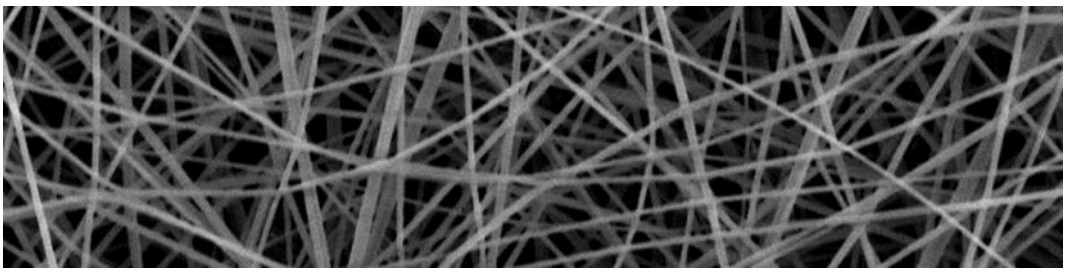
THE AUSTRALASIAN SOCIETY FOR BIOMATERIALS & TISSUE ENGINEERING

ASBTE *NEWS*

AUGUST 2018

INSIDE THIS ISSUE:



From the President

Penny Martens

Hello all and greetings from the Presidency. I am very pleased to be leading the society during these exciting times. My goal as President is to make our society even better and stronger than it already is.

In April we had a very successful meeting in Perth, our first in WA. I know many of you were there and will agree that it was an outstanding meeting with great talks, inspiring science, and lively networking in a wonderful venue. I would like to thank the organisers, Iyer, Rod and the whole team, for organising such a great meeting.

As discussed at our AGM, there are few exciting things over the coming year. First, two new initiatives are being developed: our Equity, Diversity and Inclusion Policy, as well as an ECR Award. Please watch your inboxes for drafts of these policies as we want your input before we finalise them.

Next year's meetings are also going to be a bit different. In late March/early April we are going to run a student focused 1-day event, followed on the next day by a Society Strategy day. Plans for both are being made now, so if you have any thoughts on what you would like covered, please send through your suggestions. I would really love to have as many of our students and full members attend on the strategy day (either in person or via Skype), as I have found that we always run out of time at our AGM to discuss the important things. Also, it is about time that we have a think about what we, as a society, want to be and where we want to go in the future.

Don't worry if you feel this format means you are missing out on presenting your great science, we have a solution. The Asian Biomaterials Congress is being held in Brisbane in Oct, and we will use that to hold our normal ASBTE scientific talks. Thus, I strongly encourage all of you to attend both our strategy day, and the Asian Biomaterials Congress.

As always, I love to chat, so you have any ideas or issues that you would like to discuss, please feel free to reach out.

Penny Martens

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 editors. Veronica Glattauer (veronica.glattauer@csiro.au) and Bryan Coad (bryan.coad@adelaide.edu.au)

ASBTE 2018 Conference Wrap Up

This year's annual conference of the Australasian Society for Biomaterials and Tissue Engineering was held in Freemantle, Western Australia. Over 180 delegates attended with international and local academics, clinicians and industry participants.
The conference was officially opened by Western Australian Chief Scientist Professor Peter Klinken who made special mention of the importance of biomedical research and achievements.

The conference kicked off with plenary speaker Professor Fiona Wood who spoke about the role of nanoscience in tissue engineering.
Science sessions covered a breath of topics, Bioprinting, Biosensing, Stem cells and Cell Therapies, and drug delivery.
This year's ASBTE Award of Research Excellence was awarded to Dr Thilak Gunatillake for his achievements and contributions to Biomaterials.

Prof. Peter Klinken

Prof. Fiona Wood

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! au.linkedin.com

Annual General Meeting of the Society

The Annual General Meeting was held on 4th of April in Freemantle WA. 34 members attended. The president, treasurer, and executive officer all presented their reports summarising the major activities over the past year. A summary of activities related to FASTS, website/social media, awards, and the IUSBSE were also presented.

