

Bioinformatics Institute Publications – 2008

1.	<i>Dominique Chu, Nicolae Radu Zabet, Boris Mitavskiy.</i> Models of transcription factor binding : Sensitivity of activation functions to model assumptions. Journal of Theoretical Biology 257 (2009), Pg 419-429, doi : 10.1016/j.jtbi.2008.11.026
2.	<i>Morium Akter, Mohammad Shorif Uddin, Aminul Haque.</i> Diagnosis and Management of Diabetes Mellitus through a Knowledge-Based System. IFMBE Proceedings Vol. 23: ICBME 2008 - 13th International Conference on Biomedical Engineering, Dec 3-6 2008, S'pore, pp 1000-1003 ISBN: 978-3-540-92840-9
3.	<i>Wolfgang Benetka, Norbert Mehlmer, Sebastian Maurer-Stroh, Michaela Sammer, Manfred Koranda, Ralph Neumüller, Jörg Betschinger, Jürgen A. Knoblich, Markus Teige, Frank Eisenhaber.</i> Experimental testing of predicted myristoylation targets involved in asymmetric cell division and calcium-dependent signaling. Cell Cycle, Vol. 7, Issue 23, 1 Dec 2008, Pg 3709-3719
4.	<i>Liu Shouping, Chandra Verma, Lei Zhou, Roger Beuerman, Liyan Chen, Shubhra Ghosh Dastidar, Jing Li, Donald Tan.</i> Effect of Structural Parameters of Peptides on Dimer Formation and Highly Oxidized Side Products in the Oxidation of Thiols of Linear Analogues of Human b-Defensin 3 by Dimethyl Sulfoxide. Journal of Peptide Science
5.	<i>M Scaltriti, C Verma, M Guzman, J Jimenez, J L Parra, K Pedersen, D J Smith, S Landolfi, S Ramon y Cajal, J Arribas, J Baselga.</i> Lapatinib, a HER2 tyrosine kinase inhibitor, induces stabilization and accumulation of HER2 and potentiates trastuzumab-dependent cell cytotoxicity. Oncogene 2008
6.	<i>Jiapei Ho, Jacklyn-Wai-Fun Kong, Lee-Yee Choong, Marie-Chiew-Shia Loh, Weiyi Toy, Poh-Kuan Chong, Chee-Hong Wong, Chow-Yin Wong, Nilesh Shah, Yoon-Pin Lim.</i> Novel Breast Cancer Metastasis-Associated Proteins. Journal of Proteome Research
7.	<i>Frank Eisenhaber.</i> Introduction to Bioinformatics, by Arthur M. Lesk - Book Review. Biotechnology Journal, Nov. 2008, Vol. 3, Issue 11, Pg 1452-1453
8.	<i>Weimiao Yu, Hwee Kuan Lee, Srivats Hariharan, Wenyu Bu, Sohail Ahmed.</i> Quantitative Neurite Outgrowth Measurement Based on Image Segmentation with Topological Dependence. Cytometry Part A, 75A: Pg 289-297, 2009, ISSN: 1552-4930, doi: 10.1002/cyto.a.20664
9.	<i>Frank Eisenhaber.</i> From a heap of facts to predictive biological theory: the future of life sciences viewed through the prism of a bioinformatics textbook - Book Review. BioEssays 30:1034-1035, 2008
10.	<i>Petra Van Damme, Sebastian Maurer-Stroh, Kim Plasman, Joost Van Durme, Niklaas Colaert, Evy Timmerman, Pieter-Jan De Bock, Marc Goethals, Frederic Rousseau, Joost Schymkowitz, Joel Vandekerckhove, Kris Gevaert.</i> Analysis of protein processing by N-terminal proteomics reveals novel species-specific substrate determinants of granzyme B orthologs. Molecular Cellular Proteomics
11.	<i>Shubhra Ghosh Dastidar, David P. Lane and Chandra S. Verma.</i> Multiple Peptide Conformations Give Rise to Similar Binding Affinities: Molecular Simulations of p53-MDM2. Journal of the American Chemical Society
12.	<i>Poh-Kuan Chong, Huiyin Lee, Jacklyn Wai-Fun Kong, Marie Chiew-Shia Loh, Chee-Hong Wong and Yoon-Pin Lim.</i> Phosphoproteomics, oncogenic signaling and cancer research. Proteomics 2008
13.	<i>Wee Guan Lim, Xiao Chen, Jun-ping Liu, Bee Jen Tan, Shufeng Zhou, Adam Smith, Nathaniel Lees, Liansheng Hou, Fukang Gu, Xi Yong Yu, Yaomin Du, Derek Smith, Chandra Verma, Ke Liu and Wei Duan.</i> The C-terminus of PRK2/PKNy is required for optimal activation by RhoA in a GTPdependent manner. Archives of Biochemistry and Biophysics 479 (2008) Pg 170-178, doi: 10.1016/j.abb.2008.09.008

