Dear Members of TERMIS,

As we approach the World Congress in September in Vienna, I want to inform you of a significant new partnership of TERMIS with oral and maxillofacial surgeons; a synergy that further emphasizes the advancing clinical translation of tissue engineering/regenerative medicine.

A group of surgeons and research scientists interested in oral and maxillofacial applications had formed an international association identified as the “Tissue Engineering Society”. This group has now agreed to a partnership whereby that Society has dissolved and these individuals have become full members of TERMIS. It is expected that they will form a thematic group within TERMIS taking advantage of the TERMIS infrastructure while maintaining their autonomy and their focused interest in oral and maxillofacial applications. We wholeheartedly welcome them to TERMIS.

I also want to take this opportunity to acknowledge the efforts and resources put forth by Heinz Redl in organizing what I believe will be an unsurpassed meeting with respect to quality, quantity and breadth of tissue engineering and regenerative medicine. The entire spectrum of basic science, preclinical studies and emerging clinical studies in this field will be on display in Vienna. In addition to the scientific program, there will be a robust program of student and young investigator initiated events as well as a diverse social agenda. I look forward to seeing all of you at in Austria.

With Regards,

Steve Badylak, President TERMIS
Dear TERMIS members,

I am organizing, during the 3rd TERMIS World Congress in Vienna September 8, 2012, a panel discussion on the topic of “the future of publishing in the tissue engineering & regenerative medicine space”. The scholarly information landscape is becoming very complex as the impact factor, citations, h-index & m-index, and search engines (e.g. scoopus versus Google scholar) have become very important for academic career development. At the same time publishers, libraries and search engines are all jostling for pole position in the digital and print space. Most recently, one of the topics most discussed is related to the question of the advantages/disadvantages of open source versus traditional publishing.

As the above described situation is not only very difficult to comprehend for PhD students and Post-doc's but also for junior and senior faculty, it will be the aim of the panel discussion to give the wider tissue engineering/ regenerative medicine community a comprehensive overview from the editors perspective. The panel will discuss the direction the field is moving from an editorial and publishing point of view.

It is a great honor for me to report that I was able to bring together the editors of the leading journals in the field to participate in the panel discussion:

Prof. David Williams, Editor-In-Chief Biomaterials
Prof. Geoff Richards, Editor-In-Chief eCM Journal
Prof. Rui Reis, Editor-In-Chief Tissue Engineering & Regenerative Medicine Journal
Prof. John Fisher, Editor-In-Chief Tissue Engineering Journal
Prof. Graham Parker, Stem Cells & Development Journal
Prof. William Wagner, Editor-In-Chief Acta Biomaterialia
Prof. Glenn E. McGee, Editor-in-Chief The American Journal of Bioethics
Dr. Markus Hengstschläger, Austrian Science Foundation

In respect to the format of the panel discussion, I would like to invite you as a TERMIS member to post your top three questions to the panel members by sending an email to the TERMIS Administrator, Mrs. Sarah Wilburn swilburn@termis.org. Sarah will collate all the questions from the submissions submitted. I will pick the top 5 rated questions and will ask the panel members to answers those first during the panel discussion. If time allows, I will also ask the audience to post questions during the panel discussion session.

I look forward to receiving your questions and seeing you during the panel discussion in Vienna.

Yours sincerely,

Professor Dietmar W. Hutmacher
PhD (NUS), MBA
(Henley)
3rd TERMIS World Congress 2012
“Tissue Engineering and Regenerative Medicine”

September 5 - 8, 2012 Vienna, Austria
www.termis.org/wc2012
Pre-Meetings & TERMIS Evening Event

Stem Cell Update Salzburg – Symposium Tour
For information/registration click here.

IPLASS – International Placenta Stem Cell Society
„The Regenerative Potential of Placenta Derived Cells“ - 2nd International Meeting of the International Placenta Stem Cell Society
For information/registration click here.

Advanced Therapy Medicinal Products (ATMPs):
From Promise to Reality - Tissue Engineering and Regenerative Medicine Regulatory Path – CAT-TERMIS-ISCT Satellite Workshop
For information/registration click here.

NAMABIO-COST Meeting - 2nd NAMABIO Joint Meeting
GRIBOI (Society for Injectable Osteoarticular Biomaterials)
For information/registration click here.

