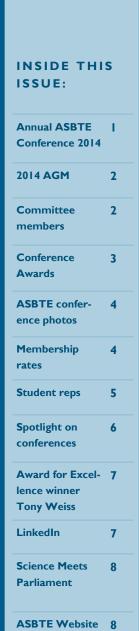
THE
AUSTRALASIAN
SOCIETY FOR
BIOMATERIALS &
TISSUE
ENGINEERING



ASBTE NEWS

JUNE 2014

Annual Conference in Lorne Victoria





The 23rd Annual ASBTE Conference was held at the beautiful Mantra Resort, Lorne VIC 22nd to 24th April, 2014. The conference was a great success attracting delegates from across Australia, New Zealand and more than 10 other countries. Particularly noteworthy was the Clinical Symposium that provided examples of how clinicians and clinical researchers are utilising biomaterials in a variety of clinical settings. Throughout the conference, young investigators chaired most of the sessions, doing an outstanding job with this. Antimicrobial materials and coatings were also a particular focus of this conference, with a plenary presentation and 2 symposia on this topic. The conference chairs Helmut Thissen and Keith McLean did a fantastic job organising. Big thanks go also to the conference organising committee and professional conference organisers Arinex. Finally, the conference wouldn't have been a success without support from our sponsors: Melbourne Materials Institute, Wound Management Innovation CRC, CSIRO, Cell Manufacturing CRC, Australian National Fabrication Facility (National and South Australian node), Philips Ormonde Fitzpatrick, ATA Scientific, Scanco Medical, Maverick Biomaterials, Evonik Industries and Cambridge University Press.

ASBTE NEWS is a biannual newsletter that covers news from The Australasian Society for Biomaterials & Tissue Engineering. If you have a news item that you wish to be included please contact the editor:

Bryan Coad (Bryan.Coad@unisa.edu.au)

Society Business

The Annual General Meeting of the Society

The society's AGM was held in conjunction with the conference. The Annual General Meeting of the ASBTE was



Executive officer Helmut Thissen and outgoing president Lisbeth Grøndahl

an opportunity to review the past year, where the society has maintained a healthy budget position while being able to support a large number of students and young investigator members by providing lab travel awards and conference travel awards as well as members attending Science meets Parliament. A new ASBTE committee and new ASBTE student representatives (see details below) were elected at the AGM. In addition, Laura Poole-Warren and Justin Cooper-White were confirmed as delegates to the International Union of Societies for Biomaterials Science and Engineering (IUSBSE) and Kate Fox as the delegate to the advocacy body Science & Technology Australia (STA). Lisbeth Grøndahl and Megan Lord will chair the 2015 Annual Meeting, which will be held in Sydney in conjunction with the 5th International Symposium on Surfaces and Interfaces of Biomaterials (ISSIB).

ASBTE Committee 2014 - 2015

Introducing this year's ASBTE committee members:



(left to right): **Travis Klein** (ordinary member), **Helmut Thissen** (Executive Officer), **Lisbeth Grøndahl** (Vice President), **Tony Weiss** (ordinary member), **Bryan Coad** (ordinary member), **Rodney Dilley** (Representative for Western Australia), **Tim Woodfield** (President). *Absent*: **Penny Martens** (Treasurer and Secretary), **Veronica Glattauer** (ordinary member).

2014 ASBTE Annual Conference Awards

Best Poster in Micro/nano fabrication award sponsored by Australian National Fabrication Facility South Australian node



Stephanie Müller and Bryan Coad

Congratulations goes to Stephanie Müller from the University of Siegen Germany for her poster "POEGMA brush coating of nanoporous alumina: Synthesis, characterization and cell-surface interaction tests". Stephanie won \$1000 in facility access to the ANFF-SA node at the University of South Australia.

ASBTE Best Poster Award



Javad Jafari and Tim Woodfield

Congratulations goes to Javad Jafari from the University of Melbourne for his poster "Magnetic manipulation of cells for soft tissue engineering".

