As I write this letter, the deadline for submissions of Abstracts for the TERMIS 2015 World Congress has just passed, and the outline of the program has been published on our website. As you will see elsewhere in this Newsletter, the Congress will take place in Boston in September. Boston is, of course, an ideal place to host a world conference on tissue engineering and regenerative medicine in view of its strong traditions and reputation within this field, both scientifically and clinically, and the large number of very prominent academic institutions and hospitals within the city and its environs. The program will reflect these traditions and successes.

However, this is a global event and the occasion will also reflect the global nature of our society and the TERM field. There are now major centers of TERM activity in Europe and Asia as well as in the Americas and when the submitted abstracts are reviewed, I am sure that they will represent these overseas activities, both in quantity and quality. We would expect the majority of delegates will be from the USA and Canada, and it is their opportunity to demonstrate to the world just what is the state-of-the-art in this continent. It is also an opportunity for overseas delegates to demonstrate to their North American colleagues how good they are. I have drawn attention before to the fact that attendances at TERMIS continental chapter conferences are now very similar, and it is clear to me, having attended most of these conferences in the last three years, that the quality of presentations is also comparable in these three regions.

The Boston team have to be on top form in order to equal the very high standard set by Heinz Redl in Vienna at the last World Congress in 2012. I am confident that they will rise to the occasion and I urge all TERMIS members, and indeed their colleagues who are not yet members of TERMIS, to attend the congress in order to contribute to the scientific and clinical sessions, and, of course, to experience the delights of the wonderful city that we know Boston to be.

Sincerely,

David Williams
President, TERMIS
Dear TERMIS Members,

Determining the right amount of regulation is difficult in any industry, let alone in a complex and dynamic field of the health care industry in regards to tissue engineering & regenerative medicine products. From a global perspective, the current regulatory landscape resembles a mixed patchwork of different legislations and regulatory guidelines. Regulation and standardisation has long been established as an important milestone in the maturation process of novel health care technologies. In a projection for the 21st century vision for the future of tissue engineering & regenerative medicine that will support significant medical breakthroughs based on patient-centric regenerative paradigms aiming to restore the normal structure and function of damaged, dysfunctional, or diseased tissues, we as the TERMIS society should have a focus on excellent basic science and to support enthusiastically the translation of regenerative principles into routine clinical practice. Regenerative medicine in large is not only for niche and highly specialised medical applications, but to deliver routinely effective and clinically proven health care treatment(s) that could thus be poised to transit from proof-of-principle studies toward clinical validation. Our globally organised society has over 4,200 members strong. The TERMIS membership should act as the disciplinarian to motivate our members to include standardisation and regulatory affairs that are paving the way for making regenerative medicine one of the major players in the vanguard of 21st century health care. I look forward to seeing you at the TERMIS World Congress in Boston to discuss and challenge my rationale and thoughts penned out in this message from the editor.

Yours sincerely,

Prof. Dietmar W. Hutmacher, PhD (NUS), MBA (Henley)
Stay connected to **Tissue Engineering**!

As a member of TERMIS you have FREE online access to, **Tissue Engineering** (http://www.liebertpub.com/ten) the leading biomedical journal on all aspects of tissue growth and regeneration. Multidisciplinary in scope, the Journal provides a variety of original articles, reviews, and methods papers that can be delivered right to your inbox!

**Be notified as new articles publish:**
Sign Up for TOC Alerts at [http://www.liebertpub.com/ten/connect](http://www.liebertpub.com/ten/connect)

And make sure to check out these top-read articles:

**Tissue Mimetics: Engineered Hydrogel Matrices Provide Biomimetic Environments for Cell Growth**
Stephanie A. Fisher, Roger Y. Tam, and Molly S. Shoichet

The Biomaterials Conundrum in Tissue Engineering
David F. Williams

![White Paper on How to Go Forward with Cell-Based Advanced Therapies in Europe](http://online.liebertpub.com/doi/full/10.1089/ten.tea.2013.0589)

**Current Status of Multipotent Mesenchymal Stromal Cells**
Syed R. Husain, Yoshikazu Ohya, Junya Toguchida, and Raj K. Puri

![Generating Cartilage Repair from Pluripotent Stem Cells](http://online.liebertpub.com/doi/full/10.1089/ten.teb.2012.0757)
Aixin Cheng, Timothy E. Hardingham, and Susan J. Kimber

![GMP Cryopreservation of Large Volumes of Cells for Regenerative Medicine: Active Control of the Freezing Process](http://online.liebertpub.com/doi/full/10.1089/ten.tec.2013.0571)
Isobel Massie, Clare Selden, Humphrey Hodgson, Barry Fuller, Stephanie Gibbons, and G. John Morris

