J. (**2010**) A genomic glance at the components of the mRNA export machinery in *Plasmodium falciparum*. **Communicative & Integrative Biology** 3(4):318-26

1919. Sabarinathan R, Basu R and Sekar K. (**2010**) ProSTRIP: A method to find similar structural repeats in three-dimensional protein structures. **Computational Biology and Chemistry** 34, 126-30

1920. Dusane DH, Matkar P, Venugopalan VP, Kumar AR and Zinjarde SS. (**2010**) Cross-Species Induction of Antimicrobial Compounds, Biosurfactants and Quorum-Sensing Inhibitors in Tropical Marine Epibiotic Bacteria by Pathogens and Biofouling Microorganisms. **Current Microbiology** 62, 974-80

1921. Khan M, Kumar A and Goel R. (**2010**) Comparative protein modeling, prediction of conserved residue and active sites in cold resistant protein isolated from CRPF(1), a cold tolerant mutant of *Pseudomonas fluorescens*. **Current Microbiology** 60, 428-34

1922. Nagpal JK, Rani R, Trink B, Saini KS. (**2010**) Targeting miRNAs for drug discovery: a new paradigm. **Current Molecular Medicine** 10, 503-510

1923. Rashid M. and Raghava GPS. (**2010**) A Simple Approach for Predicting Protein-Protein Interactions. **Current Protein and Peptide Science** 11, 589-600

1924. Shenoy SR and Jayaram B. (**2010**) Proteins: Sequence to Structure and Function - Current Status. **Current Protein and Peptide Science** 11, 498-514

1925. Saha B, Jyothi Prasanna S, Chandrasekar B and Nandi D. (**2010**) Gene modulation and immunoregulatory roles of interferon gamma. **Cytokine** 50, 1-14

1926. Ryo S, Wijdeven RH, Kono T, Karunasagar I, Rombout JH, Sakai M, Tyagi A, Hermsen T, Verburg-van Kemenade BM and Savan R. (**2010**)

Common carp have two subclasses of bonyfish specific antibody IgZ showing differential expression in response to infection. **Developmental and Comparative Immunology** 34, 1183-90

1927. Barathi S, Angayarkanni N, Pasupathi A, Natarajan SK, Pukraj R, Dhupper M, Velpandian T, Muralidharan C and Sivashanmugham M. (**2010**) Homocysteinethiolactone and paraoxonase: novel markers of diabetic retinopathy. **Diabetes Care** 33, 2031-7

1928. Maiti B, Khushiramani R, Tyagi A, Karunasagar I and Karunasagar I. (**2010**) Recombinant ferritin protein protects Penaeus monodon infected pathogenic *Vibrio* harveyi. **Diseases Of Aquatic Organisms** 88, 99-105

1929. Bhattacharya T, Ghosh TC. (**2010**) Protein connectivity and protein complexity promotes human gene duplicability in a mutually exclusive manner. **DNA Research** 17, 261-70

1930. Rao KP, Richa T, Kumar K, Raghuram B and Sinha AK. (**2010**) *In silico* analysis reveals 75 members of mitogen-activated protein kinase kinase kinase gene family in rice. **DNA Research** 17, 139-53

1931. Amalraj RS, Selvaraj N, Veluswamy GK, Ramanujan RP, Muthurajan R, Palaniyandi M, Agrawal GK, Rakwal R, Viswanathan R. (**2010**) Sugarcane proteomics: establishment of a protein extraction method for 2-DE in stalk tissues and initiation of sugarcane proteome reference map. **Electrophoresis** 31, 1959-1974

1932. Xavier T, Sreepriya, Ganesan TS and Menon KN. (**2010**) A simple and efficient method for processing of cell lysates for two-dimensional gel electrophoresis. **Electrophoresis** 31, 2429-35

1933. Bapat SA, Jin V, Berry N, Balch C, Sharma N, Kurrey N, Zhang S, Fang F, Lan X, Li M, Kennedy B, Bigsby RM, Huang T H-M, Nephew KP. (**2010**) Multivalent Epigenetic Marks Confer Microenvironment-Responsive Epigenetic Plasticity to Ovarian Cancer Cells. **Epigenetics** 5, 1-14

1934. Kelkar A and Deobagkar D. (**2010**) Methylation profile of genes on the human X chromosome. **Epigenetics** 5, 612-8

1935. Singh AR, Joshi S, Kayastha AM and Saxena JK. (**2010**) Guanidium chloride and urea induced unfolding of tetrameric *Brugia malayi* hexokinase. **European Biophysical Journal** 39, 289-297

1936. Bali A, Sharma K, Bhalla A, Bala S, Reddy D, Singh A and Kumar A. (**2010**) Synthesis, evaluation and computational studies on a series of acetophenone based 1-(aryloxypropyl)-4-(chloroaryl) piperazines as potential atypical antipsychotics. **European Journal of Medicinal Chemistry** 45, 2656-2662

1937. Puri Nidhi, Prakash Om, Raman Manoharlal, Sharma Monika, Ghosh Indira and Prasad Rajendra. (**2010**) Analysis of physico-chemical properties of substrates of ABC and MFS multidrug transporters of pathogenic *Candida albicans*. **European Journal of Medicinal Chemistry** 45, 4813-26

1938. Barnabas Anburaj D, Radhakrishnan Girish K. and Ramakrishnan Usha. (**2010**) Characterization of a begomovirus causing horsegram yellow mosaic disease in India. **European Journal of Plant Pathology** 127, 41-51

1939. Purushotham G, Madhumohan K, Anwaruddin Mohammad, Nagarajaram

HA, Hariram Vuppaladadhiam, Narasimhan Calambur and Bashyam Murali D . (**2010**) The MYH7 p.R787H mutation causes hypertrophic cardiomyopathy in two unrealted families. **Experimental & Clinical Cardiology** 15, e1-e4

1940. Deenadayalan A, Sundaramurthi JC and Raja A. (**2010**) Immunological and proteomic analysis of preparative isoelectric focusing separated culture filtrate antigens of *Mycobacterium tuberculosis*. **Experimental and Molecular Pathology** 88, 156-62

1941. Chandra S, Ruhela D, Deb A and Vishwakarma RA. (**2010**) Glycobiology of the Leishmania parasite and emerging targets for antileishmanial drug discovery. **Expert Opinion on Therapeutic Targets** 14, 739-57

1942. Srivastava G, Singh K, Tiwari MN and Singh MP. (**2010**) Proteomics in Parkinson's disease: Current trends, translational snags and future possibilities. **Expert Review of Proteomics** 7, 127-39