Elections were held to determine the composition of the committee. Penny Martens was elected as new president while Helmut Thissen became vice-president. The current Executive officer, and Treasurer were re-elected. Five nominations for the four ordinary member positions and so these positions were determined by a vote. Following this, the non-elected positions were assigned, giving us state and student representation across nearly all areas of Australia and New Zealand.

The society then discussed future ASBTE conferences/meetings. ASBTE will be supporting the Asian Biomaterials Congress planned for mid-October 2019 in Brisbane. Also in 2019, ASBTE will host a combined Student/ECR Symposium and Strategic Planning day and annual general meeting. This is an open-attendance meeting planned to highlight the current research from students/ECRs as well as to discuss the future direction of ASBTE and strategic alliances. The proposed date for this event is still under discussion but targeted near Easter 2019.

Helmut put forth an initial idea for a new Early Career Researcher award. This will be discussed in the coming months.

Penny introduced a draft Gender and Diversity Policy. This policy is currently being discussed within the committee and will be circulated to members for discussion.

We also recognised the service of Helmut Thissen as past president. Helmut provided excellent leadership and has left a good legacy for the society.

Full details of the AGM were summarized and sent to members by email. If you would like further details or a copy of the minutes, please do not hesitate to contact me.

Bryan Coad, Executive Officer

Introducing this year's ASBTE committee members

Penny Martens (President)

Helmut Thissen (Vice-President)

Bryan Coad (Executive Officer)

Jelena Rnjak-Kovacina (Treasurer)

Veronica Glattauer

Travis Klein

Khoon Lim

Neil Cameron

Ordinary members

2018/19 Student Representatives

I did a bachelor's in material science. Then, my keen interest in chemical and biomedical engineering urged me to pursue a master's degree in that field. For this reason, as a PhD candidate, I started a bio-related computational modelling with specific focus on oxygen diffusion in the kidney. Following this main project, I am also working on the 3D printed diamond structures in order to tune flexibility and stiffness simultaneously. This promising structure can be used as a bone scaffold in tissue engineering.
Currently, I am in first year of the PhD program at Murdoch University and enjoying every step of this period.

Azin Azad,WA

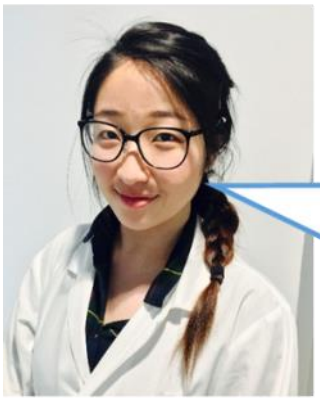
I am a first year PhD student at Monash University in the department of Materials Science Engineering where I work on hydrogel scaffolds for bone-tendon interface repair. Common and well-known injuries of the bone-tendon interface are the tennis elbow and jumper's knee. As the bone-tendon interface does not restore to its natural anatomy after injury, there is an increase chance of re-injury and prolonged disability. The anatomy of the bone-tendon interface is complex, consisting of four zones within a length of 1 mm. The overarching goal of this project therefore, will be to develop a tissue engineered bone-tendon interface mimicking this complex native biochemical, biomechanical, and cellular properties of the different zones of the bone-tendon interface. I am supervised by Dr. Jess Frith, Prof. Rocky Tuan, and Prof. Neil Cameron.

Ilze Donderwinkel, Vic

I finished my bachelor of Pharmacy at the University of Barcelona in 2013. After working for a year in the private sector I started a Masters of Bioengineering at The Chemical Institute of Sarria, in Barcelona, doing a Master Thesis at the Institute of Medical Engineering and Sciences at MIT, Boston. Currently, hI am in my second year of PhD in the Centre of Regenerative Medicine at Queensland University of Technology, led by D/Prof Dietmar W. Hutmacher. He is developing a patient-specific humanised animal model of multiple myeloma with 2 main objectives; first, to use it as a novel preclinical platform for drug discovery and development for innovative multiple myeloma therapies, with a special focus on CAR-T cell therapy testing and secondly, to study the interactions between myeloma cells and their microenvironment, focusing on the dormant cells subpopulations.

