Volume XV | Issue III & IV

interLink

Linking the international community of tissue engineers and regenerative medicine scientists

Letter from the President

Dear TERMIS Members,

I hope that as 2020 draws to a close that you, your families and colleagues are, and remain, safe during this very difficult year. As the 2nd wave of the COVID19 pandemic makes its way across the globe, it provides us all with uncertainty of what is in store for 2021. The horizon is now looking promising as several vaccines are showing to be very effective in the clinical trials and hopefully when applied over 2021 will protect us and allow us to meet again. Despite the pandemic, we would like to wish you all a very happy upcoming holiday season, just recently with Diwali in India, Thanksgiving in AM, Christmas in EU and AM, and in Asia year of the Ox in February 2021. Take value in the time we have all had with our families and continue to think positively for a healthy, enjoyable and productive 2021.

2020 has been a very difficult year for research with many universities and institutes having to endure various lockdowns, skeleton staff for lab work and postponement of practical research projects. New experiences for us as parents and grandparents having to help with homeschooling of children and grandchildren (most of which who teach us some latest computes skills, especially hacks to our attempts enforce screen time control). Many have spent this time in home offices finishing publications, writing grants, and having time to reflect on projects and think on new ideas. In a hectic world, we rarely get this time to reflect, and perhaps that is one thing, along with more family time, we can be thankful for. We have all become familiar with virtual meetings through GoTo, Teams, Zoom, Lifesize etc. and have rethought global travel for the present. In my opinion, virtual meetings cannot replace the inherent human need for physical social interaction. Humans are social "animals", which is a very important aspect for both our mental and physical health. Our research congresses must return as face-to-face physical meetings to allow networking, time for friendship and socializing (where many great projects are also born). Youngsters need to start their networks and get seen, which is very important for their future. What we have learned from the COVID19 pandemic is that there are also advantages to the virtual meeting, as it can reduce barriers to those who do not have the ability or finances to travel, and now many conferences are including hybrid options to attendees. We should take this opportunity to strengthen TERMIS. The use of additional virtual enhancement of our meetings, especially in and for emerging countries and for countries with a lot of research, who do not get the opportunity so often to attend the chapter or world conferences. We have also realized that we should also now assess the possibility of national meetings to encourage more people to get involved, especially to encourage more students who find it difficult for international travel.

*As you are aware, the 2021 TERMIS World Congress has been postponed to 15th – 19th November. The abstract submissions have been reopened and will close on 31st January 2021. If you have submitted an abstract previously, the great news is, you are able to modify your submitted abstract with latest results up to the new submission deadline. In order to maximize the participation of delegates the congress organizers are happy to announce **TERMIS 2021 TV** – a daily broadcast during the congress with highlights of parallel sessions, visitor interviews, expert sessions and live broadcast of all plenary sessions. Also, all parallel sessions will be recorded and after editing will be available to watch them again via our TERMIS TV website. With this newly developed service for the TERMIS community, we would like not only to offer a digital platform to our established community, but also to be able to reach new scientists around the world interested in TERMIS. It is our great hope that the 2021 World Congress will be held in the physical form in November with the enhancement of a hybrid option.*

***A very special thank you to the SYIS**-AM and SYIS-EU Councils for organizing a wonderful SYIS webinar series! We have received nothing but positive feedback and we hope to continue something similar to this series in 2021 involving all chapters. It is great when early stage researchers lead with such enthusiasm. The conference organizers will continue to keep you posted on the latest developments.*

I would like to take this opportunity to thank the TERMIS Governing Board who have not stood idle during this time, having worked throughout the year on various scenarios to keep TERMIS financially viable. We concluded to move to a yearly membership model fee and I will inform you more about this soon in a dedicated letter to this topic. As president for two years now, I have experienced great dedication from members of chapter councils and committees all wishing to help further our mission "Advancing tissue engineering & regenerative medicine worldwide to generate knowledge with a view to improving patient outcomes globally". I also would like to thank Sarah Wilburn our executive administrator and only society employee for her dedication, her long-term knowledge on the society and her continued trust in my presidency.

I thank each and every one of you dedicated volunteers for your time to help us with our mission.

I also want to thank you, our members, without which TERMIS is nothing, for your continued support of TERMIS. Our Society continues to sustain itself through these times due to our members and supporters. Our new membership mode will be extremely important in the upcoming years and I urge you to pay your 2021 fees when the invoice arrives. The costs will not change in 2021.

If you have any suggestions on membership benefits that TERMIS can implement to add value to our members, please feel free to contact Sarah Wilburn with your suggestions who will bring these forward to our new membership committee, composed of chapter and global members-at-large from the TERMIS Global governing Board. We want to continue to provide you with virtual interactions via the TERMIS-AM TWIGs webinars, the SYIS webinar series and the board will soon be announcing new benefits as well.