1943. Basundra R, Kumar A, Amrane S, Verma A, Phan AT and Chowdhury S. (**2010**) A novel G-quadruplex motif modulates promoter activity of human thymidine kinase. **FEBS Journal** 277, 4254-64

1944. Dutta A, Paul S and Dutta C. (**2010**) GC-rich intra-operonic spacers in prokaryotes: possible relation to gene order conservation. **FEBS Letters** 584(22):4633-8

1945. Mitra P and Pal D. (**2010**) New measures for estimating surface complementarity and packing at protein-protein interfaces. **FEBS Letters** 584, 1163-8

1946. Nair S and Savithri HS. (**2010**) Natively unfolded nucleic acid binding P8 domain of SeMV polyprotein 2a affects the novel ATPase activity of the preceding P10 domain. **FEBS Letters** 584(3):571-6

1947. Sen K, Podder S, and Ghosh TC. (**2010**) Insights into the genomic features and evolutionary impact of the genes configuring duplicated pseudogenes in human. **FEBS Letters** 584, 4015-8

1948. Dutta A and Chaudhuri K. (**2010**) Analysis of tRNA composition and folding in psychrophilic, mesophilic and thermophilic genomes: indications for thermal adaptation. **FEMS Microbiology Letters** 305(2):100-8

1949. Raghunath P, Maiti B, Shekar M., Karunasagar, I and Karunasagar I. (**2010**) Clinical Aeromonas veronii biovar veronii strains harbour non-functional gene similar to the thermostable direct hemolysin-related hemolysin (trh) gene of *Vibrio* parahaemolyticus. **FEMS Microbiology Letters** 307, 151-157

1950. James R, Thampuran N, Lalitha KV, Rajan LA and Joseph TC. (**2010**) Differential gene expression profile of the hepatopancreas of white spot syndrome virus infected Fenneropenaeus indicus by suppression subtractive hybridization. **Fish & Shellfish Immunology** 29, 884-9

1951. Randhawa GJ, Singh M and Grover M. (**2010**) Bioinformatic analysis for allergenicity assessment of *Bacillus thuringiensis* Cry proteins expressed in insect-resistant food crops. **Food and Chemical Toxicology** 49, 356-362

1952. Puri A, Basha PO, Kumar M, Rajpurohit D, Randhawa GS, Kianian SF, Rishi A, Dhaliwal HS. (**2010**) The polyembryo

gene (OsPE) in rice. **Functional & Integrative Genomics** 10, 359-66

1953. Srivastava M, Akhoon BA and Gupta SK. (**2010**) Development of resistance against blackleg disease in Brassica oleracea var. botrytis through *In silico* methods. **Fungal Genetics and Biology** 47, 800-8

1954. Singh H, Andrabi M, Kahili B, Ghosh TC , Kochetov AV and Ahmad S. (**2010**) On *nucleotide* solvent accessibility in RNA structure. **Gene** 463, 41-48

1955. Kshatriya GK, Aggarwal A, Khurana P, Singh HS, Italia YM, Saraswathy KN and Ghosh PK. (**2010**) Genomic and linguistic affinities: a study of allelic and haplotype diversity at DRD2 locus among the tribes of Gujarat, western India. **Genetic Testing and Molecular Biomarkers** 14, 215-23

1956. Kandasamy K, Mohan SS, Raju R, Keerthikumar S, Kumar GS, Venugopal AK, Telikicherla D, Navarro JD, Mathivanan S, Pecquet C, Gollapudi SK, Tattikota SG, Mohan S, Padhukasahasram H, Subbannayya Y, Goel R, Jacob HK, Zhong J, Sekhar R, Nanjappa V, Balakrishnan L, Subbaiah R, Ramachandra YL, Rahiman BA, Prasad TS, Lin JX, Houtman JC, Desiderio S, Renauld JC, Constantinescu SN, Ohara O, Hirano T, Kubo M, Singh S, Khatri P, Draghici S, Bader GD, Sander C, Leonard WJ and Pandey A. (**2010**) NetPath: a public resource of curated signal transduction pathways. **Genome Biology** 11, R3

1957. Dutt Sriparna, Singh VK, Marla Soma S and Kumar Anil. (**2010**) *In silico* determination of sequential, structural and functional diversity of wheat cystatins and its implication in plant defense. **Genomics Proteomics & Bioinformatics** 8, 42-56

1958. Salahuddin P and Khan AU. (**2010**) Structural and functional analysis of NS1 and NS2 proteins of H1N1 subtype. **Genomics Proteomics and Bioinformatics** 8, 190-199

1959. Dutt S, Singh VK, Marla SS and Kumar A. (**2010**) *In silico* analysis of sequential, structural and functional diversity of wheat cystatins and its implication in plant defense. **Genomics Proteomics Bioinformatics** 8, 42-56

1960. Prabu GR and Mandal AK. (**2010**) Computational identification of miRNAs and their target genes from expressed sequence tags of tea (*Camellia sinensis*). **Genomics Proteomics Bioinformatics** 8, 113-21

1961. Sridhar J, Sowmiya G, Sekar K and Rafi ZA. (**2010**) PsRNA: a computing engine for the comparative identification of putative small RNA locations within intergenic regions. **Genomics, Proteomics and Bioinformatics** 8, 127-34

1962. Molparia B, Goyal K, Sarkar A, Kumar S and Sundar D. (**2010**) ZiF-Predict: a web-tool for predicting DNA-binding specificity in C2H2 zinc finger proteins. **Genomics, Proteomics and Bioinformatics** 8, 122-126

1963. Umamaheswari A, Pradhan D and Hemanthkumar M. (**2010**) Identification of potential Leptospira phosphoheptose isomerase inhibitors through virtual high-throughput screening. **Genomics, Proteomics and Bioinformatics** 8, 246-55

1964. Singh SP, Khan F and Mishra BN. (**2010**) Computational characterization of *Plasmodium falciparum* proteomic data for screening of potential vaccine candidates. **Human Immunology** 71, 136-43

1965. Subramanian K and Gadgil C. (**2010**) Robustness of the Drosophila segment polarity network to transient perturbations. **IET Systems Biology** 4, 169-76

1966. Nayak Kinshuk C. (**2010**) Mutational bias and Gene expression level shape codon usages in Thermobifida fusca YX. ***In silico*** **biology** 9, 337 353