Best Oral Presentation (Early Career Researcher) sponsored by Phillips Ormonde Fitzpatrick



Justine Roberts and Grace Chan

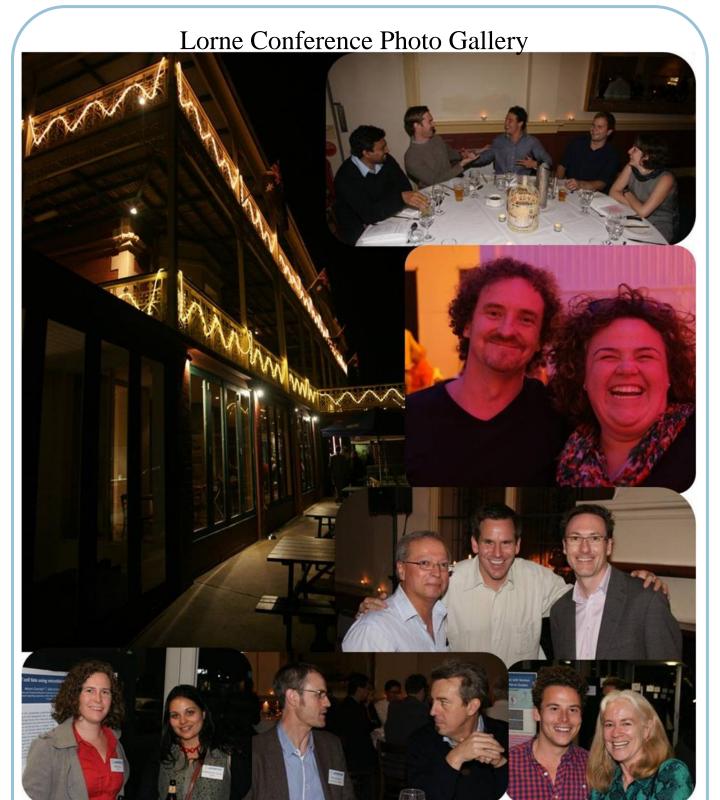
Congratulations goes to Justine Roberts from the University of Colorado (now UNSW Australia) for her presentation "Hyaluronan binding peptides aid in hyaluronan retention for tissue engineering applications".

Best Oral Presentation (Student) sponsored by Phillips Ormonde Fitzpatrick



Aaron Dingle and Grace Chan

Congratulations goes to Aaron Dingle from the O'Brien Institute and University of Melbourne for his presentation "Engineering organ specific microvasculature for liver tissue engineering ".



If you have a suggestions for newsletter spotlight articles such as lab profiles or have recently published an exciting article of interest to ASBTE members please contact the editors:

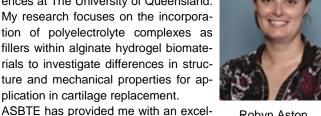
Bryan Coad (bryan.coad @unisa.edu.au) & Veronica Glattauer (Veronica.Glattauer @csiro.au))

Membership Rates: Full Member (Calendar Year) \$80; Student Member (Calendar Year) \$40. Membership forms are available at www.biomaterials.org.au

Our 2014/15 ASBTE Student Representatives

Queensland

My name is Robyn Aston and I am a third year PhD student from The School of Chemistry and Molecular Biosciences at The University of Queensland. My research focuses on the incorporation of polyelectrolyte complexes as fillers within alginate hydrogel biomaterials to investigate differences in structure and mechanical properties for application in cartilage replacement.



Robyn Aston

lent opportunity to disseminate my re-

search, network and socialise with academics, other professionals and students in the biomaterials field. I look forward to my position as a student representative in the organisation of networking events for student members. I can be contacted at robyn.aston@uqconnect.edu.au if any current or prospective student members have any questions about the society or for the organisation of student activities.

Victoria

My name is Peter Koegler and I'm a third year PhD student at Swinburne University of Technology as well as CSIRO Materials Science and Engineering, both in Melbourne, and can be reached via Peter.Koegler@csiro.au or pkoegler@swin.edu.au. I've obtained my Bachelors and Masters Degree from Reutlingen University in Germany with a major in Polymer Chemistry. Currently I'm working on colloidal assemblies and surface modification strate-



Peter Koegler

gies to control biointerfacial interactions. As an ASBTE student representative here in Victoria I'm looking forward to organise regular get-togethers with invited speakers, giving particularly students the opportunity to meet and interact with their peers and senior researchers.

New Zealand

My name is Seamus Tredinnick and I make better hips and knees! I'm writing up my PhD thesis in the development of an additive manufactured titanium scaffold which is now being used clinically in total joint arthroplasty devices. I am based at the University of Canterbury but I've worked extensively at Otago University both in Dunedin and at the Christchurch School of Medicine,



Lincoln University, and most recently at Seamus Tredinnick

the Queensland University of Technology. Originally I'm a mechanical engineer and I have worked with a number of medical device companies. I'm passionate about med-device development and collaborative research with a strong clinical focus. The ASBTE is a fantastic group of people who support young researchers to work along side experts in the field and put their research out on the world stage. Contact me at seamus.tredinnick@pg.canterbury.ac.nz to find out how we can help you.