Hofburg Congress Centre

www.termis.org/wc2012

Why Become an Exhibitor or Sponsor of the 2012 TERMIS World

- Exposure to local, national and international audience of decision makers and influential people involved with TE/RM.
- Opportunities to raise your company’s profile amongst a valuable target audience before, during and after this event
- Recognition including acknowledgement and clear demonstration of your organization’s involvement, commitment and support with this market.
- Valuable insights, information and exposure to the latest developments in this field.
- Feel free to attend the scientific sessions.
- Multidisciplinary audience: clinicians, specialized scientists, engineers and researchers in top academic institutions and companies.
- There are NO OTHER TERMIS meetings in 2012

“There is still time to register!”

To received more information on exhibiting or sponsoring the 2012 World Congress, contact:

Mr. Klaus Ehrenmüller
Med.ex medical exhibition company
klause@medex.co.at

2012 TERMIS World Congress Hosted By:

AUVA
Ludwig Boltzmann Gesellschaft
Society of the Advancement of Research and Tissue Engineering
SYIS Activities at the 2012 TERMIS World Congress in Vienna

SYIS Young Investigator Night (including business meeting) (attendance required :) – Thursday, September 6, after 20.30h, Café Leopold (close to the conference venue: see map “Museumsquartier MQ”)

Don’t miss our young investigator night after the main conference opening reception. At Leopold, a decent bar & nightclub, all the SYIS activities that will happen during the conference will be presented to you. Furthermore, SYIS will pay you a drink and will let you enjoy a night to remember supported by local and international DJs! Come and get acquainted with young researchers from other countries! And don’t forget to bring your dancing shoes!

Student-Mentor Meet (registration required) Wednesday, September 5, 18.30 conference venue

During the student-mentor meet, students and young investigators will get a chance to interact with world-renowned academic and industrial investigators in the field of Tissue Engineering & Regenerative Medicine. Students and young investigators will be organized in small groups with each mentor and have their questions answered in a relaxed and open discussion.

Career Session (registration required) – Friday, September 7, 18.20-19.00, conference venue

A panel of experts, each having taken different but sometimes overlapping directions in their careers, will discuss, debate and offer insight into topics of interest in the field today and provide insights into starting a career in this field.

Scientific Co-chair (registration required)

SYIS members will have the opportunity to assist chairing a session with a leader in the field of research during a scientific session.

SYIS Awards (registration required)

SYIS will award the three best oral presentations selected in the SYIS young investigator session (Thursday, September 6, 16:00-17:30, Festsaal). A short-list of participants for the award session will be selected based on abstract scoring and informed ahead of time to participate in this session.

Winners will be selected based on their performance during the award session by a prestigious panel. Best oral presentations, the three best posters by SYIS members and travel grants will be awarded during the Gala Evening, on (Friday, September 7, 19.30). Stay sharp and do your best!

About us: TERMIS-SYIS provides a platform for the “next generation” of scientists and engineers in the field of tissue engineering and regenerative medicine to interact. SYIS aims to further the professional and scientific development of its members. This year there are a number of activities planned to enhance the TERMIS-EU experience of its members. SYIS activities are only for students and young researchers:

- Student: Any individual who is engaged as a full-time graduate or undergraduate in a university or college program and is actively involved in research in the field of tissue engineering.
- Young Investigator: Young Investigators are defined as persons who are employed by an academic institution in the field of tissue engineering and regenerative medicine, who have been awarded their doctoral degree within the past 3 years and who are not holding an appointment as a faculty or academic staff in a university/research institute. Young investigators are required to have their advisor/supervisor send a letter as proof of the bona fide status of the young investigator. TERMIS-SYIS

Georg Feichtinger (TERMIS SYIS World Congress Chair)
Rogério Pirraco (TERMIS SYIS-EU Chair)
Sayed-Hadi Mirmalek-Sani (TERMIS SYIS-AM Chair)
Zhang Zhiyong (TERMIS SYIS-AP Chair)

All students and young investigators that register for the 2012 TERMIS World Congress in Vienna is encouraged to register and participate in these activities.

If you want to take part in these events, please contact us at termis2012syis@gmail.com stating your name your affiliation and which events you want to participate in. To make sure you are eligible for being part of SYIS, read a little more about us at the end of this piece.

SYIS will also have a booth at the conference site, so look for us!
Report from the SYIS-AM Chair

To the TERMIS-AM members,

As I have been reading recently 2012 is a year of change, and this is certainly true for the Student and Young Investigator Section! We have already seen a significant update from TERMIS-North America to TERMIS-Americas, for which I’d like to warmly welcome all the newly-eligible student and young investigators to the Society.