1967. Balakrishnan M, Srivastava RC and Mayank Pokhriyal. (**2010**) Homology modeling and docking studies between HIV-1 protease and carbamic acid. **Indian Journal of Biotechnology** 9, 96-100

1968. Yadav AK. (**2010**) Comparative analysis of protein structure of common Hb Q variants. **Indian Journal of Pathology and Microbiology** 53, 696-8

1969. Sengupta N, Alam SI, Kumar B, Kumar RB, Gautam V, Kumar S and Singh L. (**2010**) Comparative proteomic analysis of extracellular proteins of *Clostridium perfringens* type A and type C strains. **Infection and Immunity** 78, 3957-68

1970. Dixit J, Srivastava H, Sharma M, Das MK, Singh OP, Raghavendra K, Nanda N, Dash AP, Saksena DN and Das A. (**2010**) Phylogenetic inference of Indian malaria vectors from multilocus DNA sequences. **Infection, Genetics and Evolution** 10, 755–763

1971. Srivastava H, Sharma M, Dixit J and Das A. (**2010**) Evolutionary insights into insecticide resistance gene families of *Anopheles gambiae*. **Infection, Genetics and Evolution** 10, 620-8

1972. Bhattacherjee A and Chakraborti AS. (**2010**) Fructose-induced modifications of myoglobin: Change of structure from met (Fe(3+)) to oxy (Fe(2+)) form. **International Journal of Biological Macromolecules** 48, 202-209

1973. Bodade RG, Beedkar SD, Manwar AV and Khobragade CN. (**2010**) Homology modeling and docking study of xanthine oxidase of Arthrobacter sp. XL26. **International Journal of Biological Macromolecules** 47, 298-303

1974. Rathi B Aggarwal R and Naik S. (**2010**) *In silico* CD4+ T cell epitope mapping and HLA coverage analysis for proteins of human hepatitis E virus. **International Journal of Integrative Biology** 9, 74-9

1975. Boobalan C and Bharathi N. (**2010**) Comparative Modeling and Functional Characterization of 3-D Structure of Late Embryogenesis Abundant Protein of *Arabidopsis thaliana*. **Journal of Advanced Bioinformatics Applications and Research** 1, 8-12

1976. Saveetha KL. Karthiba, M. Raveendran, D. Saravanakumar, Raguchander T and Samiyappan R. (**2010**) Transcriptional analysis of molecular interactions between *Pseudomonas fluorescens* strain TDK1, *Oryza sativa* and Cnaphalocrocis. **Journal of Applied Entomology** 134, 762–773

1977. Ruwandeepika HA, Defoirdt, T, Bhowmick PP, Shekar M, Bossier P and Karunasagar I. (**2010**) Presence of typical and atypical virulence genes in *Vibrio* isolates belonging to the Harveyi clade. **Journal of Applied Microbiology** 109, 888-899

1978. Angadi UB and Venkatesulu M. (**2010**) FuzzyART neural network for protein classification. **Journal of Bioinformatics and Computational Biology** 8, 825-41

1979. Bhattacharyya S, Rajan RE, Swarupa Y, Rathore U, Verma A, Udaykumar R, and Varadarajan R. (**2010**) Design of a non-

glycosylated outer domain derived HIV-1 gp120 immunogen that binds to CD4 and induces neutralizing antibodies. **Journal of Biological Chemistry** 285, 27100-10

1980. Chaturvedi R, Bansal K, Narayana Y, Kapoor N, Sukumar N, Togarsimalemath SK, Chandra N, Mishra S, Ajitkumar P, Joshi B, Katoch VM, Patil SA and Balaji KN. (**2010**) The multifunctional PE_PGRS 11 protein from *Mycobacterium tuberculosis* plays a role in regulating resistance to oxidative stress. **Journal of Biological Chemistry** 285(40), 30389–30403

1981. Lomash S, Nagpal S and Salunke DM. (**2010**) An antibody as surrogate receptor reveals determinants of activity of an innate immune peptide antibiotic. **Journal of Biological Chemistry** 285, 35750-8

1982. Bhattacharya A and De RK. (**2010**) Average correlation clustering algorithm (ACCA) for grouping of co-regulated genes with similar pattern of variation in their expression values. **Journal of Biomedical Informatics** 43, 560-8

1983. Pashov AD, Monzavi-Karbass B, Raghava GPS and Kieber-Emmons T. (**2010**) Bridging Innate and Adaptive Anti-Tumor Immunity Targeting Glycans. **Journal of Biomedicine and Biotechnology** 2010, 354068

1984. Ayyasamy Mahalakshmi and Rajaiah Shenbagarathai. (**2010**) Homology modeling of Cry10Aa. **Journal of Biomolecular modeling Structure and Dynamics** 28, 363-378

1985. Naik PK, Alam A, Malhotra A and Rizvi O. (**2010**) Molecular modeling and structure-activity relationship of podophyllotoxin and its congeners. **Journal of Biomolecular Screening** 15, 528-40

1986. Borkar A, Ghosh I and Bhattacharyya D. (**2010**) Structure and dynamics of double helical DNA in torsion angle hyperspace: a molecular mechanics approach. **Journal of Biomolecular Structure and Dynamics** 27, 695-712

1987. Das S, Mitra S and Chakrabarti J. (**2010**) Multiply expressed tRNA genes?. **Journal of Biomolecular Structure and Dynamics** 28, 239-46

1988. Mittal Aditya, Jayaram B, Shenoy Sandhya R and Bawa Tejdeep Singh. (**2010**) A Stoichiometry driven universal spatial organization of backbones of folded proteins: Are there Chargaff's rules for protein folding ?. **Journal of Biomolecular Structure and Dynamics** 28, 133-142

1989. Mukhopadhyay P and Ghosh TC. (**2010**) Relationship between gene compactness and base composition in rice and human genome. **Journal of Biomolecular Structure and Dynamics** 27, 477-88

1990. Roy S and Thakur AR. (**2010**) 20ns molecular dynamics simulation of the antennapedia homeodomain-DNA complex: water interaction and DNA structure analysis. **Journal of Biomolecular Structure and Dynamics** 27, 443-56

1991. Heikham R and Shankar R. (**2010**) Flanking region sequence information to refine microRNA target predictions. **Journal of Biosciences** 35, 105-18

1992. Packialakshmi RM, Srivastava N, Girish KR and Usha R. (**2010**) Molecular characterization geminivirus replication initiator protein. **Journal of Biosciences** 32, 17-29

1993. De D, Chakraborty PD and Bhattacharyya D. (**2010**) Regulation of trypsin activity by peptide fraction of an

aqueous extract of human placenta used as wound healer. **Journal of Cellular Physiology** 226, 2033-40

