

# 5<sup>th</sup> Australian Peptide Conference “From Discovery to Therapeutics” PROGRAMME

## Sunday 5th October, 2003

12:00 pm	Registration		
5:00 pm	<b>Opening Session</b>	<b>“PEPTIDES: FROM BENCH TO THERAPEUTICS”</b>	Chair: Ian Smith and John Wade <i>Sponsored by Applied Biosystems</i>
Mario Geysen (45)		Combinatorial Compound Libraries for Drug Discovery: An Ongoing Challenge	
Axel Ullrich (45)		From Gene to Therapy <i>(Sponsored by Cryptome Pharmaceuticals)</i>	
6:45 pm	<b>Dinner</b>		

## Monday 6th October, 2003

7:00 am	Breakfast		
8:30 am	<b>Session 1: “PROTEOMICS”</b>	Chair: Jochan Frantzen and Ed Nice	
Ralph Bradshaw (30)		Proteomics: Perceptions, problems and promises. <i>(Sponsored by Molecular and Cellular Proteomics)</i>	
Bill Hancock (30)		An integrated proteomics approach to the study of breast cancer.	
Reiner Westermier (30)		Redefinition of 2-D gels by the use of difference gel electrophoresis with fluorescence labelling.	
Anthony Purcell (20)		Probing the immune proteome: Biochemical and structural basis of the ligand specificity of closely related HLA alleles.	
10:20 am	Morning Tea		
10:50 am	<b>Session 2: “PEPTIDE DISCOVERY”</b>	Chair: Laszlo Otvos and David Craik	
Rob Meloen (30)		Peptide vaccines.	
Hans Vogel (30)		Antimicrobial peptides: unexpected activities and a common mechanism of action?	
Gottfried Otting (30)		Paramagnetic Tagging of Proteins: Enhanced Speed and Accuracy of Protein Analysis by NMR.	
Stephen Brennan (30)		Fibrinogen: Structure and Disease.	
Norelle Daly (20)		Diversity in the disulfide folding pathways of cystine knot proteins.	
1:10 pm	Lunch		
2:00 pm	Free Afternoon		
4:30 pm	<b>Session 3: “PEPTIDE DESIGN”</b>	Chair: Richard Lewis and Dirk Tourwe	
Dek Woolfson (30)		Designing nano-scale peptide assemblies from the bottom up.	
Dave Fairlie (30)		Macrocyclic peptidomimetics: Constraining peptides to mimic protein surfaces.	
Vincent Dive (30)		Phosphinic Peptides: New chemical entity to probe the function of zinc enzymes.	
Andrew Abell (20)		An eye to the future: Peptidomimetic-based treatments for cataracts.	
Jane Spetzler (20)		Design and preparation of high-affinity insulin agonists and antagonists using identified insulin receptor bound peptides.	
6:40 pm	<b>Dinner</b>		
8:00 pm	Poster Session A	(Coffee, cheese, port and wine)	

## Tuesday 9th October, 2001

7:00 am	Breakfast		
8:30 am	<b>Session 4: “G PROTEIN-COUPLED RECEPTORS”</b>	Chair: Mathew Vadas and Ian Gibbins	
Steve Douglas (30)		Combinatorial chemistry and cancer proteomics.	
Arthur Christopolous (30)		Biophysical and pharmacological studies of G protein-coupled receptor dimerization. <i>(Sponsored by PerkinElmer)</i>	
Wally Thomas (20)		Activation-deficient type 1 angiotensin receptors display arrestin-based class switching.	
Patrick Sexton (20)		Spatial proximity between a photolabile residue in position 19 of salmon calcitonin and the amino terminus of the human calcitonin receptor.	
10:20 am	Morning Tea + Conference Photo		
11:00 am	<b>Session 5: “HOT TARGETS”</b>	Chair: Anthony Turner and Philip Hogg	
Boris Martinac (30)		Gating of mechanosensitive channels by bilayer deformation forces.	
Andrew Clayton (30)		Novel fluorescence technologies to examine EGF receptor activation and signalling dynamics in live cells. <i>(Sponsored by Lambert Instruments)</i>	
David Kaye (30)		Arginine transport in health and cardiovascular disease.	
Rob Baxter (30)		Insulin-like growth factor (IGF)-dependent and -independent actions of IGF binding protein-3. <i>(Sponsored by Advanced Labs)</i>	
Paramjit Bansal (20)		Synthesis and structure of ertgxin (CnErg1) and HERG K <sup>+</sup> channel S5-P extracellular linker: Role of an I-helix in c-type inactivation.	
1:10 pm	Lunch	2:00 pm	Free Afternoon

