



MGMS and RSC MMG Young Modellers' Forum 2008

Presentations

9.00 – 9.30	Coffee and Registration
9.30 - 9.40	Welcome and Introduction Steve Maginn and Stuart Firth-Clark
9.40 – 10.00	Where Does the Tetrazole Belong? Insight to the Binding Pose of AT1 Antagonists Using Homology Modelling, Molecular Dynamics, and Docking NJ Maximilian Macaluso – <i>University of Cambridge</i>
10.00 – 10.20	The Determinants of Protein Kinase Inhibitor Selectivity Duangrudee Tanramluk – <i>University of Cambridge</i>
10.20 – 10.40	On the Diversity of Physicochemical Environments Experienced by Identical Ligands in Binding Pockets of Unrelated Proteins Abdullah Kahraman – <i>European Bioinformatics Institute</i>
10.40 – 11.00	Protein-Protein Interactions as Drug Targets: a View from the Binding Site Jonathan C. Fuller – <i>University of Leeds</i>
11.00-11.20	Entropic Cost of Molecular Association Sheeba Jem Irudayam – <i>University of Manchester</i>
11.20-11.40	Haptic Technology in Drug Design: Breaching the Accessibility Barrier Nicola Zonta – <i>University of Cardiff</i>
11.40-13.30	Lunch and Poster Session
13.30 – 13.50	Coarse-Grain Protein Modelling with Hamiltonian Replica Exchange Mishal Patel – <i>University of Southampton</i>

13.50 – 14.10	Classification Models for Aqueous Solubility in the Early Drug Discovery Phase Christian Kramer - <i>Universität Erlangen-Nürnberg</i>
14.10 – 14.30	Towards High Level QM/MM Calculation of Protein-Ligand Binding Affinities Katie Shaw – <i>University of Bristol</i>
14.30 – 15.00	Tea
15.00 - 15.20	FapR Protein: Functional Study of a Potential Target for Antibiotics Against Gram Positive Bacteria Olivier Périn – <i>Institut Pasteur, Paris</i>
15.20 – 15.40	Wavelet Compression of GRID Fields for Similarity Searching and Virtual Screening Richard Martin – <i>University of Sheffield</i>
15.40 – 16.00	Probing Enzyme Catalysis Using High Pressure Molecular Dynamics Tom McGroarty – <i>University of Manchester</i>
16.00	Molecular Mayhem
16.30	Judges Deliberations
16.45	Presentations
17.00	End

Posters

Poster 1	Discarding Functional Residues from the Substitution Table Improves Predictions of Active Sites within Three-Dimensional Structures Sungsam Gong – <i>University of Cambridge</i>
Poster 2	A Computational Method for Examining the Conformational Stability of Family A GPCRs Lisa M Simpson – <i>University of Essex</i>
Poster 3	Protein Dynamics and Networks of Dynamically-Conserved Residues Suryani Lukman – <i>University of Cambridge</i>

- Poster 4 **Use of Reduced Dimensionality Representation and Molecular Dynamics Techniques to Investigate PDZ Domain Similarity and Ligand Specificity**
Cristina Sisu – *University of Cambridge*
- Poster 5 **Computational Studies of Water-Mediated Interactions in Ionotropic Glutamate Receptors**
Michelle A. Sahai – *University of Oxford*
- Poster 6 **Dynamics of Phosphate Transport by the Anion-Specific Outer Membrane Protein OprP**
Prapasiri Pongprayoon – *University of Oxford*
- Poster 7 **Unsatisfied Hydrogen Bond Donors/Acceptors at Buried Protein-Ligand Interfaces**
Kamran Haider – *University of York*
- Poster 8 **Molecular Dynamics Simulations of Mesophilic and Thermophilic Citrate Synthase**
John McGeagh – *University of Bristol*
- Poster 9 **QM/MM Study of the Sulfoxidation of Dimethyl Sulphide by Cytochrome P450**
Cristina S. Porro – *University of Manchester*
- Poster 10 **Specific Ion Effects on Structurally Persistent Micelles – Guiding Experiments with MD Simulations**
Christof Jäger - *Universität Erlangen*
- Poster 11 **The Role of Complex Formation between Substrates and Efflux Pump Inhibitors (EPIs) in Multidrug-Resistant (MDR) Bacteria**
Sheikh Shilbe Rahman – *School of Pharmacy, London*
- Poster 12 **Easy and Rapid Method for Dendrimer 3D Structure Generation**
Teresa S. Barata - *School of Pharmacy, London*