1994. Umamaheswari A, Pradhan D and Hemanthkumar M. (**2010**) *In silico* identification of common putative drug targets in *Leptospira interrogans*. **Journal of Chemical Biology** 3, 165–173

1995. Umamaheswari A, Pradhan D and Hemanthkumar M. (**2010**) Virtual screening for potential inhibitors of homology modeled *Leptospira interrogans* MurD ligase. **Journal of Chemical Biology** 3, 175–187

1996. Sonavane S and Chakrabarti P. (**2010**) Prediction of Active Site Cleft Using Support Vector Machines. **Journal of Chemical Information and Modeling** 50, 2266-73

1997. Pandya Prateek, Maidul Islam Md, Kumar G Suresh, Jayaram B and Kumar Surat. (**2010**) DNA Minor Groove Binding of Small Molecules: Experimental and Computational Evidence. **Journal of Chemical Sciences** 122, 247-257

1998. Mitra P and Pal. (**2010**) Using correlated parameters for improved ranking of protein-protein docking decoys. **Journal of Computational Chemistry** 32, 787-96

1999. Manoharan P, Vijayan RS and Ghoshal N. (**2010**) Rationalizing fragment based drug discovery for BACE1: insights from FB-QSAR, FB-QSSR, multi objective (MO-QSPR) and MIF studies. **Journal of Computer-Aided Molecular Design** 24, 843-64

2000. Yamamoto D, Ghosh S, Ganesh B, Krishnan T, Chawla-Sarkar M, Alam MM, Aung TS and Kobayashi N. (**2010**) Analysis on genetic diversity and molecular evolution of human Group B rotaviruses based on whole genome segments. **Journal Of General Virology** 91, 1772-1781

2001. Kumar Uday Chandra, Munipalli Haripriya and Shaik Mahmood. (**2010**) 2D QSAR, Pharmacophore and Docking Studies of *Mycobacterium tuberculosis* Enoyl Acyl Carrier Protein Reductase Inhibitors. **Journal of Global Pharma Technology** 2, 73-89

2002. Bhatia S and Sharma DK. (**2010**) Mining of genomic databases to identify novel biodesulfurizing microorganisms. **Journal of Industrial Microbiology and Biotechnology** 37, 425-9

2003. Barh D, Bhat D and Viero C. (**2010**) miReg: a resource for microRNA regulation. **Journal of Integrative Bioinformatics** 7, 144

2004. Hamed RI, Ahson SI and Parveen R. (**2010**) A new approach for modelling gene regulatory networks using fuzzy petri nets. **Journal of Integrative Bioinformatics** 7, 113

2005. Mallika V, Sivakumar KC, Jaichand S and Soniya EV. (**2010**) Kernel based machine learning algorithm for the efficient prediction of type III polyketide synthase family of proteins. **Journal of Integrative Bioinformatics** 7, 143

2006. Sarkar RR, Maithreye R and Sinha S. (**2010**) Design of regulation and dynamics in simple biochemical pathways. **Journal of Mathematical Biology** 63, 283-307

2007. Banerji Anirban and Ghosh Indira . (**2010**) Mathematical criteria to observe mesoscopic emergence of protein biochemical properties. **Journal of Mathematical Chemistry** 49, 643-665

2008. Kumar S, Kumar A and Dixit VK. (**2010**) Diversity in cag pathogenicity island (cag PAI) of *Helicobacter pylori* isolates from North and South Indian populations. **Journal of Medical Microbiology** 59, 32-40

2009. Singh S, Kumar A, Panneerselvam K and Vennila JJ. (**2010**) Diagnosis of Arthritis Through Fuzzy Inference System. **Journal of Medical Systems** DOI: 10.1007/s10916-010-9606-9

2010. Priyadharshini R, Hemalatha D and Gunasekaran P. (**2010**) Role of Val289 residue in the alpha-amylase of Bacillus amyloliquefaciens MTCC 610: an analysis by site directed mutagenesis. **Journal of Microbiology and Biotechnology** 20, 563-8

2011. Dey S, Pal A, Chakrabarti P and Janin J. (**2010**) The subunit interfaces of weakly associated homodimeric proteins. **Journal of Molecular Biology** 398, 146-60

2012. Matharu NK, Hussain T, Sankaranarayanan R and Mishra RK. (**2010**) Vertebrate homologue of Drosophila GAGA factor. **Journal of Molecular Biology** 400, 434-447

2013. Begum T and Ghosh TC. (**2010**) Understanding the effect of secondary structures and aggregation on human protein folding class evolution. **Journal of Molecular Evolution** 71, 60-9

2014. Shruthi H, Babu MM and Sankaran K. (**2010**) TAT-pathway-dependent lipoproteins as a niche-based adaptation in prokaryotes. **Journal of Molecular Evolution** 70, 359-370

2015. Udaya Prakash NA, Jayanthi M, Sabarinathan R, Kangueane P, Mathew L and Sekar K. (**2010**) Evolution, homology conservation, and identification of unique sequence signatures in GH19 family chitinases. **Journal of Molecular Evolution** 70, 466-78

2016. Akhoon BA, Gupta SK, Verma V, Dhaliwal G, Srivastava M, Gupta SK and Ahmad RF. (**2010**) *In silico* designing and optimization of anti-breast cancer antibody mimetic oligopeptide targeting HER-2 in women. **Journal of Molecular Graphics and Modelling** 28, 664-9

2017. Bhutoria S and Ghoshal N. (**2010**) Deciphering ligand dependent degree of binding site closure and its implication in inhibitor design: A modeling study on human adenosine kinase. **Journal of Molecular Graphics and Modelling** 28, 577-91

2018. Jayakanthan M, Chandrasekar S, Muthukumaran J and Mathur PP. (**2010**) Analysis of CYP3A4-HIV-1 protease drugs interactions by computational methods for Highly Active Antiretroviral Therapy in HIV/AIDS. **Journal of Molecular Graphics and Modelling** 28, 455-63

2019. Koulgi S, Sonavane U and Joshi R. (**2010**) Insights into the folding pathway of the Engrailed Homeodomain protein using replica exchange molecular dynamics simulations. **Journal of Molecular Graphics and Modelling** 29, 481-91

2020. Kundu S and Roy D. (**2010**) Structural study of carboxylesterase from hyperthermophilic bacteria *Geobacillus stearothermophilus* by molecular dynamics simulation. **Journal of Molecular Graphics and Modelling** 28, 820-827

