

## East Coast Protein Meeting 2015 Program

Friday 24<sup>th</sup> July

|               |   |
|---------------|---|
| 15:00 – 17:15 | Registration  |
| 17:15 – 18:15 | <b>Plenary Session 1</b><br>Prof. Juliet Gerrard (University of Auckland)<br><i>Chair: Róisín McMahon</i>                   |
|               | <b>Session 1: Protein-ligand interactions</b><br><i>Chair: Andrew Walker</i>  |
| 18:15 – 18:35 | Dorothy Wai<br>The Yin and Yang of nucleic acid binding by classical zinc fingers   |
| 18:35 – 18:55 | Amy Mcgrath<br>DNA sliding clamps: An emerging target for antibacterials  |
| 18:55 – 19:10 | Tony Ngo<br>The search for surrogate ligands targeting orphan receptor, GPR37L1, using a binding pocket similarity approach |
| 19:10 – 19:25 | Ingrid Macindoe<br>LDB1 Self-association  |
| 19:30 – 21:30 | <b>Dinner &amp; Drinks</b>  |

Saturday 25<sup>th</sup> July

|               |   |
|---------------|---|
| 08:00 – 08:30 | <b>Arrival Tea &amp; Coffee</b>   |
| 08:30 – 08:45 | <b>Sponsor talk- Merck Millipore</b><br>Dale Pavlovski  |
|               | <b>Session 2: Protein complexes &amp; oligomers</b><br><i>Chair: Mary Christie</i>  |
| 08:45 – 09:05 | Mario Garcia<br>New crystal structures for the catalytic subunit of <i>Arabidopsis thaliana</i> acetohydroxyacid synthase reveal the binding site for two commercial herbicides |
| 09:05 – 09:25 | Lachlan Casey<br>The solution structure of SR33 challenges paradigms for coiled-coil dimerization in NB-LRR proteins  |
| 09:25 – 09:40 | Mathew Horrocks<br>The development of single-molecule techniques for studying the aggregates of proteins associated with Parkinson's and Alzheimer's disease                    |
| 09:40 – 09:55 | Alastair Stewart<br>Structural and functional insights into the evolution and stress adaptation of type II chaperonins  |
| 09:55 – 10:10 | Sarah Piper<br>Characterisation of the <i>Yersinia entomophaga</i> ABC toxin complex: A novel host specific toxin delivery system   |
| 10:15 – 10:45 | Morning Tea   |

## East Coast Protein Meeting 2015 Program

Saturday 25<sup>th</sup> July (cont'd)

|               |  |
|---------------|--|
| 10:45 – 11:15 | <b>Special session: Statistics for bioscientists</b><br>Prof. Joel Mackay (University of Sydney)   |
|               | <b>Session 3: Protein-protein interactions</b><br><i>Chair: Alastair Stewart</i>   |
| 11:15 – 11:35 | Evelyne Deplazes<br>Limitations of restraint-driven docking of flexible peptides to ion channels – Lessons learnt from the complex formed by the spider venom PCTX1 and the acid sensing ion channel 1 |
| 11:35 – 11:55 | Neil Robertson<br>The biophysical basis of an aggregation-prone LIM code revealed by simple FRET-based techniques  |
| 11:55 – 12:10 | Dezerae Cox<br>To bind, or not to bind: The small heat shock proteins interact with various species formed during the aggregation of $\alpha$ -synuclein   |
| 12:10 – 12:25 | Rebecca San Gil<br>A new method to study ancient proteins: Re-evaluating the chaperone efficacy of heat shock proteins using bicistronic vectors   |
| 12:30 – 14:30 | <b>Lunch</b>   |
| 14:00 – 14:30 | <b>MX beamline update - what is going on at the Australian Synchrotron?</b><br>Daniel Eriksson   |
|               | <b>Session 4: Protein structure and function</b><br><i>Chair: Megan Cross</i>  |
| 14:30 – 14:50 | Thomas Clairfeuille<br>Structural basis of protein cargo transport by Sorting Nexin 27 and the retromer complex sorting machinery  |
| 14:50 – 15:10 | Ross Blundell<br>Adenylosuccinate synthetase as an antifungal drug target  |
| 15:10 – 15:25 | Amy Wyatt<br>Characterisation of a bleach-activated human chaperone  |
| 15:25 – 15:40 | Shane Horsefield<br>Structural basis of axonal sarm-poptosis and TRIF inhibition   |
| 15:40 – 15:55 | Janina Steinbeck<br>A molecular resolution 3D atlas of the photosynthetic machinery of green algae cells   |
| 16:00 – 16:30 | <b>Afternoon Tea</b>   |
| 16:40 – 18:30 | <b>Poster session</b>  |
| 18:45 – 19:45 | <b>Plenary Session 2: Career Advice Forum</b><br>Prof. Jenny Martin (University of Queensland)<br><i>Followed by a panel discussion with Q&amp;A</i><br><i>Chair: Evelyne Deplazes</i>                 |
| 20:00         | <b>Conference dinner &amp; drinks</b>  |
| 22:00 – 00:00 | <b>Conference social party</b>   |

## East Coast Protein Meeting 2015 Program

Sunday 26<sup>th</sup> July

|               |   |
|---------------|---|
| 08:00 – 09:00 | <b>Arrival Tea &amp; Coffee</b>   |
| 09:00 – 10:00 | <b>Plenary Session 3</b><br>Dr. Mark Kvansakul (La Trobe University)<br><i>Chair: Antoine van Oijen</i>   |
| 10:00 – 10:30 | <b>Morning Tea</b>  |
|               | <b>Session 5: Cell surface and signaling proteins</b><br><i>Chair: Matthew Horrocks</i>   |
| 10:30 – 10:50 | Thomas Ve<br>Characterisation of higher-order assembly signaling in Toll-like receptor pathways   |
| 10:50 – 11:05 | Lin Luo<br>A novel non TIR-domain-containing adaptor in Toll-like receptor signaling and inflammation   |
| 11:05 – 11:20 | Alexandra Schumann-Gillett<br>Structural characterisation of a putative intermediate in E-cadherin <i>trans</i> dimer formation   |
| 11:20 – 11:30 | <b>Group photo</b>  |
|               | <b>Session 6: Therapeutics and drug development</b><br><i>Chair: Harshad Ghodke</i>   |
| 11:35 – 11:55 | Wai Soon Eng<br>First crystal structures of <i>Mycobacterium tuberculosis</i> 6-oxopurine phosphoribosyltransferase in complex with acyclic nucleoside phosphonates whose prodrugs have antituberculosis activity |
| 11:55 – 12:10 | Philippa Stokes<br>Developing peptides to specifically target the breast cancer oncogene LMO4   |
| 12:10 – 12:25 | Mary Christie<br>Structural characterisation of stabilised human antibody therapeutics  |
| 12:25 – 12:40 | Zhong Guo<br>Engineering electrochemical protein biosensors   |
| 12:45 – 13:00 | <b>Final remarks and presentation of prizes</b>   |
| 13:00 – 14:00 | <b>Lunch</b>  |
| 14:00         | <b>Meeting closes</b>   |