New South Wales

My name is Ulises Aregueta and I am a second year PhD student in the Graduate School of Biomedical Engineering at the University of New South Wales. I obtained by B.S. in Biomedical Engineering (IPN, México) and I hold a M.Sc. in Biotechnology (ITESM, México). My PhD project is focused on three-dimensional neural cultures in hydrogels with the purpose of using the neurons as an extension of electrodes to address issues on neural interfaces.



Ulises Aregueta

My main goal is to develop the skills to perform high impact research in neural tissue engineering and as student representative I am looking forward to provide students with a social network to share their work, ideas and suggestions in the field of tissue engineering. Feel free to contact me at u.areguetarobles@student.unsw.edu.au

South Australia

My name is Morteza Kafshgari and I'm a third year PhD student at the University of South Australia (Mawson Institute). I have obtained my Master's Degree from the University of Sistan and Baluchestan in Iran with a major in Chemical engineering. Currently I'm working on porous silicon nanoparticles to diver therapeutic agents (anticancer drugs, oligonucleotides and nitric oxide) and also seeking smart surface functionalization strategies for the porous



Morteza Kafshgari

silicon nanoparticles to enhance target delivery accompanied by a control sustained drug release. I am a new ASBTE representative in South Australia, and if you have questions regarding the society, and its activities, please contact me at hasmy023@mymail.unisa.edu.au

ASBTE Student representatives organise student gettogethers, lectures, and special events for ASBTE students. Contact them to join or suggest any activities of interest.

Spotlight on Conferences

ASBTE Annual Conference 2015

5th International Symposium on Surfaces and Interfaces of Biomaterials held in conjunction with the 24th Annual Conference of the Australasian Society for Biomaterials and Tissue Engineering (ASBTE) Sydney, Australia 7 – 10th April, 2015

World Biomaterials Congress 2016



WBC2016.org

Other Major Conferences

Conference	Location	Dates	Deadlines	Website
NanoBio Australia 2014	Brisbane, Australia	6 – 10 Jul. 2014	Registration still open	www.icbni.com.au
Australian Biomedical Engineering Conference (ABEC 2014)	Canberra, Australia	20 – 22 Aug. 2014	Abstract deadline 20th June, 2014	abec2014.iamevents.com.au
European Society for Biomaterials	Liverpool, England	31 Aug – 3 Sep. 2014	Early-bird registration 15 th June, 2014	esb2014.org
Tissue Engineering and Regenerative Medicine International Society-Asia Pacific Meeting (TERMIS- AP 2014)	Daegu, Korea	24 – 27 Sep. 2014	Late-Breaking Poster Abstracts: 31 Jul. 2014	www.termis.org/ap2014
International Conference of Repair, Regeneration and Reconstruction	London, England	25 – 27 Sep. 2014	Abstracts deadline: 1 st July, 2014	icr3.org
Matrix Biology Society of Australia and New Zealand	Queenscliff, Australia	26 – 29 Oct. 2014	Abstracts deadline 23 July, 2014	mbsanz2014.com.au/
Advanced Materials & Nanotechnology (AMN7)	Nelson, New Zealand	8 – 12 Feb, 2015	Abstracts deadline 31 July 2014	www.amn-7.com
ASBTE / International Symposium of Surface and Interface of Biomaterials	Sydney, Australia	7 – 10 Apr. 2015	Accepting abstracts from 1 st October, 2014	www.issib2015.smalitalkevents.com.au
Tissue Engineering and Regenerative Medicine International Society World Congress 2015	Boston, USA	8 – 11 Sep. 2015	To be announced	www.termis.org/ meetings worldcongress.php
World Biomaterials Congress	Montreal, Canada	18 – 22 May 2016	Call for symposia opens 15 Sep 2014. Abstracts open early 2015.	wbc2016.org

Profile of ASBTE Award for Research Excellence winner Tony Weiss

The ASBTE Award for Research Excellence recognises a member of the society who has made a significant contribution to the fields of Biomaterials and Tissue Engineering.

The recipient for 2014 was Tony Weiss, Professor of Biochemistry & Molecular Biotechnology at the University of Sydney.