2021. Mascarenhas NM, Bhattacharyya D and Ghoshal N. (**2010**) Why pyridine containing pyrido[2,3-d]pyrimidin-7-ones selectively inhibit CDK4 than

CDK2: insights from molecular dynamics simulation. **Journal of Molecular Graphics and Modelling** 28, 695-706

2022. Akhoon BA, Gupta SK, Dhaliwal G, Srivastava M and Gupta SK. (**2010**) Virtual screening of specific chemical compounds by exploring *E.coli* NAD(+)-dependent DNA ligase as a target for antibacterial drug discovery. **Journal of Molecular Modeling** 17, 265-273

2023. Bera I, Laskar A and Ghoshal N. (**2010**) Exploring the structure of opioid receptors with homology modeling based on single and multiple templates and subsequent docking: A comparative study. **Journal of Molecular Modeling** 17, 1207-21

2024. Danishuddin M, Khan SN and Khan AU. (**2010**) Molecular interactions between mitochondrial membrane proteins and the C-terminal domain of PB1-F2: an *In silico* approach. **Journal of Molecular Modeling** 16, 535-41

2025. Ghosh P and Bagchi MC. (**2010**) Anti-tubercular drug designing by structure based screening of combinatorial libraries. **Journal of Molecular Modeling** 17, 1607-20

2026. Jatana N, Jangid S, Khare G, Tyagi AK and Latha N. (**2010**) Molecular modeling studies of Fatty acyl-CoA synthetase (FadD13) from *Mycobacterium tuberculosis*-a potential target for the development of antitubercular drugs. **Journal of Molecular Modeling** 17,301-313

2027. Khedkar VM, Ambre PK, Verma J, Shaikh MS, Pissurlenkar RR and Coutinho EC. (**2010**) Molecular docking and 3D-QSAR studies of HIV-1 protease inhibitors. **Journal of Molecular Modeling** 16, 1251-68

2028. Maganti L, Manoharan P and Ghoshal N. (**2010**) Probing the structure of *Leishmania donovani* chagasi DHFR-TS: comparative protein modeling and protein-ligand interaction studies. **Journal of Molecular Modeling** 16, 1539-47

2029. Manivel P, Muthukumaran J, Kannan M and Krishna R. (**2010**) Insight into residues involved in the structure and function of the breast cancer associated protein human gamma synuclein. **Journal of Molecular Modeling** 17, 251-263

2030. Mannu J, Jenardhanan P and Mathur PP. (**2010**) A computational study of CYP3A4 mediated drug interaction profiles for anti-HIV drugs. **Journal of Molecular Modeling** 17, 1847-1854

2031. Mitra I, Saha A and Roy K. (**2010**) Pharmacophore mapping of arylamino-substituted benzo[b]thiophenes as free radical scavengers. **Journal of Molecular Modeling** 16, 1585-96

2032. Mitra P and Pal D. (**2010**) dockYard-a repository to assist modeling of protein-protein docking. **Journal of Molecular Modeling** 17, 599-606

2033. Parthiban M, Shanmughavel P and Sowdhamini R. (**2010**) *In silico* point mutation and evolutionary trace analysis applied to nicotinic acetylcholine receptors in deciphering ligand-binding surfaces. **Journal of Molecular Modeling** 16, 1651-70

2034. Purohit R, Rajendran V and Sethumadhavan R. (**2010**) Relationship between mutation of serine residue at 315th position in *M. tuberculosis* catalase-peroxidase enzyme and Isoniazid susceptibility: An *In silico* analysis. **Journal of Molecular Modeling** 17, 869-77

2035. Tomar NR, Singh V, Marla SS, Chandra R, Kumar R and Kumar A. (**2010**) Molecular Docking studies with rabies virus glycoprotein to design viral therapeutics. **Journal of Pharmaceutical Science** 72, 486-90

2036. Priyakumar UD. (**2010**) Atomistic details of the ligand discrimination mechanism of S(MK)/SAM-III riboswitch. **Journal of Physical Chemistry B** 114, 9920-5

2037. Priyakumar UD, Harika G and Suresh G. (**2010**) Molecular simulations on the thermal stabilization of DNA by hyperthermophilic chromatin protein sac7d, and associated conformational transitions. **Journal of Physical Chemistry B** 114, 16548-57

2038. Priyakumar UD, Ramakrishna S, Nagarjuna KR and Reddy SK. (**2010**) Structural and energetic determinants of thermal stability and hierarchical unfolding pathways of hyperthermophilic proteins, Sac7d and Sso7d. **Journal of Physical Chemistry B** 114, 1707-1718

2039. Sharma P, Sponer JE, Sponer J, Sharma S, Bhattacharyya D and Mitra A. (**2010**) On the role of the cis Hoogsteen:sugar-edge family of base pairs in platforms and triplets-quantum chemical insights into RNA structural biology. **Journal of Physical Chemistry B** 114, 3307-20

2040. Marla Soma, Bharatiya Deeksha, Bala Madhu, Singh Vinay and Kumar Anil. (**2010**) Classification of Rice Seed Storage Proteins using Neural Networks. **Journal of Plant Biochemistry and Biotechnology** 19,1

2041. Pandey A, Rajamani U, Verma J, Subba P, Chakraborty N, Datta A, Chakraborty S and Chakraborty N. (**2010**) Identification of extracellular matrix proteins of rice (*Oryza sativa L.*) involved in dehydration-responsive network: a proteomic approach. **Journal of Proteome Research** 9, 3443-64

2042. Arpita Mishra, Dinesh Pandey, VK Singh and Anil Kumar. (**2010**) Molecular cloning and *In silico* analysis of functional homologues of hypersensitive response gene(s) induced during pathogenesis of Alternaria blight in two genotypes of Brassica showing differential resistance. **Journal of Proteomics and Bioinformatics** 3, 244-248

2043. Nath Manoj, Anshita Goel, Gohar Taj and Kumar Anil. (**2010**) Molecular cloning and *In silico* comparative analysis of calmodulin from cereals and millets. **Journal of Proteomics and Bioinformatics** 3, 294-301

2044. Shakil S and Khan AU. (**2010**) Interaction of 2009 CTX-M variants with drugs and inhibitors: a molecular modeling and docking study. **Journal of Proteomics and Bioinformatics** 3 , 130-134

2045. Barh D, Misra AN and Kumar A. (**2010**) *In silico* Identification of dual ability of N. gonorrhoeae ddl for developing drug and vaccine against pathogenic *Neisseria* and other human pathogens. **Journal of Proteomics Bioinformatics** 3, 082-090