We also have big changes in the SYIS-AM Council, and I’m delighted to announce the appointment Rebecca Dahlin, our former Treasurer, as the SYIS-AM Council Chair, as I am now stepping down. I’d also like to announce Tracy Hookway as the new Council Vice-Chair and Sean Murphy as our Chair of the Scientific & Professional Development Committee. I’d also like to welcome Kimberly Ferlin in the newly-created position of Communications Officer, as a way to increase our interaction with members and exposure, so through Facebook, LinkedIn, Twitter and the TERMIS website, we’ll have every platform covered!

The recent SYIS-AM elections saw a record number of nominees and votes for the SYIS-AM nominees, for which we all are very proud. The new council members will continue to be supported by Christopher Bashur as Secretary, and I’d like to offer my sincerest thanks to Chris and the outgoing council members, namely Robert Gauvin as the former Chair of the Scientific & Professional Development Committee, Christine Kowalczewski as Vice-Chair, Patrick Spicer as the 2011 Meeting and Fundraising Chair and also former Council Chair Maxime Guillemette, for their dedication and hard work over the last few years presiding over the section and events at the informative, enjoyable and excellent meetings in Orlando and Houston.

With these changes I’m confident the SYIS-AM will go from strength to strength, I’m excited about the future of the section, and I wish them and the SYIS organizers of the upcoming World Congress the greatest success!

With very best wishes

S. Hadi Mirmalek-Sani
SYIS-AM New Council Members

Rebecca Dahlin - SYIS-AM Chair
Rebecca received her bachelor’s degree in Biomedical Engineering in 2009 from Texas A&M University. She is currently a graduate student in the Department of Bioengineering at Rice University in the laboratory of Antonios Mikos. Her research focuses on the creation of polymer/extracellular matrix composite constructs for the repair of osteochondral defects.

Tracy Hookway - SYIS-AM Vice-Chair
Tracy received her bachelor's degree in Bioengineering from Lehigh University in 2006. She just received her Ph.D. from Worcester Polytechnic Institute in the laboratory of Marsha Rolle. Her research focused on engineering vascular tissue by cellular self-assembly. She is about to begin her postdoctoral research at Georgia Institute of Technology under the supervision of Todd McDevitt.

Chris Bashur - SYIS-AM Secretary
Chris received his PhD from Virginia Tech in 2009, where he developed novel scaffolds for ligament tissue engineering applications and determined how adult stem cell respond to biomaterial topography and other aspects of the microenvironment. He is currently a postdoctoral fellow at the Cleveland Clinic in Dr. Anand Ramamurthi's laboratory. His project involves developing methods to improve elastic fiber generation and organization within a tissue engineered small-diameter vascular graft.

Sean Murphy - SYIS-AM Chair of the Scientific & Professional Development Committee
Sean Murphy received his Ph.D. From Monash University in Australia under the supervision of Profs. Alan Trounson, Euan Wallace and Graham Jenkin. He developed methodologies to isolate and characterize fetal stem cells for clinical applications and demonstrated their potential for treating lung disease. He is currently a postdoctoral research fellow at the Wake Forest Institute for Regenerative Medicine, North Carolina, mentored by Prof. Anthony Atala. His research focuses on developing fetal stem cell therapies for lung diseases such as cystic fibrosis and is supported by an American Lung Association Senior Research Training Fellowship and a Chapman Foundation grant.

Kimberly Ferlin - SYIS-AM Communications Officer
Kimberly received her bachelor's degree in Biomedical Engineering in 2010 from the University of Rochester. She is currently a graduate student in the Fischell Department of Bioengineering at the University of Maryland in the Tissue Engineering and Biomaterials Laboratory of John Fisher. She is also an ORISE Fellow in the Center for Devices and Radiological Health at the FDA. Her research focuses on investigating the impact of cell-substrate interactions on mesenchymal stem cell enrichment, proliferation, and differentiation.

SYIS-AM Treasurer (Vacant)
This position will be filled in the fall during the TERMIS election.
Labotatory Feature

MEDIPOST Biomedical Research Institute

MEDIPOST, Co., Ltd., Seoul, Korea
1571-17 Seocho-3dong, Seocho-gu, Seoul 137-874, Korea
Tel : +82-2-3465-6770
Fax : +82-2-475-1991
E-mail : sjchoi@medi-post.co.kr
Web page: http://medi-post.com

MEDIPOST was established in 2000 and specializes in stem cell therapeutics using multi-potent human Umbilical Cord Blood-derived Mesenchymal Stem Cells (hUCB-MSCs) with expertise in the banking of the umbilical cord blood. MEDIPOST’s Research & Development Center is focused on providing a coordinated "bench to bedside" approach from the basic and clinical research programs to the development and commercialization of novel therapeutics for the patients. The researchers at MEDIPOST’s Biomedical Research Institute – part of Research & Development Center, have access to a wide range of adult pluripotent stem cells including hematopoietic stem cells (HSCs) and mesenchymal stem cells (MCSs) from umbilical cord blood.