4:30 pm	<b>Session 6: “SIGNALLING”</b>	Chair: Andy Giraud and Walter Thomas	
Vincent Harley (20)		Dimerization of SOX9 is not necessary for sex determination.	
Ross Bathgate (20)		The novel G protein-coupled receptors LGR7 and LGR8 are the receptors for relaxin and insulin 3.	
Soren Naaby-Hansen (20)		Proteomic analysis of receptor signalling and the effects of receptor co-stimulations.	
Fwu-Shan Sheu (20)		Different mechanisms underlying the facilitation and inactivation of voltage dependent potassium channels by nitric oxide.	
6:30 pm	<b>Dinner</b>	8:00 pm	Poster Session B (Coffee, cheese, port and wine)

## Wednesday 8th October, 2003

7:00 am	Breakfast		
8:15 am	<b>Session 7: “PEPTIDE DELIVERY”</b>	Chair: Istvan Toth and Rebecca Lew	
Frank Caruso (30)		Nanoscale coated and encapsulated colloids for biological applications.	
Oscar Simonson (20)		Bioplex, a system for non-viral gene delivery.	
Peter Moyle (20)		Development of a peptide vaccine against HPV-16 associated cervical cancer.	
Amanda Donald (20)		Conjugation of a peptide inhibitor of Gs protein signalling to different membrane permeable peptides.	
10:30	Reef Trip	For delegates not booked on the Reef tour, lunch can be taken at the resort	
6:30 pm	<b>Dinner</b>	8:00 pm	Poster Session C (Coffee, cheese, port and wine)

## Thursday 9th October, 2003

7:00	Breakfast		
8:30 am	<b>Session 8: “NEUROPEPTIDES”</b>	Chair: David Small and Roberto Cappai	
Jeff Kelly (30)		Inflammatory metabolite initiation of protein misfolding in Alzheimer's Disease.	
MacDonald Christie (30)		Do opioid peptides target multiple interacting opioid receptors?	
Paul Fraser (30)		Design of peptide-based inhibitors of islet amyloid polypeptide fibrillogenesis.	
Anthony Turner (20)		Angiotensin-converting enzyme-2 (ACE2): From discovery to therapeutics.	
Kevin Barnham (20)		Why is Aβ toxic?	
10:30 am	Morning Tea		
11:00 am	<b>Session 9: “ PEPTIDE SYNTHESIS ”</b>	Chair: Patrick Perlmutter and Geoff Tregear	
Saburo Aimoto (30)		Methodological studies for membrane protein synthesis focused on peptide segment preparation and segment condensation. <i>(Sponsored by Peptisyntha)</i>	
Yasuyuki Shimohigashi (20)		Site-directed affinity-labeling of opioid receptors by SNpys-containing enkephalin and dynorphin analogues.	
Yun-Hua Ye (20)		Synthetic methodology of head to tail cyclization of linear peptides.	
Yoshio Okada (20)		Development of orally active novel type opioid mimetics containing pyrazinone ring as spacer.	
Marie-Hélène Richard (20)		Large scale purification of synthetic peptides by reversed-phase chromatography from development to industrial process.	
1:00 pm	Lunch	2:00 pm	Free afternoon
5:30 pm	<b>Session 10: “ PEPTIDES FOR PROFITS (ROUND TABLE)”</b>	Moderators: Alan Robertson and Dick Wettenhall <i>Sponsored by Davies Collision Cave</i>	
George Morstyn	<i>Amgen</i>		
Andrew Wilks	<i>Cytopia</i>		
Victor Argaet	<i>Davies Collision Cave</i>		
Paul Alewood	<i>IMB</i>		
8:00 pm	Conference Dinner	<i>Sponsored by UCB - Bioproducts</i>	

## Friday 10th October, 2003

7:00 am	Breakfast		
9:00 am	<b>Session 11: “CHIP TECHNOLOGY”</b>	Chair: Mibel Aguilar and Jeff Gorman	
Yoon Sik Lee (30)		Microsystems for peptide synthesis and protein identification.	
Scott Weinberger (30)		New surface enhanced neat desorption SELDI protein biochip arrays for evaluating the low molecular weight proteome of nasopharyngeal swab samples of SARS patients.	
Ite Laird-Offringa (30)		Surface plasmon resonance protein-nucleic acid interaction, and drug discovery. <i>(Sponsored by Biacore)</i>	
Chris Stehmann (15)		Protein arrays - a new option for 'system wide studies' of protein networks and functions.	
Peter Kesners (15)		Magnetic bead based sample preparation combined with MALDI TOF mass spectrometry detection and pattern recognition software for clinical proteomic profiling	