Chapter Name: Australian Chapter of the Controlled Release Society

Date Established: 2007

Chapter Board/Leadership Council (list names and positions):

Prof Ben Boyd
Monash Institute of Pharmaceutical Sciences
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Vice-Chair:
Dr Pavla Simerska
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Scientific Secretary:
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Secretary:
A/Prof Daniela Traini
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Treasurer and Sponsorship Coordinator:
Dr Tim Barnes
School of Pharmacy
University of South Australia
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Total number of chapter members: The Australian Chapter does not keep a formal membership. Over 100 people attended our 2014 event as an indication of interest in CRS science.

2013-2014 Chapter Activities:

1. 7th Annual Meeting of the Australian Chapter of the Controlled Release Society, was run at the Woolcock Institute for Medical Research, University of Sydney in October 2013 and was the subject of a December report to the Board, a CRS Newsletter article, and a Special issue of Current Drug Delivery (in progress).

2. Event Name and date: 8th Annual Meeting of the Australian Chapter of the Controlled Release Society, was run in conjunction with the 5th FIP Pharmaceutical Sciences World Congress, Melbourne, Australia 13-16 April 2014

Drug Delivery Australia- CRS Australian chapter had a dedicated day on Wednesday the 16th of April 2014.

There were two different Symposia session dedicated to:

1. Self Assembly Drug Delivery:
   Chair: Clive Prestidge (Australia)
   - 10.30 – 11.00 Nanovaccines: Istvan Toth, University of Queensland, Australia
   - 11.00 – 11.30 Polymeric micelles for drug delivery in cancer: Vladimir Torchilin, Northeastern University, Boston, USA
   - 11.30 – 12.00 Controlling structural transformations between bicontinuous and other lipid liquid crystalline materials for drug delivery: Ben Boyd, Monash University, Melbourne, Australia

2. Pulmonary Delivery:
   Chair: Paul Young (Australia)
   - 13.00 – 14.30 Drug absorption in the lungs - uptake and efflux transporters: Carsten Ehrhardt, Trinity College, Dublin, Ireland
   - 13.00 – 14.30 Ex vivo and in vivo siRNA delivery to activated T cells as novel anti-inflammatory asthma therapy: Olivia Merkel, Wayne State University, United States
   - 13.00 – 14.30 Inhalation of rifapentine dry powder to shorten tuberculosis treatment: Daniela Traini, The University of Sydney, Australia

3. Submitted DDA Orals:
   Chair: Istvan Toth (Australia)
   - 14.30 – 14.45 Surface Acoustic Wave (SAW) Atomization of Therapeutic Antibodies for Pulmonary Delivery: Christina Cortez-Jugo (Australia)
   - 14.45 – 15.00 Liposome based vaccine delivery system against malaria: Ashwin Giddam (Australia)
   - 15.00 – 15.15 Enhanced local delivery of topical anaesthetics: Anthony Raphael (Australia)
15.15 – 15.30  An aptamer-based siRNA in vivo delivery system targeting cancer stem cells - Tao Wang (Australia)

4. DDA Submitted Orals:  
   Chair: Tim Barnes (Australia)  
   16.30 – 17.00  Aqueous remote loading of protein therapeutics in PLGA microspheres (30 min), Steven Schwendeman (USA)  
   17.00 – 17.15  Fabrication of mupirocin-encapsulated PLGA nanoparticles for the delivery to biofilms, Nicky Thomas (Australia)  
   17.15 – 17.30  Polymer-functionalised silica lipid hybrid materials that enhance the solubilization and oral absorption of poorly water soluble drugs, Clive Prestidge (Australia)  
   17.30-18.00 DDA Poster Prizes, DDA Closing Remarks, and AUS-CRS AGM

- Attendee total: 100 of over 1500 FIP attendees
- Photographs and a brief description of the event:  
The Annual Meeting of Drug Delivery Australia, Australian Chapter of the CRS 2014 was held at the Convention Centre in Melbourne concurrently to the 5th FIP Pharmaceutical Sciences World Congress, Australia 13-16 April 2014 at the same venue.