Alvaro Sanchez

2018/19 Student Reps.

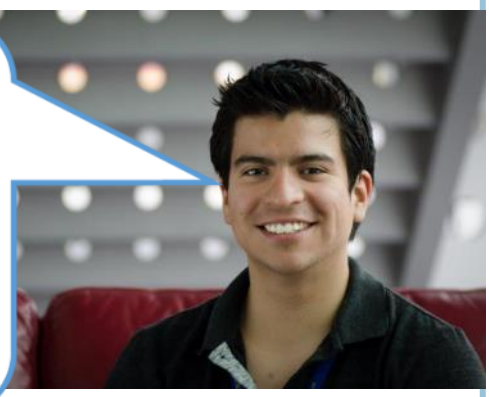


Huan Ting Ong (Ting)

I am currently a 2nd year PhD candidate at the Ear Science Institute Australia and the University of Western Australia. My PhD project investigates cell-to-cell interactions between mesenchymal stem cells and skin during wound healing. I look at the signals the stem cells produce and regulate them to improve wound healing. My previous experience also involves testing biomaterials for cell functionality in a tissue engineering approach. I believe that cells, like researchers, benefit from substantial communication and collaboration to get things moving! As one of the WA student representative, I hope to bring more researchers together to innovate and establish better research outcomes.

I work developing nanocomposite biomaterials for 3D printing of engineered bone constructs. My research aims to expand and improve the offer of available biomaterials that are suitable for processing through additive manufacturing techniques, and at the same time provide cell signalling cues towards bone tissue development.

University of Otago; Christchurch Regenerative Medicine and Tissue Engineering (CReaTE) group.



Cesar Alcala - PhD candidate

Student Representatives	Location
Ilze Donderwinkel	VIC
Alvaro Sanchez	QLD
Stephanie Lamont-Friedrich (Steph)	SA
Cesar Roberto Alcala Orozco	NZ
Rebecca Sehnert	NSW
Huan Ting Ong (Ting)	WA
Azin Azadi	WA
(vacant)	ACT

International Union of Societies for Biomaterials Science and Engineering (IUSBSE) Delegates
Justin Cooper-White
Lisbeth Grondahl

Science and Technologies Australia (STA) Liaison Officer
Kelly Tsang

2018 ASBTE Award of Research Excellence

Helmut Thissen and Thilak Gunatillake

Congratulations to Dr. Thilak Gunatillake (CSIRO Manufacturing) who was awarded the prestigious ASBTE Award of Research Excellence 2018. The award recognises a member of ASBTE who has made a significant contribution to the discipline of biomaterials and tissue engineering. The ASBTE Award of Research Excellence is presented every two years at the annual ASBTE meeting. The 2018 award was announced at the conference dinner of the annual meeting in Perth.

Over his long career, Thilak has demonstrated excellence not only in regard to scientific achievements, but more importantly has also achieved outstanding success in regard to translational work, with significant impact on the field of Biomaterials and Tissue Engineering.

Thilak graduated from the City University of New York, USA and conducted research on novel polymerisation methods prior to joining CSIRO in 1988. At CSIRO, he initiated a research program to improve the fundamental understanding of how synthetic polymers degrade in the biological environments with the aim of developing new materials suitable for medical devices and implants for long-term implantation.

During the early part of his CSIRO career, Thilak focused on understanding the structure/property relationship of polyurethanes and their influence on biocompatibility and their performance in the biological environment. He designed and synthesised new polymers to suit implants to either last a longer time in the body or to degrade in a specific time frame. This work, and the resulting intellectual property, provided the basis for later translational work and successful commercial outcomes.

Thilak was one of the key scientists involved in the design and synthesis of polyurethane biomaterials Elast-Eon™ and NovoSorb™. AorTech and PolyNovo Biomaterials, two successful spin-off companies based in Melbourne, are based on his work. These companies continue to commercialise non-biodegradable and biodegradable polyurethane materials for use in biomedical devices and implants. They also continue to employ a number of people and contribute significantly to the Australian Med Tech success.