2046. Kushwaha SK and Shakya M. (**2010**) Protein interaction network analysis - approach for potential drug target identification in *Mycobacterium tuberculosis*. **Journal of Theoretical Biology** 262, 284-94

2047. Chakraborti S, Chatterjee T, Joshi P, Poddar A, Bhattacharyya B, Singh SP, Gupta V and Chakrabarti P. (**2010**) Structure and activity of lysozyme on binding to ZnO nanoparticles. **Langmuir** 26, 3506-3513

2048. Mishra NK and Raghava GPS. (**2010**) Prediction of specificity and cross-reactivity of kinase inhibitors. **Letters In Drug Design & Discovery** 8, 223-228

2049. Gill J, Kumar A, Yogavel M, Belrhali H, Jain SK, Rug M, Brown M, Maier AG and Sharma A. (**2010**) Structure, localization and histone binding properties of nuclear-associated nucleosome assembly protein from *Plasmodium falciparum*. **Malaria Journal** 9,90

2050. Pallavi R, Acharya P, Chandran S, Daily JP and Tatu U. (**2010**) Chaperone expression profiles correlate with distinct physiological states of *Plasmodium falciparum* in malaria patients. **Malaria Journal** 9, 236

2051. Dey A, Verma AK and Chatterji D. (**2010**) Role of an RNA polymerase interacting protein, MsRbpA, from *Mycobacterium smegmatis* in phenotypic tolerance to rifampicin. **Microbiology** 156, 873-83

2052. Deenadayalan A, Heaslip D, Rajendiran AA, Velayudham BV, Frederick S, Yang HL, Dobos K, Belisle JT and Raja A. (**2010**) Immunoproteomic identification of human T cell antigens of *Mycobacterium tuberculosis* that differentiate healthy contacts from tuberculosis patients. **Molecular & Cellular Proteomics** 9, 538-49

2053. Banerjee S and Goswami R. (**2010**) GST profile expression study in some selected plants: *In silico* approach. **Molecular and Cellular Biochemistry** 336, 109-26

2054. Bhatti JS, Bhatti GK, Mastana SS, Ralhan S, Joshi A and Tewari R. (**2010**) ENPP1/PC-1 K121Q polymorphism and genetic susceptibility to type 2 diabetes in North Indians. **Molecular and Cellular Biochemistry** 345, 249-57

2055. Vikram Singh Gaur, U.S. Singh and Anil Kumar. (**2010**) Transcriptional profiling and *In silico* analysis of Dof transcription factor gene family for understanding their regulation during seed development of rice *Oryza sativa L.* **Molecular Biology Reports** 38, 2827-2848

2056. Kumar N and Mohanty D. (**2010**) Structure based identification of MHC binding peptides: Benchmarking of prediction accuracy. **Molecular Biosystems** 6, 2508-2520

2057. Raman Karthik, Bhat Ashwini G. and Chandra Nagasuma. (**2010**) A systems perspective of host-pathogen interactions: Predicting disease outcome in tuberculosis. **Molecular BioSystems** 6, 516 - 530

2058. Goel R, Muthusamy B, Pandey A and Prasad TS. (**2010**) Human Protein Reference Database and Human Proteinpedia as Discovery Resources for Molecular Biotechnology. **Molecular Biotechnology** 48, 87-95

2059. Kaur S, Modi P, Srivastava V, Mudgal R, Tikoo S, Arora P, Mohanty D and Sengupta S. (**2010**) Chk1-dependent constitutive phosphorylation of BLM helicase at Serine 646 decreases after DNA damage. **Molecular Cancer Research** 8, 1234-47

2060. Nandi S and Bagchi MC. (**2010**) 3D-QSAR and molecular docking studies of 4-anilinoquinazoline derivatives: a rational approach to anticancer drug design. **Molecular Diversity** 14, 27-38

2061. Sebastian A, Bender A and Ramakrishnan V. (**2010**) Virtual activity profiling of drug molecules by 1D

fingerprinting. **Molecular Informatics** 29, 773-779

2062. Pandaranayaka Eswari, Prasanthi Namburi, Kannabiran N, Rangachari Krishnan, Dhivya Mohan, Krishnadas Subbiah, Sundaresan Periasamy and Krishnaswamy S. (**2010**) Polymorphisms in intronic region of MYOC gene associated with primary open angle glaucoma - possible role of alternate splicing. **Molecular Vision** 16, 2891-902

2063. Magdoom KN, Subramanian D, Chakravarthy VS, Ravindran B, Amari SI and Meenakshisundaram N. (**2010**) Modeling Basal Ganglia for Understanding Parkinsonian Reaching Movements. **Neural Computing** 23, 477-516

2064. Lavery Richard, Zakrzewska Krystyna, Beveridge David, Bishop Thomas C, Case David, Cheatham Thomas III, Dixit Surjit, Jayaram B, Lankas Filip, Laughton Charles, Maddocks John H, Michon Alexis, Osman Roman, Orozoco Modesto, Perez Alberto, Singh Tanya, Spackova Nada and Sponer Jiri. (**2010**) A Systematic molecular dynamics study of nearest-neighbor effects on base pair and base pair step conformations and fluctuations in B-DNA. **Nucleic Acids Reasearch** 38, 299-313

2065. Agarwal SM, Raghav D, Singh H and Raghava GP. (**2010**) CCDB: a curated database of genes involved in cervix cancer. **Nucleic Acids Research** 39, Supp 1, D 975-979

2066. Anand S, Prasad MVR, Yadav G, Kumar N, Shehara J, Ansari MZ and Mohanty D. (**2010**) SBSPKS: structure based sequence analysis of polyketide synthases. **Nucleic Acids Research** 38, W487-96

2067. Ansari HR, Flower DR and Raghava GPS. (**2010**) AntigenDB: An immunoinformatics database of pathogen antigens. **Nucleic Acids Research** 38, D847-D853

2068. Bharti SK and Varshney U. (**2010**) Analysis of the impact of a uracil DNA glycosylase attenuated in AP-DNA binding in maintenance of the genomic integrity in *Escherichia coli*. **Nucleic Acids Research** 38, 2291-301

2069. Kumar P, Chaitanya PS and Nagarajaram HA. (**2010**) PSSRdb: a relational database of polymorphic simple sequence repeats extracted from prokaryotic genomes. **Nucleic Acids Research** 39, D601-D605