Using the state-of-the-art stem cell processing and culturing technology, a dedicated team of over 60 scientists at MEDIPOST Biomedical Research Institute has made R&D efforts for over 10 years for developing adult stem cell drugs to meet unmet medical needs in areas such as osteoarthritis, stroke, Alzheimer's disease, bronchopulmonary dysplasia (BPD) and improving the efficacy of hematopoietic stem cell transplantation (HSCT).

MEDIPOST is proud to bring the world's first hUCB-MSC drug into Korean market, which we believe will revolutionize today's medical care.

First Cell Therapeutics : Hematopoietic Stem Cells (HSCs)

The R&D roadmap at MEDIPOST begins from the cord blood banking. MEDIPOST stores over 150,000 cord blood units which accounts for approximately 40% of the total cord blood units banked in Korea MEDIPOST supports approximately 60% of all Cord Blood Hematopoietic Stem Cell Transplantations (CBTs) performed in Korea.

A pharmaceutical product must demonstrate its identity, concentration, purity and other quality standards to ensure the required levels of safety and efficacy can be met. Likewise, a Cord Blood Bank must also ensure that its product – stored units of cord blood, is disease free and that it is handled free of contamination while preserving its integrity and function. In order to achieve this, MEDIPOST’s Cord Blood Bank has developed quality management systems to ensure the quality standards of stored products including high levels of long-term stability and viability.
Second Cell Therapeutics: Mesenchymal Stem Cells (MSCs)

Cord blood stem cells have a large ex vivo expansion capacity and are multipotent in nature which can give rise to various types of tissues. We have developed cellular therapeutics with understanding of the cells' characteristics and testing them in animal models of disease.

hUCB-MSCs are a robust source not only for giving rise to a new cell type in need but also for secreting various trophic factors which will signal the activation of the host's own stem cells for producing required cell types. hUCB-MSCs possess excellent proliferation capacity with ability to differentiate into multiple types of cells or tissues. They are immune-privileged and thus their allogeneic use does not cause adverse immune reactions. hUCB-MSCs harvested from cord blood show the lowest levels of immunogenicity compared to those by other types of adult stem cells. In fact, instead of provoking the immunogenicity, they rather modulate the adverse immune reactions within the host and therefore making hUCB-MSCs an ideal candidate for mass-producible stem cell drug for allogeneic use.

Drug efficacy is paramount in manufacturing stem cell drugs at a large scale. Allogeneic stem cell drugs must meet reliable cell numbers per product, as well as cell viability and sterility at the same time. MEDIPOST has developed a potency screening technology in which a pre-screening system using various potency markers allows selection of stem cell batches that are of adequate quality to be used for designated clinical indication.

Effective potency marker screening is essential to ensure consistent quality among batches of adult stem cell drugs from different UCB donors, as individual variations among UCB donors can lead to batches of sub-standard hUCB-MSCs. Our potency marker screening system ensures that only the batches of donated UCB that meet the minimum potency criteria for a given adult stem cell drug product, are selected.

Stem cell mass manufacturing is performed in compliance with the Korea Food and Drug Administration (FDA)'s current Good Manufacturing Practices (GMP) standards. GMP management includes Equipment Qualification (EQ), Installation Qualification (IQ), Operational Qualification (OQ), Performance Qualification (PQ), standard Operating Protocols (SOPs), environmental monitoring and production and Quality Control (QC) validations. MEDIPOST strictly adheres to the regulations by the Korea FDA for the production and formulation of our stem cell drugs, to ensure that our products are of the highest quality and safety.
Stem cells are derived from umbilical cord blood of qualified donors following donor screening including adventitious agents testing, donor questionnaire, medical and family history checks and signing of an informed consent form. Cord blood stem cells are isolated and expanded according to SOPs and the working cell bank is created by freezing the expanded stem cells. These cells are characterized according to the SOPs with sterility and quality tests to ensure the manufacture of a safe and effective product.

