

# The 2009 Computational Structural Bioinformatics Workshop

November 1, Washington D.C.

<http://www.cs.nmsu.edu/~dsi/bioworkshop09>

## The Program

<b>8 - 8:15am Poster Setup</b>
<b>8:15 - 10am Session 1 (Cabinet/Judiciary Room, Each speaker: 18-minute talk + 2-minute questions)</b>
Brief Welcome 8:15 - 8:20am
1. "An Efficient Geometric Build-up Algorithm for Protein Structure Determination with Sparse Exact Distance Data" <i>Robert Davis, Claus Ernst, and Di Wu</i>
2. "Tracing Conformational Changes in Proteins" <i>Nurit Haspel, Mark Moll, Matthew Baker, Wah Chiu, and Lydia Kavraki</i>
3. "Prediction of Protein Long-Range Contacts Using GaMC Approach with Sequence Profile Centers" <i>Peng Chen and Jinyan Li</i>
4. "Generalized Spring Tensor Models for Protein Fluctuation Dynamics and Conformation Changes" <i>Tu-Liang Lin and Guang Song</i>
5. "An artificial backbone of hydrogens for finding the conformation of protein molecules" <i>Carlile Lavor, Antonio Mucherino, Leo Liberti, and Nelson Maculan</i>
<b>10:00 - 10:15am Coffee Break</b>
<b>10:15 - 12:15pm Session 2 (Cabinet/Judiciary Room, Each speaker: 18-minute talk + 2-minute questions)</b>
6. "Effect of sidechain anisotropy on residue contact determination" <i>Weitao Sun and Jing He</i>
7. "Computational Testing of Protein-Protein Interactions" <i>Ataur Katebi, Andrzej Kloczkowski, and Robert Jernigan</i>
8. "Discrimination of Thermophilic and Mesophilic Proteins" <i>Todd Taylor</i>
9. "Sequence-based B-cell epitope prediction by using associations in antibody-antigen structural complexes" <i>Liang Zhao and Jinyan Li</i>
10. "Matching Observed Alpha Helix Lengths to Predicted Secondary Structure" <i>Brian Cloteaux and Nadezhda Serova</i>
11. "How does the periodicity associated with nucleosomal DNA reflect on its intrinsic curvature?" <i>Murlidharan Nair</i>
<b>12:15-1:15pm Lunch Break</b>
<b>1:15-2:15pm Poster Session</b>
<b>2:15 - 3:55pm Session 3 (Cabinet/Judiciary Room, 20 minutes each)</b>
12. "Polynomial-Time Disulfide Bond Determination Using Mass Spectrometry Data" <i>William Murad, Rahul Singh, and Ten-Yang Yen</i>
13. "Density-Based Classification of Protein Structures Using Iterative TM-score" <i>David Hoksza and Jakub Galgonek</i>
14. "A global optimization algorithm for protein surface alignment" <i>Paola Bertolazzi, Concettina Guerra, and Giampaolo Liuzzi</i>
15. "Upper Bounds for Foldings in the FCC-HP Protein Model" <i>Abu Dayem Ullah and Kathleen Steinhofel</i>
16. "Node Degree Distribution in Amino Acid Interaction Networks" <i>Omar GACI and Stefan BALEV</i>
<b>3:55pm Closing Remarks</b>

### Posters :

Paper 1-16 and additionally following two posters:

"Fast database search for similar and flexible structures based on TOPS++FATCAT", *Mallika Veeramalai and Adam Godzik*

"Structure Prediction for Helical Skeletons from Low Resolution Protein Density Map", *Kamal Al Nasr, Jing He*

### PROGRAM CHAIRS

Di Wu, Western Kentucky University

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### PROGRAM COMMITTEE

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