**Bio-Pick, Place, and Perfuse: A New Instrument for 3D Tissue Engineering**
Andrew M. Blakely, Kali L. Manning, Anubhav Tripathi, and Jeffrey R. Morgan
Anthony Atala, MD  
Wake Forest Institute for Regenerative Medicine

Laura E. Niklason, M.D., Ph.D  
Yale University

Robert S. Langer  
Massachusetts Institute of Technology

Molly Stevens, FRENG  
Imperial College London

Jeong Ok Grace Lim, Ph.D  
Kyungpook National University

C. James Kirkpatrick  
Johannes Gutenberg University

IMPORTANT DEADLINES

Online Registration Opens:  
May, 2015

Early Bird Registration Close:  
July 6, 2015
Applicants should submit an Executive Summary directly to Amy Drum (adrum@ahint.com) no later than June 1, 2015. Executive Summaries must be comprised of (at least) the following content sections: (1) Company Summary, (2) Products and/or Service (3) Market and Competition Analysis (4) Strategy and Implementation, (5) Financial Plan and (6) Management Plan. Submissions are limited to 2-pages (including any figures and/or diagrams), single spaced, 12-pt font, 0.5-inch margins in .doc or .pdf format. Submissions not adhering to these guidelines will not be considered.

Judging will be performed by no less than three industry and academic experts in the field, with traditional academic grades (eg, A, B, C) given; the "grade point average" will determine the results. Executive Summaries will be based on the following equally-weighted categories:

- **Completeness** - has well-developed elements necessary to business planning (product explanation, benefits, market and competition analysis, regulatory and IP landscape, management team, program management, etc)
- **Quality of Analysis** - vision, challenges, benefits well-thought out, fair-balanced, supported by data (or literature) and realistic. Less emphasis placed on accuracy.
- **Novelty** - technology or service is differentiable (and valued) in existing or future marketplace.

More information is available at http://www.termis.org/wc2015/bizcomp.php
The TERMIS-AP Council would like to announce the solicitation of proposals to host the 2018 World Congress that will be held in Asia-Pacific.

If you are interested in hosting the 2018 World Congress meeting within the Asia-Pacific Chapter, please submit your request to Sarah Wilburn at swilburn@termis.org. You will be provided with a meeting host form that asks detailed questions about the meeting organizers, location/venue, program, and meeting financials. When proposals are submitted, they are reviewed by the TERMIS-AP Meetings Committee and an official vote is conducted.

The deadline for submitting proposals for the 2018 World Congress is Wednesday, July 15, 2015.

To request a meeting host application form, please contact Sarah Wilburn at swilburn@termis.org or by telephone at +1 (925) 362-0998.
The TERMIS-AM Council and the TERMIS-AM Awards Committee would like to announce the call for nomination packages for the 2015 TERMIS-AM Awards Program.

Nomination packages for any TERMIS-AM award should be submitted to Sarah Wilburn, the TERMIS Administrator, by Friday, May 1, 2015. The criteria for submitting a nomination must be followed in order for the nomination to be accepted.

The awardees will be presented with their award at the 2015 TERMIS World Congress that will be held in Boston in September.

Please submit your nomination packages to:

TERMIS-AM Awards Committee
c/o Sarah Wilburn
E: swilburn@termis.org

Details on submission criteria is available at http://www.termis.org/chapters_am_awards.php.

Nomination packages are being accepted for the following awards:

Lifetime Achievement

Senior Scientist

Young Investigator

Mary Ann Liebert, Inc. Outstanding Student Award

Educational

And

Innovation/Commercialization
University of Maryland and Johns Hopkins Team Up to Host Successful TERMIS-Americas 2014 Conference

Over 850 people attended the TERMIS Americas 2014 annual conference in December in Washington DC. The annual meeting is the premier networking and educational event for the regenerative medicine and tissue engineering industry.

This year’s meeting was hosted by the University of Maryland and Johns Hopkins University, with Dr. John Fisher, Professor and Associate Chair, Fischell Family Distinguished Professor in Bioengineering, as the Conference Chair and the TERMIS-AM Chair-Elect. Dr. Jennifer H. Elisseeff, Director, Translational Tissue Engineering Center and Professor at Johns Hopkins, served as the Scientific Program Chair. The theme of this year’s meeting, “Restoring Lives Through Regenerative Medicine,” was inspired by the geographical location of the Nation’s capital and the increasing desire to focus on the impact of regenerative medicine on patient’s lives. The opening plenary symposium featured talks from transplant surgeons who first highlighted the critical need of engineering tissues and organs decades ago and provided a glimpse of the future of regenerative medicine and the synergies with the transplant community. Keynote speaker Joseph Vacanti, MD, who led the first TERMIS meeting in 1996 provided historical perspective and insights from his own career. This year’s scientific program comprised of session topics that focused on the fundamental principles, emerging tools and connections to new fields, and practical applications of the latest advances in tissue engineering and regenerative medicine. The immunoengineering session in particular was well attended and demonstrated robust excitement.