Based on our scientific achievements together with proven safety on allogeneic hUCB-MSC transplantation, at MEDIPOST, we aspire to lead the development and commercialization of adult stem cell drugs to help benefit patients suffering from incurable diseases.

In 2005, MEDIPOST’s first product CARTISTEM®, was released for use in the clinical trials. Since then, we have continuously been improving the manufacturing process to better support the clinical trials. Following the successful completion of the clinical trials in Korea, in January 2012, the Korea FDA has approved the manufacture and sale of CARTISTEM® in Korea, as a safe and effective stem cell drug for the treatment of ‘Repetitive Traumatic and Degenerative Osteoarthritis (OA)’.

During the past 11 years of R&D efforts, researchers at MEDIPOST confirmed the presence of potent adult stem cells in the cord blood and demonstrated through many publications in high-profile scientific journals (see Selected Publications) that the hUCB-MSCs can be used in allogeneic adult stem cell transplantations for regenerative medicine. Through rigorous R&D efforts, MEDIPOST has achieved large-scale, pre-manufacturing and cryo-preservation of adult stem cell products using hUCB-MSCs as drug substance. This enables instant availability of the stem cell drugs for the patients when they need them without the need of an invasive collection of stem cells from the patient’s own tissues or time required for further culturing process prior to administration of stem cells into the patient.

Selected Publications


Upcoming Conferences

June 2012
**REMEDIS 2012** Conference Dates: 15-17 June 2012 Conference Location: IASI ROMANIA


July 2012
**MSC 2012 Galway** Conference Dates: July 2-3, 2012 Conference Location: Galway, Ireland Download the flyer

5th Annual Business Education Course: Regenerative Medicine Education Course Location: Case Western Reserve University, Cleveland, OH Education Course Dates: July 16-19, 2012

August 2012
**Rice University’s Advances in Tissue Engineering Short Course** Short Course Dates: August 8-11, 2012 Short Course Location: Rice University BioScience Research Collaborative Short Course Director: Dr. Antonios G. Mikos

2012 ISOMRM 2nd International Symposium of Materials on Regenerative Medicine Symposium Dates: August 29-31, 2012 Taipei, Taiwan, ROC 10% registration discount will be available for TERMIS members

September 2012
**2012 3rd TERMIS World Congress: Vienna, Austria** Conference Dates: September 5-8, 2012 Conference Location: Hofburg Congress Center in Vienna, Austria Conference Chair: Heinz Redl, PhD

Stem Cells USA & Regenerative Medicine Congress Conference Dates: September 20-21, 2012 Congress Location: The Charles Hotel, Boston, MA

International Symposium in Applied Bioimaging: Bridging Development and Application Symposium Dates: September 20-21, 2012 Symposium Location: Biblioteca Almeida Garrett, Porto, Portugal The European Science Foundation in the framework of the project REMEDIC will fund 8 Travel Awards (500 €) on a competitive basis to assist graduate students and post-docs to present their work at the symposium.

November 2012
**2012 ASMB Meeting** Meeting Dates: November 11-14, 2012 The 2012 meeting will be held jointly with the Society for Glycobiology.

June 2013
**2013 TERMIS-EU: Istanbul, Turkey** Conference Dates: June 12-15, 2013 Conference Location: Istanbul, Turkey Conference Chair: Erhan Pişkin, PhD

October 2013
**2013 TERMIS-AP: Shanghai, P. R. China** Conference Dates: October 23-26, 2013 Conference Location: Shanghai, P.R. China Conference Chair: Yilin Cao, MD, PhD

December 2013
**2013 TERMIS-Americas: Atlanta, GA** Conference Location: Atlanta, Georgia Conference Chair: Robert E. Guldberg, PhD Conference Program Chair: Todd C. McDevitt, PhD More details to follow.

June 2014
**2014 TERMIS-EU: Genoa, Italy** Conference Dates: 10-13 June 2014 Conference Co-Chairs: Ranieri Cancedda and Claudio Migliaresi More details to follow.

2015 TERMIS World Congress

Solicitation of Proposals for the 2015 TERMIS World Congress

The TERMIS-Americas Chapter Council would like to announce the solicitation of proposals for hosting the 2015 TERMIS World Congress that rotates to the Americas. If you are interested in hosting the 2015 TERMIS World Congress, please submit your request to the administrator, 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 will be reviewed by the TERMIS-Americas Meetings Committee & TERMIS Americas Council and an official vote is conducted.

The deadline to submit a proposal has been extended to Tuesday, July 31, 2012.
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