DDA 2014 Conference Room

The meeting included Plenary lectures from Isvan Toth (University of Queensland, Australia) and Carsten Ehrhardt, (Trinity College, Dublin), as well as a very strong array of invited international speakers including Vladimir Torchilin, Northeastern University, Boston, USA) and Olivia Merkel, (Wayne State University, United States)

The conference also offered a great opportunity to showcase Australian research in Drug Delivery with invited talks from Ben Boyd (Monash University), Daniela Traini (Woolcock Institute for Medical Research, Sydney), Clive Prestidge (Ian Walk Institute, Adelaide).
Dr Traini presentation on Tuberculosis in the pulmonary delivery session

Complimenting the excellent invited presentations, were contributed talks in the DDA Submitted and Contributed oral sessions, and an excellent poster session, comprising over 50 poster presentations across all areas of drug delivery. The posters were all excellent quality and the student presenters should all be congratulated on the presentation of their work.

- The best student poster presentations were selected for two prizes of $1000 subsidy to attend the Edinburgh CRS Annual Meeting, with 3rd and 4th winning book vouchers.
The Top 3 Student Poster winner at DDA2014

- **Event funding methods (registration fee, sponsorship, etc.):**
  1. Registration was included in the FIP Conference
  2. Sponsorship was not necessary since DDA-CRS was part of the FIP event

- **Event Highlights (specifically focus on the actions taken to create a successful event):**
  1. The invited speakers were represented from several different fields and included experts, not only from academia but also from the government institutions and industry.
  2. Talks covered wide range of topics under the Micro to Nano for different pharmaceutical applications
  3. Running in concomitance with FIP encouraged discussion about key issues and encouraged cross-collaboration in different fields. Furthermore enabled an extremely strong showing of invited speakers for the DDA Meeting.
  4. Venue – easy to access for delegates is more encouraging, low cost frees up funding to invest in more international speakers
Sharing success (highlight how other chapters can achieve such a success):

1. The active partnership with the larger FIP Conference allowed access to higher quality speakers than would be able to be attracted to the stand alone meeting, flowing on to higher attendance at the symposium, and awareness of CRS. The strong international flavour also was helped in this regard – there were 9 Australian interstate speakers, 3 from USA and 1 from Development of Pharmaceutical Therapeutics.

2. From Biological Imaging to Delivery System Optimisationm the speakers illustrated the diversity and internationality of attendees.

3. To assist in promoting attendance at the upcoming Australian Chapter DDA 2015 meeting (below), the speakers were required to pay for their travel and accommodation expenses but receive free registration for the DDA meeting in Sydney.

2014 (future) Chapter Activities:

- Planned event name: “Methods and techniques for material science characterization”. This theme is highly relevant for the pharmaceutical industry as well as to biopharmaceutical start up companies. It will attract scientists from academia and industry, both in the pharmaceutical field and the life sciences in general. This would be the 7th workshop in a series that the AUS-CRS has presented in conjunction with the NZ Chapter.

- Tentative Dates: The 7th Joint Australia-New Zealand Chapters of the Controlled Release Society Workshop will be held at the University of Adelaide.

- Planned event dates: 23rd and 24th October 2014.

- Plans for success (how chapter plans to make event a success):
  - Location – Adelaide is easy to access for students in Australia and NZ
  - Free registration for students, as university venue is being used.

2015 (future) Chapter Activities:

- Planned event name: Drug Delivery Australia (DDA) 2015 will be held in Brisbane.

- Planned event dates: tba, probably last week October.

- Plans for success (how chapter plans to make event a success):
  - Student prizes again for travel to CRS 2016
  - Location – Brisbane is easy to access
  - Low registration costs as university venue is being used.
  - Conference Dinner included in the registration.

Chapter’s involvement with CRS

- Chapter committee is now disbanded. Several regular Chapter members hold board positions at CRS.

- Publication in the CRS newsletter – The Australian Local Chapter has published in the CRS newsletter on several occasions, including an article on the DDA2013 meeting.