The program included keynote lecturers that targeted key tools and barriers to overcome for tissue engineering and regenerative medicine strategies, including Gregg Semenza, MD, PhD, Professor at Johns Hopkins who discussed fundamentals of vascularization; Darrell Irvine, PhD, Professor and Howard Hughes Investigator at Massachusetts Institute of Technology who inspired the audience with immunoengineering for biomedical applications; and Antonios Mikos, PhD, Professor and Chair of Biomedical Engineering at University of Texas, Austin who highlighted his basic and translational biomaterials work.

Three preconference workshops leveraged the location of Washington to engage federal agencies and to highlight the need for translating regenerative medicine technologies to improve lives. The first workshop was led by the Alliance for Regenerative Medicine to discuss “Commercialization Strategies for Tissue Engineered Products.” Sarah Haecker, PhD and Thomas Novak, PhD, led a group of industry representatives, academic entrepreneurs, and regulatory experts to discuss best practices and challenges for moving therapies to the clinic. The second workshop, led by Eva Lai, PhD and Luis Alvarez, PhD brought together clinicians, researchers, and leaders from federal, public, and private sectors in an engaging format to discuss the clinical challenges and functional rehabilitation needs of the wounded warriors, and to present the visions, challenges, and solutions to bring emerging research and capabilities forward. The third workshop was led by Rosemarie Hunziker, PhD and Richard McFarland, MD, PhD, from the Multi-agency Tissue Engineering Sciences working group (MATES). The workshop paired government supporters with non-governmental performers in a series of case studies.

The conference had over 195 oral presentations, 335 poster presentations, and 35 sponsors and exhibitors. The meeting drew attendees from almost every state, and received registrations from international participants from over 30 countries. The audience included a mix of academicians, corporate professionals, and government representatives, with CEOs, principal investigators, post-doctoral fellows, pre-doctoral students, and other researchers.

TERMIS-AM has established several award mechanisms to recognize outstanding scientists in the field, including the Lifetime Achievement Award, awarded to Anthony Atala, MD; the Senior Scientist Award, presented to Molly Shoichet, PhD; the Mary Ann Liebert, Inc. Outstanding Student Award, awarded to Laura Bracaglia; the Educational Award presented to Bryan Brown, PhD; and the Young Investigator Award which was given to Warren Grayson, PhD. In addition, Corin Williams, PhD and Jenny Peutzer, PhD were presented with the 5th Annual Wake Forest Institute for Regenerative Medicine Young Investigator Awards to recognize outstanding achievements.

Continued on the next page...
The Student and Young Investigator Section of the Americas chapter (SYIS-AM) organized a number of exciting activities at the meeting. With support from the National Science Foundation and the National Institutes of Health, they were able to expand many of the SYIS events this year. The activities included the Student-Meet-Mentor Lunch, the Career Opportunities Discussion Panel, Tours of the Food and Drug Administration Laboratories, Student Co-Chairing, Student Poster Awards, and an Undergraduate Poster Session. SYIS-AM presented three awards for the best poster – first place was presented to Lindsay Lozeau for her poster titled, “Recombinant LL37 Antimicrobial Peptide with Collagen Tethering for Wound Healing Applications”; second place was presented to Qi Xing for the poster titled, “Highly Organized Three-Dimensional Tissue Construct Created in a Rotating Wall Vessel Bioreactor”; and third place was presented to Ji Hyun Kim for the poster titled, “3-D Bioprinting of Skeletal Muscle Constructs for Reconstruction”.

This year, TERMIS-AM took advantage of the Washington DC location with a spectacular dinner at the Smithsonian Portrait Gallery where attendees could enjoy the stunning courtyard for networking and catching up with old friends and then visit the museum galleries. TERMIS-AM continued for a second year the Women in Tissue Engineering & Regenerative Medicine luncheon. This activity, along with travel grants, was supported in part by grants from the National Institutes of Health and National Science Foundation.

Tissue engineering and regenerative medicine have become critical scientific disciplines. The TERMIS-AM meeting continues to grow and mature every year, and it has now become the major venue for the presentation of basic research, and its clinical application. For over 10 years, this meeting continues to foster interactions among basic scientists engaged in discovery and development, translational researchers who bring scientific discoveries to the clinical forefront, clinicians, and those engaged with funding, regulatory and commercial endeavors.

