Biophysics, Structural and Computational Biology

2013 Retreat October 14, 2013 Poster Presentations

1. Amber Can Predict the Conformational Preference for Tandem GA Pairs in RNA

13. Investigation of the Mechanism of Antimicrobial Lipopeptides Using Coarse-Grained Molecular Dynamics Simulations

Dejun Lin, Joshua N. Horn, Zhen Xia, Pengyu Ren and Alan M. Grossfield

14. Initiation Factor 2 Stabilizes the Ribosome in a Partially Rotated State

Clarence Ling, Jillian Dann and Dmitri N. Ermolenko

15. Pre-mRNA Splicing Factor Targeting by the CAPER U2AF Homology Motif at 1.7 Å Resolution

Sarah Loerch, Valerie Manceau, Alexandre Maucuer, Michael R. Green and Clara L. Kielkopf

16. A Tool for Making New Tools for Analyzing Molecular Simulations

Tod D. Romo and Alan M. Grossfield

17. Structural Dynamics of Elongation Factor G During Ribosomal Translocation

Enea Salsi, Elie Farah, Jillian Dann and Dmitri N. Ermolenko

18. Covariance Ration Analysis of Molecular Dynamics Trajectories of HIV-1 Reverse Transcriptase

James Seckler, Serdal Kirmizialtin, Kenneth Johnson and Alan M. Grossfield

19. Parallelization of RNA Structure Software Package for RNA Secondary Structure Prediction Michael Sloma and David H. Mathews

20. Human Cytochrome C: Residue 41 Mutations Affect Electron Transfer Rate and Hydrogen-Bonding Network Near the Heme

Rebecca M. Smith, Matthew D. Liptak, Benjamin Snyder and Kara L. Bren

21. Improving RNA Nearest Neighbor Parameters for Predicting Helical Stability by Going Beyond the Two-State Model

Aleksandar Spasic, Jonathan Chen, Matthew Seetin, Douglas H. Turner and David H. Mathews

22. Nanoscale Silicon Photonic Devices for Ultrasensitive Virus Detection

Rashmi Sriram, Dhrubo Jyoti Basu Roy, Jim E. Baker, Mark Lifson, Amrita R. Yadav, Sudeshna Pal, Philippe M. Fauchet, Matthew Yates and Benjamin L. Miller

23. The Study of tRNA Modifications by Molecular Dynamics

XiaoJu Zhang and David H. Mathews

24. Identification of Mutations Stabilizing Ste2p, a G Protein Coupled Receptor in S. Cerevisiae <u>Jeffrey Zuber</u> and Mark E. Dumont