2070. Pradhan S, Sengupta M, Dutta A, Bhattacharyya K, Bag SK, Dutta C and Ray K. (**2010**) Indian genetic disease database. **Nucleic Acids Research** 39, D933–D938

2071. Thomas S, Karnik S, Barai RS, Jayaraman VK and Idicula-Thomas S. (**2010**) CAMP: a useful resource for research on antimicrobial peptides. **Nucleic Acids Research** 38, D774-80

2072. Gupta G, Surolia A and Sampathkumar SG. (**2010**) Lectin microarrays for glycomic analysis. **OMICS** 14, 419-36

2073. Gupta B, Dash AP, Shrivastava N and Das A. (**2010**) Single *nucleotide* polymorphisms, putatively neutral DNA markers and population genetic parameters in Indian *Plasmodium vivax isolates*. **Parasitology** 137, 1721-1730

2074. Gupta B, Awasthi G and Das A. (**2010**) Malaria parasite genome scan: insights into antimalarial resistance. **Parasitology Research** 107, 495-9

2075. Sharma M, Dash AP and Das A. (**2010**) Evolutionary genetic insights into

Plasmodium falciparum functional genes. **Parasitology Research** 106, 349-55

2076. Tyagi S, Sharma M and Das A. (**2010**) Comparative genomic analysis of simple sequence repeats in three *Plasmodium* species. **Parasitology Research** 108, 451-8

2077. Ranganathan Y and Borges RM. (**2010**) Reducing the babel in plant volatile communication: using the forest to see the trees. **Plant biology (Stuttgart)** 12, 735-42

2078. Umate P, Tuteja R and Tuteja N. (**2010**) Genome wide analysis of helicase gene family from rice and Arabidopsis: a comparison with yeast and human. **Plant Molecular Biology** 73, 449-465

2079. Aswati Nair R, Kiran AG, Sivakumar KC, and George Thomas. (**2010**) Molecular characterization of an oomycete-responsive PR-5 protein gene from *Zingiber zerumbet*. **Plant Molecular Biology Reporter** 28, 128–135

2080. Taj Gohar, Agarwal Payal, Grant Murray and Kumar Anil. (**2010**) MAPK machinery in plants: Recognition and response to different stresses through multiple signal transduction pathways. **Plant Signalling and Behaviour** 5, 1370-8

2081. Ray S, Patra B, Das-Chatterjee A, Ganguli A and Majumder AL. (**2010**) Identification and organization of chloroplastic and cytosolic L-myo-inositol 1-phosphate synthase coding gene(s) in *Oryza sativa*: comparison with the wild halophytic rice, *Porteresia coarctata*. **Planta** 231, 1211-27

2082. Laneri K, Bhadra A, Ionides EL, Bouma M, Dhiman RC, Yadav RS and Pascual M. (**2010**) Forcing versus feedback: epidemic malaria and monsoon rains in northwest India. **PLoS Computational Biology** 6, e1000898

2083. Arora G, Sajid A, Gupta M, Bhaduri A, Kumar P, Basu-Modak S and Singh Y. (**2010**) Understanding the role of PknJ in *Mycobacterium tuberculosis* : biochemical characterization and identification of novel substrate pyruvate kinase A. **PLoS One** 5, e10772

2084. Benayoun Bérénice A, Caburet Sandrine, Dipietromaria Aurélie , Georges Adrien, Barbara D'Haene, Pandaranayaka PJ Eswari, L'Hôte David, Todeschini Anne-Laure, Krishnaswamy S, Fellous Marc, Baere Elfride De and Veitia Reiner A. (**2010**) Functional Exploration of the Adult Ovarian Granulosa Cell Tumor-Associated Somatic FOXL2 Mutation p.Cys134Trp (c.402C>G). **PLoS ONE** 5, e8789

2085. Gupta K, Kumar P and Chatterji D. (**2010**) Identification, Activity and Disulfide Connectivity of C-di-GMP Regulating Proteins in *Mycobacterium tuberculosis*. **PLoS One** 30, e15072

2086. Kapoor K, Rehan M, Lynn AM and Prasad R. (**2010**) Employing information theoretic measures and mutagenesis to identify residues critical for drug-proton antiport function in Mdr1p of *Candida albicans*. **PLoS One** 5, e11041

2087. Khandelwal Garima and Jayaram B. (**2010**) A phenomenological model for predicting melting temperatures of DNA sequences. **PLoS ONE** 5, e12433

2088. Patil R, Das S, Stanley A, Yadav L, Sudhakar A and Varma AK. (**2010**) Optimized hydrophobic interactions and hydrogen bonding at the target-ligand interface leads the pathways of drug-designing. **PLoS One** 5, e12029

2089. Ramana J and Gupta D. (**2010**) FaaPred: A SVM-Based Prediction Method for Fungal Adhesins and Adhesin-Like Proteins. **PLoS One** 5, e9695

2090. Ramana J and Gupta D. (**2010**) Machine learning methods for prediction of CDK-inhibitors. **PLoS One** 5, e13357

2091. Sridhar J, Narmada SR, Sabarinathan R, Ou HY, Deng Z, Sekar K, Rafi ZA and Rajakumar K. (**2010**) sRNAscanner: a computational tool for intergenic small RNA detection in bacterial genomes. **PLoS One** 5, e11970

2092. Vishnoi A, Roy R, Prasad HK and Bhattacharya A. (**2010**) Anchor-Based Whole Genome Phylogeny (ABWGP): A Tool for Inferring volutionary Relationship among Closely Related Microorganims. **PLoS One** 30, e14159

2093. Bommakanti G, Citron MP, Hepler RW, Callahan C, Heidecker GJ, Najar TA, Lu X, Joyce JG, Shiver JW, Casimiro DR, ter Meulen J, Liang X and Varadarajan R. (**2010**) Design of an HA2-based *Escherichia coli* expressed influenza immunogen that protects mice from pathogenic challenge. **Proceedings of the National Academy of Sciences of the USA** 107, 13701-6

2094. Chakraborty S, Chakraborty N, Agrawal L, Ghosh S, Narula K, Shekhar S, Naik PS, Pande PC, Chakrborti SK and Datta A. (**2010**) Next-generation protein-rich potato expressing the seed protein gene AmA1 is a result of proteome rebalancing in transgenic tuber. **Proceedings of the National Academy of Sciences of the USA** 107, 17533-8

2095. Gayatri M and Guruprasad K. (**2010**) Analysis of the conformations corresponding to hexapeptide and large sequences characterized by continuous single amino Acid repeats in proteins. **Protein and Peptide Letters** 17, 1459-65

