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The symposium is also supported by the Australian Peptide Association, CSIRO Publishing, Frontiers in Chemistry and the Science-Community.org network.

Thursday, 12th October 2017

Registration

3:00PM - 6:00PM

Stirling Deck

Introduction and Welcome

4:00PM - 4:15PM

Stirling & Aramac Lecture Room

Opening Plenary Session

4:15PM - 6:15PM

Stirling & Aramac Lecture Room

Chairs: *John Wade & Yuji Nishiuchi*

- 4:15 PM **Andrea Robinson**
Challenging olefin metathesis with peptidomimetic synthesis *abs# 1*
- 4:45 PM **Margaret Brimble**
Synthesis of cysteine-rich antimicrobial peptides and proteins *abs# 2*
- 5:15 PM **Richard J Payne**
Accelerated protein synthesis *via* selenium-mediated ligation chemistry *abs# 3*
- 5:45 PM **Yoon-Sik Lee**
Graphical and SERS encoding system for on-bead screening of peptoid libraries *abs# 4*

The conference acknowledges the support of



Welcome Function

7:00PM - 9:00PM

Dingo Deck

Friday, 13th October 2017

Registration

8:00AM - 1:00PM

Stirling Deck

Session 2 - SPPS - Chemical Ligation

8:30AM - 10:30AM

Stirling & Aramac Lecture Room

Chairs: *Richard Payne & James Tam*

- 8:30 AM **Xuechen Li**
New tools in protein total synthesis and chemical modification *abs# 5*
- 9:00 AM **Craig A Hutton**
Exploiting thioamide reactivity in peptide synthesis and ligation *abs# 6*
- 9:30 AM **Marcel Schmidt**
Chemoenzymatic peptide synthesis (CEPS) using peptidase variants:
A more efficient and greener route for the synthesis of long peptides,
proteins and conjugates *abs# 7*
- 10:00 AM **Taku Yoshiya**
Development and application of thiol-additive-free native chemical ligation
techniques combined with several Cys modifications *abs# 8*

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Morning Tea

10:30AM - 11:00AM

Marloo Room

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Session 3 - SPPS Methodology

11:00AM - 1:00PM

Stirling & Aramac Lecture Room

Chairs: *K. Johan Rosengren & John Offer*

- 11:00 AM **Daniel Samson**
Deletion sequences in Fmoc SPPS – Root cause analysis and
prevention strategies *abs# 9*
- 11:30 AM **Yahya E. Jad**
Green strategies for solid-phase peptide synthesis (GSPPS) *abs# 10*
- 11:50 AM **Amit Mehrotra**
How to overcome the bottlenecks in the peptide synthesis workflow *abs# 11*

12:10 PM **Yuji Nishiuchi**
Better peptides via chemical glycosylation *abs# 12*

12:30 PM **Jonathan Collins**
Optimized peptide synthesis at elevated temperature *abs# 13*

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Lunch & Free Afternoon

1:00PM - 4:30PM

Maheno Restaurant

Session 4 - SPPS - Functionalization & Analogues

4:30PM - 6:30PM

Stirling & Aramac Lecture Room

Chairs: *Markus Muttenthaler & Xuechen Li*

4:30 PM **Ryo Okamoto**
Total chemical synthesis of *O*-GalNAcylated antifreeze glycoprotein using
the switchable reactivity of peptidyl-*N*-pivaloylguanidine *abs# 14*

5:00 PM **M. Akhter Hossain**
Synthesis and structure-activity relationship study of insulin and relaxin-like
peptides *abs# 15*

5:20 PM **Mitchell R Silk**
Parallel and antiparallel cyclic D/L peptide nanotubes *abs# 16*

5:40 PM **John A Karas**
Total chemical synthesis of an intra-A-chain cystathionine human insulin
analogue with enhanced thermal stability *abs# 17*

6:00 PM **Mark P Del Borgo**
Incorporating function into peptide-based materials *abs# 18*

The conference acknowledges the support of

BACHEM

Dinner amongst friends

7:00PM - 8:00PM

Sand Bar

Poster Session

8:00PM - 10:30PM

Please refer to the poster listing on page 18

Marloo Room

- 11:50 AM **Laszlo Otvos**
Transdermal administration of proline-arginine-rich host defense peptides *abs# 26*
- 12:20 PM **Shouping Liu**
Design and synthesis of lipopeptides as potent antimicrobial agents by solid phase peptide synthesis *abs# 27*
- 12:40 PM **Ralf Hoffmann**
Peptide arrays for mapping of viral epitopes and serological detection of murine norovirus infections *abs# 28*