Note: The TERMIS World Congress, held every three years at a venue where all TERMIS chapters meet as a whole, will be held September 8-11 in Boston, Massachusetts at the Boston Marriott Copley Place. Visit the TERMIS main website for more details, www.termis.org.

For more information, contact Sarah Wilburn, TERMIS Administrator.
Upcoming Conferences

May 2015
14th Annual Cell-Based Therapies & Tissue Engineering Short Course (CTTE) Short Course Dates: May 12-14, 2015 Short Course Location: Case Western Reserve University Short Course Organizer: Arnold I. Caplan, PhD TERMIS members receive a reduced registration.

2nd International Symposium on Vascular Tissue Engineering Symposium Dates: May 28-29, 2015 Symposium Location: Donghua University, Shanghai, China

June 2015
Regenerative Medicine Summer School 2015 Summer School Dates: June 1-5, 2015 Summer School Location: University of Pittsburgh TERMIS members receive a 10% discount towards tuition.

Stem Cells in Drug Discovery Conference Location: Cambridge, UK Conference Dates: 2-3 June 2015

2nd International Conference on Regenerative Biomedical Materials (ICRBMS2015) Conference Dates: June 4-8, 2015 Conference Location: Wuhan, China TERMIS members receive a reduced registration rate.

International Symposium Bone Regeneration Symposium Dates: 11-13 June 2015 Symposium Location: Berlin, Germany Symposium Theme: Crosstalk between progenitor cells, immune cells and the extracellular matrix

July 2015
Satellite Summer School on Biomaterials and Regenerative Medicine Summer School Dates: July 6-8, 2015 Summer School Location: Riva del Garda, Italy

11th International Symposium on Frontiers in Biomedical Polymers Symposium Dates: July 8-12, 2015 Symposium Location: Riva del Garda, Italy

Organ-on-a-Chip World Congress & 3D Printing Conference Dates: July 8-9, 2015 Conference Location: Boston, MA TERMIS members received a 10% discount on registration.

International Bioprinting Congress Conference Location: Singapore Conference Dates: July 9-10, 2015

August 2015
Advances in Tissue Engineering Short Course Short Course Dates: August 12-15, 2015 Short Course Location: Rice University, Houston, Texas The short course will survey the latest knowledge and technologies in the world of patient-specific therapeutics from transplantation of cells and tissues to artificial organs.

September 2015
2015 4th TERMIS World Congress Congress Dates: September 8-11, 2015 Congress Location: Boston Marriott Copley Place, Boston, MA, USA Congress Co-Chairs: David Kaplan, PhD and Kacey Marra, PhD

November 2015
International Biofabrication Conference Conference Dates: 7-9 November 2015 Conference Location: Utrecht, The Netherlands Conference Co-Chair: Jos Malda and Lorenzo Moroni

June 2016

September 2016
2016 TERMIS-AP Conference Conference Dates: September 3-6, 2016 Conference Location: Tamshui Town of New Taipei City Conference Chairs: Shih-Chieh Hung and Ming-Thau Sheu

December 2016
2016 TERMIS-AM Conference Conference Dates: December 11—16, 2016 Conference Location: San Diego, CA Conference Chairs: Anthony Ratcliffe, PhD; Robert Sah, PhD; and Bill Tawil, PhD

June 2017
2017 TERMIS-EU Conference Conference Dates: 26-30 June 2017 Conference Location: Davos Conference Center, Davos, Switzerland Conference Chair: R. Geoff Richards, PhD Conference Program Chair: Mauro Alini, PhD

September 2017
2017 TERMIS-AP Conference Conference Dates: September 21-24, 2017 Conference Location: Nantong, China Conference Chairs: Prof. Dr. Xiaosong Gu, Dr. Xiaobin Fu, and Dr. Yilin Cao Program Chairs: Dr. Fei Ding and Dr. Wei Liu

December 2017
2017 TERMIS-AM Conference Conference Dates: December 2017 Conference Location: Charlotte, North Carolina

All conferences listed have been reviewed and approved for endorsement by the TERMIS Endorsement Committee.
To accomplish its mission, TERMIS brings together the international community of persons engaged or interested in the field of tissue engineering and regenerative medicine and promotes education and research within the field of tissue engineering and regenerative medicine through regular meetings, publications and other forms of communication. The Society also serves as an international forum to promote the informed discussion of challenges and therapeutic benefits of the application of tissue engineering and regenerative medicine technologies.

Most importantly, the Society is committed to bringing you closer to key professionals to support your mutual understanding of the field, accelerate your research in the field and to enable you to contribute to the ultimate care of patients in this very important way.

Interested in contributing to the TERMIS Newsletter?
CONTACT SARAH WILBURN

Visit us at www.termis.org