14.	<i>Yan Nei Law, Stephen Ogg, John Common, David Tan, E. Birgette Lane, Andy M. Yip, Hwee Kuan Lee.</i> Automated Protein Distribution Detection in High-Throughput Image-Based siRNA Library Screens. Journal of Signal Processing Systems 2008, doi: 10.1007/s11265-008-0205-7
15.	<i>Anshul Nigham, Lisa Tucker-Kellogg, Ivana Mihalek, Chandra Verma, David Hsu.</i> pFlexAna: detecting conformational changes in remotely related proteins. Nucleic Acids Research, 2008, 1-6, doi:10.1093/nar/gkn259
16.	<i>Chen Li.</i> Using Multivariate Curve Resolution to Improve Proteomic Mass Spectra Classification. Chemometrics and Intelligent Laboratory Systems, doi:10.1016/j/chemolab.2008.07.002
17.	<i>Yu Wang, Alvin T.C. Lee, Joel Z. I. Ma, Jingbo Wang, Jianwei Ren, Yuchen Yang, Erwin Tantoso, Kuo-Bin Li, London L.P.J Ooi, Patrick Tan, Caroline G.L. Lee.</i> Profiling microRNA Expression in Hepatocellular Carcinoma reveals microRNA-224 Up-regulation and Apoptosis Inhibitor-5 as a microRNA-224-Specific Target. The Journal of Biological Chemistry, Vol.283, Issue 19, Pg 13205-13215
18.	<i>Wong Wing Cheong, Marie Loh, Frank Eisenhaber.</i> On the necessity of different statistical treatment for Illumina BeadChip and Affymetrix GeneChip data and its significance for biological interpretation. Biology Direct 2008, 3:23, doi:10.1186/1745-6150-3-23
19.	<i>V. A. Kuznetsov, E. Motakis, A. V. Ivshina.</i> Low- and High- Aggressive Genetic Breast Cancer Subtypes and Significant Survival Gene Signatures. Proceeding IEEE World Congress on Computational Intelligence, 2008 , June 1-6, Hong Kong, 4150-4155
20.	<i>Vladimir Kuznetsov, Sterling Thomas, and Danail Bonchev.</i> Data-driven Networking Reveals 5-Genes Signature for Early Detection of Lung Cancer. Proceedings of the International Conference on BioMedical Engineering and Informatics BMEI 2008, May 27-30, Sanya, Hainan, China, Vol. 1, 413-417
21.	<i>Tze-Chuen Lee, Ann S.G. Lee, Kuo-Bin Li.</i> Incorporating the amino acid properties to predict the significance of missense mutations. Amino Acids, DOI: 10.1007/s00726-008-0087-9
22.	<i>Juan Fernandez-Recio, Chandra Verma.</i> Editorial Overview : Theory and simulation. Current Opinion in Structural Biology 2008, Vol. 18, Issue 2, 131-133
23.	<i>Felicia Ng, Shayne Boucer, Susie Koh, Konduru SR Sastry, Lucas Chase, Uma Lakshmi pathy, Cleo Choong, Zheng Yan, Mohan C Vemuri, Mahendra S Rao, Vivek Tanavde.</i> PDGF, TGF-β and FGF signaling is important for differentiation and growth of mesenchymal stem cells (MSCs): transcriptional profiling can identify markers and signaling pathways important in differentiation of MSC into adipogenic, chondrogenic and osteogenic lineages. Blood, 15 July 2008, Vol. 112, No. 2, pp. 295-307 doi:10.1182/blood-2007-07-103697
24.	<i>Yan Nei Law, Carlo Zaniolo.</i> Improving the Accuracy of Continuous Aggregates and Mining Queries on Data Streams under Load Shedding. International Journal of Business Intelligence and Data Mining/Vol. 3, No. 1, 2008
25.	<i>Christopher John Brown, Deepa Srinivasan, Lee Hui Jun, David Coomber, Chandra S. Verma, David P Lane.</i> The electrostatic surface of MDM2 modulates the specificity of its interaction with phosphorylated and unphosphorylated p53 peptides. Cell Cycle, Vol. 7, Issue 5
26.	<i>Shouping Liu, Lei Zhou, Jing Li, Anita Suresh, Chandra Verma, Yong Hwee Foo, Eric P.H. Yap, Donald T. H. Tan, Roger Beuerman.</i> Linear Analogs of Human Defensin 3: Concepts for Design of Antimicrobial Peptides with Reduced Cytotoxicity to Mammalian Cells. ChemBioChem, Vol 9, Issue 6, Apr 2008, Pg 964-973
27.	<i>A. Madhumalar, Derek J. Smith, Chandra Verma.</i> Stability of the core domain of p53: insights from computer simulations. BMC Bioinformatics 2008, 9(Suppl 1): S 1
28.	<i>Guy G. Dodson, David P. Lane, Chandra S. Verma.</i> Molecular simulations of protein dynamics: new windows on mechanisms in biology. EMBO reports, Vol 9, No. 2, 2008, 144-150, doi:

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29.	<i>Bennett T.K. Lee, Lailing Liew, Jiahao Lim, Jonathan K.L. Tan, Tze Chuen Lee, Pardha S. Veladandi, Yun Ping Lim, Hao Han, Gunaretnam Rajagopal, N. Leigh Anderson.</i> Candidate List of yoUr Biomarker (CLUB): A Web-based Platform to Aid Cancer Biomarker Research. <i>Biomarkers Insights</i> 2008:3, 65-71
30.	<i>Sheraz Gul, Syeed Hussain, Mark P. Thomas, Marina Resmini, Chandra S. Verma, Emrys W. Thomas, and Keith Brocklehurst.</i> Generation of Nucleophilic Character in the Cys25/His159 Ion-Pair of Papain Involves Trp177 but not Asp158. <i>Biochemistry</i> 2008, 47, 2025 - 2035
31.	<i>A Dey, CS Verma, DP Lane.</i> Updates on p53: modulation of p53 degradation as a therapeutic approach. <i>British Journal of Cancer</i> (2008) 98, 4 - 8
32.	<i>Chinta Rambabu, Indrajit Chakrabati.</i> An Efficient Hillclimbing-based Watershed Algorithm and its Prototype Hardware Architecture. <i>Journal of Signal Process</i>
33.	<i>Joke Reumers, Sebastian Maurer-Stroh, Joost Schymkowitz, Frederich Rousseau.</i> Protein Sequences Encode Safeguards Against Aggregation. <i>Human Mutation</i> , Vol. 30, Issue 3, Pg 431-437