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Lunch & Free Time

1:10PM - 3:00PM

Maheno Restaurant

Session 7 - SPPS Applications - CPPs & drug delivery

3:00PM - 5:00PM

Stirling & Aramac Lecture Room

Chairs: *Denis Scanlon & Taku Yoshiya*

- 3:00 PM **Fabienne Burlina**
Design and study of cyclic cell-penetrating peptides *abs# 29*
- 3:30 PM **Fazel Shabanpoor**
Identification of a blood-brain barrier penetrating peptide for systemic brain delivery of morpholino oligonucleotides *abs# 30*
- 3:50 PM **Aline Dantas de Araujo**
Selenoethers as surrogates of disulfide and thioether bonds: Synthetic methods and applications in cyclic peptides *abs# 31*
- 4:10 PM **Markus Muttenthaler**
Multivalent ligand design – Chemistry and applications *abs# 32*
- 4:30 PM **Yoshio Hayashi**
3-Nitro-2-pyridinesulfonyl resin-mediated solid-phase disulfide ligation for the synthesis of cyclic peptides and peptide-drug conjugates *abs# 33*

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Closing Plenary Session

5:00PM - 6:45PM

Stirling & Aramac Lecture Room

Chairs: *Andrea Robinson & Margaret Brimble*

5:00 PM

Gilles Subra

Solid phase syntheses of silylated hybrid peptides, precursors of peptide dimers, polymers and materials

abs# 34

5:30 PM

James P. Tam

Peptide ligase as site-specific superglue

abs# 35

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Australian Peptide Association

Advancing peptide research,
technology and drug discovery

Conference Dinner

7:30PM - 10:30PM

Upper Poolside

Sunday, 15th October 2017

Transfer to the Australian Peptides Conference

10:30AM - 2:15PM

10:30AM

Ferry transfer from Kingfisher Bay Resort to Mainland Reception River Heads.

11:40AM

Bus transfer from Mainland Reception River Heads to the 12th Australian Peptide Conference venue (Peppers Noosa Resort).

ca 2:15PM

Arrival at Peppers Noosa Resort.

Bookings are essential. Please contact ASN staff onsite for bookings.

POSTER LISTING

Poster Session

Friday 13th October 2017, 8:00 pm - 10:30 pm

Marloo Room

Hoi Yee Chow

Total synthesis and medicinal chemistry of daptomycin

abs# 41

Chuankai Dai

Synthesis of a self-adjuvanting *Group A Streptococcus* nanovaccine using solid phase peptide synthesis

abs# 42

Aimee Horsfall

On-resin introduction of a new fluorescent peptide constraint

abs# 43

Yahya Jad

Synthesis and biological evaluation of Teixobactin analogues

abs# 44

Yahya E. Jad

Coupling reagents: Oxyma overcoming benzotriazoles

abs# 45

Marc-André Kasper

Chemoselectively induced cysteine-conjugation to unsaturated phosphoramidates for the side-selective generation of peptide-protein conjugates

abs# 46

Harveen Kaur

The effect of site-specific advanced glycation endproducts (AGE) on the β -amyloid peptide

abs# 47

Iman Kavianinia

Naturally occurring AHMOD-containing peptaibiotics, a promising source for the development of a new class of drugs

abs# 48

Heng Liu

Chemical biology study on high mobility group A protein (HMGA) post-translational modifications

abs# 49

Simon J Mountford

First total synthesis of PE2: A polypeptin with broad spectrum antibiotic activity

abs# 50

Jo Sampson

Cyclic peptides: Building blocks for novel nanotubes

abs# 51

Varsha Thombare

Solid phase synthesis of celogentin C

abs# 52

John D Wade

The preparation of tetrameric proline-rich antimicrobial peptides against nosocomial Gram-negative bacteria

abs# 53

Durga Prasad Yarra

Novel, modified dynorphin peptides for chronic pain and inflammation

abs# 54

Praveen Praveen

A single-chain derivative of the relxin hormone is a functionally selective agonist of the G protein-coupled receptor, RXFP1

abs# 55

Yue Zhang

Ortho-phthalaldehyde (OPA) and its derivatives in lysine selective bioconjugation via phthalimidine formation (PT ligation)

abs# 56

Max J Cryle

SNaPe: a versatile method to generate multiplexed protein fusions using synthetic linker peptides for *in vitro* applications

abs# 57

Lauren Blakeley

Solid-supported peptidic N-Heterocyclic Carbenes: Building blocks towards multifunctional supported catalysis

abs# 58

Wioleta Kowalczyk

Thrombopoietin receptor antagonists – synthesis and biological evaluation

abs# 59

Cyf Ramos-Colon

Fast and efficient automated, on-resin synthesis of disulfide-bridged type-II diabetes-related peptide Amylin

abs# 60

Cyf Ramos-Colon

Efficient synthesis of 84-mer human Parathyroid hormone for the study of osteoporosis and hypoparathyroidism

abs# 61

Andrew R Duggan

Do you care about the quality of the peptides you synthesize?

abs# 62

Amit Mehrotra

High performance flash chromatography. An alternative technique to rapidly and efficiently purify crude synthetic peptides

abs# 63

Thomas Bruckdorfer

Convenient method of peptide hydrazide synthesis using a new hydrazone resin

abs# 64