2096. Joshi RR and Sekharan S. (**2010**) Characteristic Peptides of Protein Secondary Structural Motifs. **Protein and Peptide Letters** 17, 1198-1206

2097. Kuntal BK, Aparoy P and Reddanna P. (**2010**) Development of tools and database for analysis of metal binding sites in protein. **Protein and Peptide Letters** 17, 765-73

2098. Mathur R, Suman S, Beaume N, Ali M, Bhatt AN, Chopra M, Saluja D, Mishra AK, Chandna S, Kapoor PN and Dwarakanath BS. (**2010**) Interaction and structural modification of topoisomerase IIalpha by peptidyl prolyl isomerase, pin1: an *In silico* study. **Protein and Peptide Letters** 17, 151-63

2099. Singh V and Somvanshi P. (**2010**) Toward the virtual screening of potential drugs in the homology modeled NAD+ dependent DNA ligase from *Mycobacterium tuberculosis*. **Protein and Peptide Letters** 17, 269-76

2100. Saravanan KM, Balasubramanian H, Nallusamy S and Samuel S. (**2010**) Sequence and structural analysis of two designed proteins with 88% identity adopting different folds. **Protein Engineering, Design and Selection** 23, 911-8

2101. Bhaskar Varun, Kumar Manoj, Manica Sankar, Tripathi Sunil, Venkatraman Aparna and S Krishnaswamy. (**2010**) Identification of Biochemical and Putative Biological Role of a Xenolog from *Escherichia coli* using structural analysis. **Proteins: Structure, Function and Bioinformatics** 79, 1132-42

2102. Bhattacharyya M, Ghosh A, Hansia P and Vishveshwara S. (**2010**) Allostery and conformational free energy changes

in human tryptophanyl-tRNA synthetase from essential dynamics and structure networks. **Proteins: Structure, Function and Bioinformatics** 78, 506-17

2103. Indu S, Kumar ST, Thakurela S, Gupta M, Bhaskara RM, Ramakrishnan C and Varadarajan R. (**2010**) Disulfide conformation and design at helix N-termini. **Proteins: Structure, Function and Bioinformatics** 78, 1228-42

2104. Chaerkady R, Kerr CL, Kandasamy K, Marimuthu A, Gearhart JD and Pandey A. (**2010**) Comparative proteomics of human embryonic stem cells and embryonal carcinoma cells. **Proteomics** 10, 1359-73

2105. Ray S, Mehta G and Srivastava S. (**2010**) Label-free detection techniques for protein microarrays: prospects, merits and challenges. **Proteomics** 10, 731-48

2106. Sosalegowda AH, Kundapur RR and Boregowda MH. (**2010**) Molecular characterization of heat shock proteins 90 (HSP83?) and 70 in tropical strains of *Bombyx mori*. **Proteomics** 10, 2734-45

2107. Sophiya K and Anbarasu A. (**2010**) Structural stability studies in adhesion molecules-role of cation-π interactions. **Protoplasma** 248, 673-682

2108. Balakrishnan Priya, Reddi K Sivaprasanth, Vincent Dhivya Jensi, Lakshmanan Uma, Gopalakrishnan Subramanian and Dharmar Prabaharan. (**2010**) Characterization of manganese superoxide dismutase from a marine cyanobacterium Leptolyngbya valderiana BDU20041. **Saline Systems** 6, 6

2109. Chauhan P and Shakya M. (**2010**) Role of physicochemical properties in the estimation of skin permeability: *in vitro* data assessment by Partial Least-Squares Regression. **SAR and QSAR in Environmental Research** 21, 481-94

2110. Rajasekaran R and Sethumadhavan R. (**2010**) Exploring the structural and functional effect of pRB by significant nsSNP in the coding region of RB1 gene causing retinoblastoma. **Science China Life Sciences** 53, 234-40

2111. Rajendran S and Natarajan J. (**2010**) A Comparative study of differentially expressed gene selection programs for microarray data mining. **The Internet Journal of Genomics and Proteomics** 5 (2)

2112. Marathe A and Bansal M. (**2010**) 5-Methyl Group in Thymine Dynamically Influences the Structure of a-Tracts in DNA at the Local and Global Level. **The Journal of Physical Chemistry B** 114, 5534-5546

2113. Joshi RR and Jyothish NT. (**2010**) e-PROPAINOR: A Web-Server for Fast Prediction of Cα Structure & Likely Functional Sites of a Protein Sequence. **The Open Bioinformatics J** 4, 11-16

2114. Sarangi AN, Gupta S, Trivedi N, Rathi B and Gupta SK. (**2010**) Mining the proteome of *Haemophilus ducreyi* for identification of potential drug targets. **The Open Bioinformatics Journal** 4, 1-4

2115. Nayak Spurthi N, Zhu Hongyan, Varghese Nicy, Choi Hong-Kyu Datta Subhojit, Horres Ralf, Jüngling Ruth, Singh Jagbir, Kishor PB Kavi, Hoisington Dave A, Kahl Günter, Winter Peter, Cook Douglas R and Varshney Rajeev K. (**2010**) Integration of novel SSR and gene-based SNP marker loci in the chickpea genetic map and establishment of new anchor points with *Medicago truncatula* genome.

Theoretical and Applied Genetics 120, 1415-1441

2116. Ghosh S, Kobayashi N, Nagashima S, Chawla-Sarkar M, Krishnan T, Ganesh B and Naik TN. (**2010**) Full genomic analysis and possible origin of a porcine G12 rotavirus strain RU172. **Virus Genes** 40, 382-388

2117. Roychoudhury S and Mukherjee D. (**2010**) A detailed comparative analysis on the overall codon usage pattern in herpes viruses. **Virus Research** 148, 31-43

2118. Bhartiya D, Maini J, Sharma M, Joshi P, Laddha SV, Jalali S, Patowary A, Purkanti R, Lalwani M, Singh AR, Chauhan R, Singh N, Bhardwaj A, Scaria V and Sivasubbu S. (**2010**) FishMap Zv8 update--a genomic regulatory map of zebrafish. **Zebrafish** 7, 179-80

List of Institutions

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3. Aligarh Muslim University, Aligarh
4. All India Institute of Medical Sciences, New Delhi
5. Amity University Uttar Pradesh, Lucknow
6. Amrita Research Institute, Amrita Institute for Medical Sciences, Ponekkara, Kochi,
7. Andhra University, Visakhapatnam
8. Anna University, Chennai
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