Awards that he has received in recognition of these significant achievements have included the CSIRO Medal for Business Excellence (2000), the Sir Ian McLennan Achievement for Industry Award (2002), the CSIRO Research Medal (2005), the IXL Doherty Partnering Award (2006) and the title of Fellow, Biomaterials Science and Engineering (2008).

Last not least, Thilak has served the ASBTE as President from 2010-2011 and Vice-President from 2009-2010 and 2012-2013.

ASBTE Website **www.asbte.org**

Any member wishing to supply news items, links, PhD scholarships, job listings, or other relevant information to the ***website*** should contact Travis Klein (t2.klein@qut.edu.au)

Congratulations to Conference Awardees

ASBTE Poster Presentations

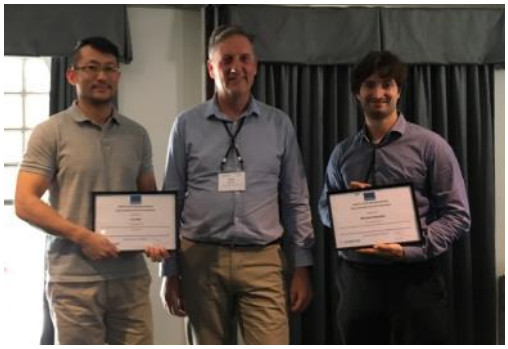
Alvaro Sanchez

Yu-Lun Chuang

Tony Huynh

ASBTE Student Oral Presentation
Adam Martin

ASBTE ECR Oral Presentation
Anna Waterhouse



Biointerphases, Student Oral Presentation
Fei Wei

Biointerphases, ECR ORAL Presentation
Michael Mueller

ASBTE 2018 Conference

ASBTE 2018 Freemantle,

ECR Career Development Session at ASBTE 2018

The ASBTE Early Career Researcher (ECR) committee organized a Career Development Session at the last ASBTE annual conference in Perth, as part of ASBTE's dedication to mentoring young academics and scientists. It was an honor to have Professor Dietmar Hutmacher (Queensland University of Technology), Dr Jelena Rnjak-Kovacina (University of New South Wales), Professor Justin Gooding (University of New South Wales), and Professor Hala Zreiqat (University of Sydney) serve on the panel to discuss career options and pathways in both research and industry. Although every research career path is different, it is very helpful to hear the real life stories of those who have walked the path, shedding light to those embarking on the path to an independent career. The panel members touched on time management skills, ways to initiate and maintain fruitful collaborations, career progression, and the "publish or perish" mentality. It was great to see a dynamic interaction between the panel and the audience, and we wish everyone who attended the session good luck in your career.

Khoon Lim, Thomas Michl, Priya Naidu

Science Meets Parliament

Dr. Daniel Langley representing ASBTE at Science meets parliament. Science meets Parliament 2018: Photo by Mark Graham

Each year, Science and Technology Australia organises an event to raise the profile of Australian Science, Technology, Engineering and Mathematics. With an election on the horizon this year, it is more important than ever that we as scientists and researchers work to champion the research that we undertake on a day-to-day basis.

This year over 240 scientists & technologists met in Canberra over 2 days for professional development and a forum at parliament house. During the second day, delegates met privately in small groups of 3 - 5 with parliamentarians and attended a parliamentary forum with Liberal MP Karen Andrews, Labour MP Richard Marles and the Greens spokesperson for science, Adam Bandt MP. As the ASBTE representative I raised two main concerns with the parliamentarians:

1. Multidisciplinary research: In the current funding environment dominated by the ARC and NHMRC, interdisciplinary research often falls through the gaps. The fundamental and applied interdisciplinary research needed to develop the tools and equipment to enable medical research is often rejected, as grant applications to the NHMRC are deemed to be too fundamental and grant applications to ARC are deemed to be medical research. The stated mandates of the ARC and NHMRC allow for the exclusion of research based on these criteria and although this distinction is designed to facilitate the grant assessment process and clarify which funding body researchers should apply for, the success of grant applications that cross multidisciplinary boundaries suffers as a result. We pushed for parliamentarians to legislate that proposals considered by the NHMRC or ARC to be more appropriate to the other funding agency should be considered by a panel from both. By allocating a small portion of existing ARC and NHMRC funding to projects that cross the boundaries between fundamental and medical research we can support important work that is currently underfunded.
2. Mental health management: Currently, the largest challenge that researchers and students face within academia and research is a lack of certainty. With the on-going trend of short term contracts and a severe lack of clear career progression pathways, Australia's best and brightest are being undermined by their fears for the future. Additionally, pressure from funding bodies and employers alike is driving the development of unhealthy work practices and overstretched employees. Finally, the combative nature of science and the fact that we are working at the forefront of knowledge means that often researchers experience long periods of 'failures', where each experiment teaches us something but may not produce a publishable result. Unfortunately these experiences currently pervade the higher education and research sectors globally with recent studies suggesting as much as 75% of academics, researchers and students experience severe mental illness, which is three times the occurrence in the Australian general public. As a solution to this endemic challenge, we proposed that government should look at moving beyond the short termism of current funding practices, allowing researchers to be employed on long term contracts within universities but reallocated to different projects as strategic directions shift. This is not a final solution, nor is it one that is easily implemented, but Emma Johnston's national press club address, (certainly worth reading if you missed it https://tinyurl.com/smp2018NPA) called for a similar shift in perspective, if not for the same reasons.

The parliamentarians I spoke with, gave the impression that they do care about science but need a reason to voice a desire for change. I urge each of you to reach out to your local MP and raise the issues of interdisciplinary funding and mental health with them. These issues deeply impact the ability of the Australian science community to undertake the work they do. Their impact is twofold, one affecting the purse strings and the other an insidious and often silent or hidden burden that our friends, colleagues and we ourselves too often bear alone.

Daniel Langley

Definitions of Biomaterials-Chengdu Workshop

Speeches at the Workshop dinner

In June, a conference on 'Definitions in Biomaterials' was held in Chengdu, China, under the auspices of the International Union of Societies of Biomaterials Science and Engineering (IUSBSE) and hosted by Professor Xingdong Zhang. The previous discussions were organized by the European Society for Biomaterials in Chester, UK in the late 1980s. The conference proceedings were edited by Professor David Williams and published by Elsevier. Thus, around 30 years have passed, and it was seen as time to re-evaluate the existing definitions. More importantly, the field has changed significantly in 30 years and a wide range of new concepts and topics have emerged based on the extensive advances in biomaterials science and engineering.

About 50 scientists from 17 countries attended, with the meeting split into 6 sessions covering General Biomaterials and Applications, Biocompatibility, Implantable & Interventional Devices, Drug/Gene Delivery Systems/Contrast Agents, Regenerative Medicine and Emerging Biomaterials. Each session had a presenter who proposed and advocated for many definitions relevant to the topic. Subsequent discussions refined and resolved the individual definitions prior to an electronic vote on each one. Definitions that received a Yes vote of >75% of those cast were considered approved and to have achieved a consensus. Those that received a Yes vote in the range of 50% to 74% were considered to have reached a provisional and to require further development. Those with the Yes vote < 50% were discarded from the present meeting for later changes.

The outcomes will now be collated by Professor David Williams for publication and distribution later this year, so that it is available to promote the awareness of the updated and new definitions to all the relevant scientific and engineering research societies and publishers.

John Ramshaw

Voting on definitions. Personal voting keypads and the result displayed on the screen - #24 just fails to reach consensus?

Congratulations Hala Zreiqat

Gladys Berejiklian , Premier of NSW

Tanya Davies, Minister for Women

Media Release Thursday, 8 March 2018

PROFESSOR HALA ZREIQAT WINS TOP ACCOLADE AT 2018 NSW WOMEN OF THE YEAR AWARDS

Professor Hala Zreiqat

An extraordinary contribution to regenerative medicine and orthopaedic research in NSW and an unwavering commitment to improving opportunities for women around the world has won Professor Hala Zreiqat the top accolade at the 2018 NSW Women of the Year awards.