One of the challenges of biomaterials is to translate novel research outcomes to innovative products that improve patient healthcare. Tony's research is a good example of "bench to bedside" translational research. He is the most prolific tropoelastin researcher over the last decade and has the most cited set of tropoelastin-subject publications from the last 10 years.

As the world leader in molecular studies on human tropoelastin, Tony has found ways to drive its assembly to make three dimensional elastin protein biomaterials. Now, elastin research had been transformed by developing tropoelastin into structures that can be used for cardiovascular, lung and skin repair. He pioneered the large scale production of clinical grade tropoelastin which has facilitated 3 clinical trials focused on delivering tropoelastin molecular constructs into human tissue. The first products are scheduled to appear in the European market with a CE mark in 2014. This is likely to result in improved therapies that include replacement skin repair components to treat burn victims and his replacement blood vessels.

A strong portfolio of intellectual property attracted the attention of venture-capital funding. An outcome of this has led to foundation of Elastagen Pty Ltd – a biotech company that successfully transitioned to skin repair and augmentation treatments with the goal of providing next generation medical and cosmetic treatments (www.elastagen.com).

ASBTE is proud to have Tony involved with the society, this past year serving as committee member. He provides a fantastic example of the impact of biomaterials on patient outcomes and a fine example of the possibilities of Australian Research.

Tony Weiss was awarded with the ASBTE Award for Research Excellence at the Annual Conference dinner in Lorne, on 23rd April, 2014.

Contributions and editing by Jerome Werkmeister and Bryan Coad

ASBTE on LinkedIn

The ASBTE group on LinkedIn provides the latest news and discussions for society members.



If you are a LinkedIn member, search for "ASBTE - The Australasian Society for Biomaterials and Tissue Engineering" in groups and request to join the group. Or type in the following web address:

www.linkedin.com/groups?home=&gid=6512061

If you are not a member of LinkedIn, start by registering today. It's free!

Photo credits:

Special thanks to Keith McLean for supplying all of the conference photos in this newsletter.

Science Meets Parliament

Report from Ashkan H. Tehrani, PhD Candidate, Queensland University of Technology

"Science meets Parliament" was an event that demonstrated the social value of science and research. During the course of the event, I interacted directly with some senior industry leaders, delegates from other institutes and universities and journalists.

On day one we participated in workshops and heard from a range of people including ministerial advisers, journalists and science communicators. I also had a chance to meet with my fellow delegates where we learnt how to effectively communicate with parliamentarians and the media by "selling" our research as a product.

Science meets Parliament (SmP) brings together about 200 of Australia's top scientists and puts them face to face with the decision makers in Canberra. This year, the ASBTE supported two members to travel to SmP and report on their experiences.

On the second day, we gathered at Parliament House for meetings with parliamentarians where I had the chance to

> meet with the honourable Sharon Bird (shadow minister vocational education. ALP) in a face to face meeting and discuss my research area and interests know her get to perspective of my research. I also had the opportunity to participate in other programs running over the course of the day including lunchtime at the National Press Club.



A Photo from the first day of the event (17th March). Ashkan (second from left) and fellow delegates

Report from Aaron Dingle, PhD Candidate, O'Brien Institute, St Vincent's Hospital, University of Melbourne

The 14th annual Science meets Canberra was held in March this year over two days at the National Gallery and Parliament House. The event provided an opportunity for scientists from around Australia and members of parliament to have an open and frank discussion on how policy is made and how science policy can be improved. The key message was that scientists need to initiate and maintain constructive dialogues with government members in order to best serve the future of science in this country. One of the party leaders asked one thing of everyone at the meeting: that scientists commit themselves to being 99% scientist and 1% politician (and, of course, vice versa for the politicians). The event covered media training with

experts from print news and online publishing as a means of having your voice heard, as well as how the policy process works and how to handle political meetings. In communication, preparation is key so try to keep things short and simple without sacrificing the overall message. Also, don't be afraid to get your science out of the lab. More information is available through Science & Technology Australia's weh site (scienceandtechnologyaustralia.org.au) and I would strongly encourage you to get involved.

I would like to thank Australian Society for Biomaterials and Tissue Engineering for such and amazing opportunity and for supporting my attendance at this meeting as a student representative of ASTBE through Science and Technology Australia.

ASBTE Website www.biomaterials.org.au

Any member wishing to supply news items, links, PhD scholarships, job listings, or other relevant information to the *website* should contact the Executive Officer (Helmut.Thissen@csiro.au)