Premier Gladys Berejiklian and Minister for Women Tanya Davies today announced the winners of seven award categories, at a breakfast ceremony at the International Convention Centre Sydney.

"The selflessness and skill that all of the winners and finalists have shown echo through their communities and make real positive impacts on people's lives," Ms Berejiklian said.

"On behalf of the NSW Government I commend each of the winners for their outstanding achievements, and look forward to seeing what they do next."

Mrs Davies said a record number of votes were received this year, with more than 14,000 people taking part online.

"The Awards are an important opportunity to acknowledge women who are driving important change through their passions and purpose and we would like to sincerely thank them for contributing so much to NSW," Mrs Davies said.

Winners in each of the individual categories are:

- 2018 NSW Premier's Award for Woman of the Year – Professor Hala Zreiqat
- 2018 NSW Aboriginal Woman of the Year Award – Carmen Julie Shelley
- 2018 First State Super Lifetime Achievement Award **new in 2018* – Norma Ingram
- 2018 Harvey Norman Young Woman of the Year Award – Shaza Rifi
- 2018 Rex Airlines Regional Woman of the Year Award – Juliet Duffy
- 2018 Community Hero Award – Dr Raji Ambikairajah
- 2018 NSW Business Woman of the Year Award – Kristy Chong

To learn more about finalists and winners please visit www.women.nsw.gov.au.

MEDIA: Ellie Wood | Premier | 0429 065 247
Elizabeth Williams | Minister Davies | 0439 807 672

Spotlight on Conferences

Please check the Web to get further information and also details on due dates

CONFERENCE	DATES	LOCATION	WEBSITE
termis® Tissue Engineering International & Regenerative Medicine Society **Advances in Tissue Engineering. 26th Annual Short Course**	August 8-11, 2018	Houston, TX	http://tissue.rice.edu/
International Conference on Biomaterials **International Conference on Biomaterials**	August 16 – 18, 2018	London, UK	http://worldbiocongress.com/2018/
termis® Tissue Engineering International & Regenerative Medicine Society **TERMIS World Congress**	September 4 -7, 2018	Kyoto, Japan	http://www.termis.org/meetings_worldcongress.php
ESB European Society for Biomaterials **29th European Conference on Biomaterials**	September 9 -13 2018	Maastricht, The Netherlands	www.esb2018maastricht.org
Bob Langer 70th Birthday Celebration	September 7 – 9 2018	Cambridge, MA	https://langersymposium.org/
allied academies **International Conference on Biomaterials and Nanomaterials**	September 17-19, 2018	Frankfurt, Germany	http://biomaterials.alliedacademies.com/
Surfaces in Biomaterials Foundation **28th Annual BioInterface Workshop and Symposium**	October 1-3, 2018	Boulder, Colorado	http://www.surfaces.org/page/2018BioInterface
BIOMAH **BioMaH 2018 2nd Biennial International Conference**	October 8 - 11, 2018	Frascati (Rome), Italy	https://biomah.ism.cnr.it
Biomaterials in Medicine and Veterinary Medicine	October 11-14, 2018	Rytro, Poland	http://www.biomat.agh.edu.pl/

Spotlight on Conferences

 **World Congress on Advanced Biomaterials and Tissue Engineering**	October 17-18, 2018	Rome, Italy	http://biomaterials-tissue-engineer-ing.pulsusconference.com/
Deutsche Gesellschaft für Biomaterialien e. V. (DGBM) **Annual Meeting of the German Society for Biomaterials**	November 8 – 10 2018	Braunschweig Germany	http://www.dgbm.org/
ACCTERM 2018 AUSTRALIA-CHINA CONFERENCE OF TISSUE ENGINEERING AND REGENERATIVE MEDICINE NOVEMBER 2018 CAIRNS, Queensland, AUSTRALIA	November 22—24 2018	Cairns, QLD	qutconfer-ences.eventsair.com/QuickEventWebsitePortal/accterm18/info
Biomimetics in Bioengineering **Biomimetics in Bioengineering Conference**	December 2—4 2018	Brisbane, QLD	http://additivebiomanufactur-ing.org/event/biomimetics-in-bioengineering-natureconferences/
 **IEEE Conference on Biomedical Engineering and Sciences (IECBES2018)**	December 3 – 6, 2018	Kuching Sarawak, Malaysia	http://iecbes.org/
 **ICNB 2018: 2nd International Conference on Nanomaterials and Biomaterials**	December 10-12, 2018	Barcelona, Spain	www.icnb.org/
 **3rd Conference on Tissue Engineering and Regenerative Medicine (CTERM 2019)**	January 5-7, 2019	Sanya, China	http://www.engii.org/conference/CTERM2019/
 ICBTE 2019 : 21st International Conference on Biomaterials and Tissue Engineering	January 21 - 22, 2019	London, UK	https://waset.org/conference/2019/01/london/ICBTE

Spotlight on Conferences

SOCIETY FOR BIOMATERIALS **2019 Society For Biomaterials Annual Meeting & Ex-**	April 2-6, 2019	Seattle, WA	https://www.biomaterials.org/events/future-meetings
BioMAT 2019 - 5th European Symposium & Exhibition on Biomaterials	May 8 – 9, 2019	Weimar, Germany	https://biomat2019.dgm.de/home/
SCIENTIFIC FEDERATION **Global Congress & Expo on Biomaterials**	May 13-14, 2019	Kuala Lumpur, Malaysia	https://scientificfederation.com/biomaterials-2019/
termis® Tissue Engineering International & Regenerative Medicine Society **2019 TERMIS-EU Conference**	May 27 - 31 2019	Rhodes, Greece	https://termis.org/eu2019/
bone-tec 2019 International Bone-Tissue-Engineering Congress **Bone-Tec 2019**	TBA	Oman	http://www.bone-tec.com/
 ICBE 2019 : 21st International Conference on Biomaterials Engineering	May 21 - 22, 2019	Berlin, Germany	https://waset.org/conference/2019/05/berlin/ICBE
Scandinavian Society for Biomaterials	June 12–14, 2019	Kirkkonummi Finland	https://events.uta.fi/scsb2019/
 ICTERM 2019 : 21st International Conference on Tissue Engineering & Regenerative Medicine	July 18 - 19, 2019	Paris, France	https://waset.org/conference/2019/07/Paris/ICTERM
GRC Frontiers of Science **Gordon Research Conference - Biomaterials and Tissue Engineering**	July 28 - August 2, 2019	Castelldefels Spain	https://www.grc.org/biomaterials-and-tissue-engineering-conference/2019/
ESB2019 **30th Annual Meeting of the European Society for Biomaterials**	September 9 –13, 2019	Dresden, Germany	http://www.esb2019.org/

Spotlight on Conferences

termis Tissue Engineering International & Regenerative Medicine Society **2019 TERMIS-AP Conference and Asian Biomaterials Congress (ABMC) 2019**	October 14-18, 2019	Brisbane	http://www.brisbane2019.com/
BiTERM 2019 Biomaterials, Biodiagnostics, Tissue Engineering, Drug Delivery and Regenerative Medicine **8th India-Australia joint BiTerm Meeting**	November 28 -30 , 2019	Kampur, India	**(To be announced)**

So plan ahead,

The Asian Biomaterials Conference will be held in Brisbane from 16-18 October 2019, jointly with TERMIS-AP 2019 (14-16 October 2019). These two conferences will be held at the Brisbane Convention Centre in the heart of Brisbane.

And future meetings in 2020:

WBC 2020 11th World Biomaterials Congress 19 - 24 May 2020, Glasgow, Scotland **11th World Biomaterials Congress, 2020**	May 19 -24 2020	Glasgow	www.wbc2020.org
termis Tissue Engineering International & Regenerative Medicine Society **2020 TERMIS-EU**	May 26-29 2020	Manchester, UK	