Thank you!

Sincerely,
R. Geoff Richards
TERMIS President

2021 TERMIS World Congress

Mark your Calendar - 15 - 19 November

The 6th TERMIS World Congress will be held in**Maastricht, The Netherlands** from **15-19 November**.

ABSTRACT SUBMISSION: Deadline 31 January 2021

TERMIS TV
To maximize the participation of delegates we are happy to announce TERMIS 2021 TV – a daily broadcast during the congress with highlights of parallel sessions, visitor interviews, expert sessions and live broadcast of all plenary sessions. Also all parallel sessions will be recorded and after editing be available to watch them again via our TERMIS TV website. With this newly developed service for the TERMIS community, we would like not only to offer a digital platform to our established community, but also to be able to reach new scientists around the world interested in TERMIS.

Let us conclude that we ensure that the TERMIS World Congress will take place in 2021. Preferably in physical form. If not, then certainly in hybrid or full virtual form.

Postponement Facts

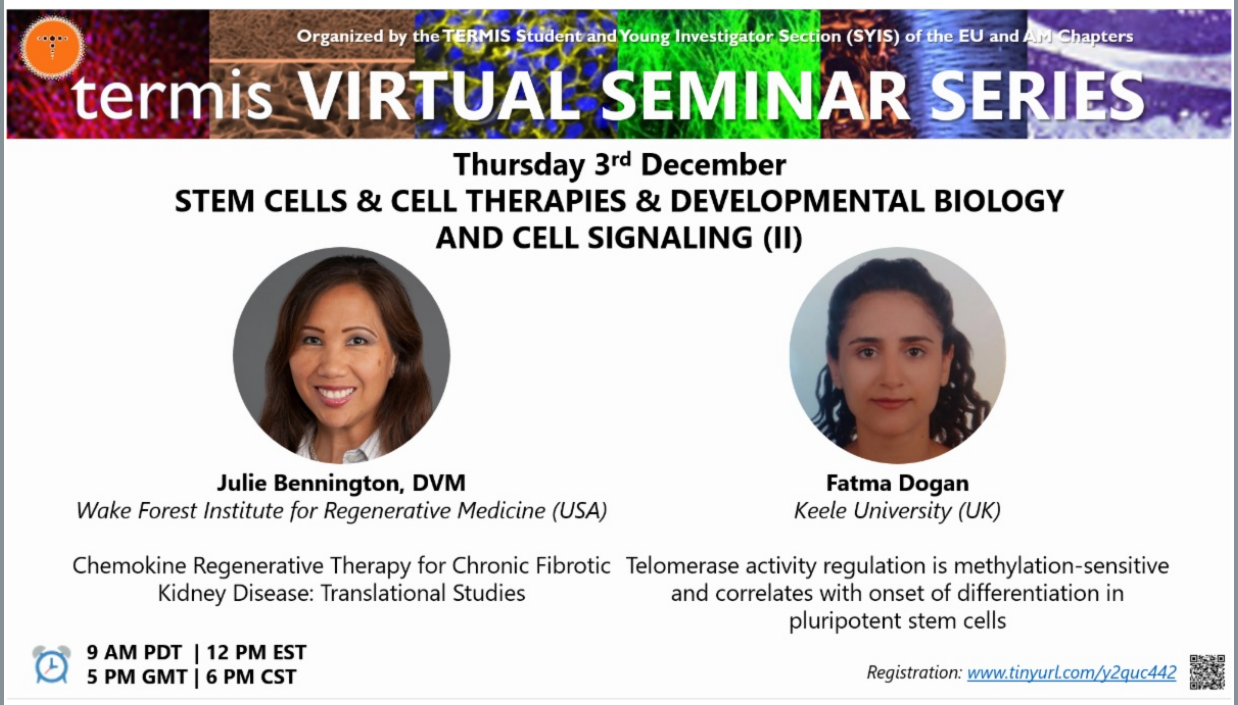
If you have any questions regarding the 2021 TERMIS World Congress, please contact:
Congress Secretariat
Klinkhamer Group | conferences & events
P.O. Box 1308
6201 BH Maastricht, the Netherlands

E: info@termis2021.org
T: +31 (0)43-36 27 008

Abstract Submission

SYIS Webinar Series
December 3rd

Follow SYIS on Twitter @SyisEU and @SyisTermis



Register for the SYIS Webinar

TERMIS-AM News

2020 TERMIS-AM Awards Recipients

The TERMIS-AM Awards Committee and Council would like to congratulate the recipients of the 2020 TERMIS-AM Awards. We invite all TERMIS members to attend the awards presentations scheduled for December 8th at 2:00 PM Eastern Time U.S.

Register for the TERMIS-AM Awards Presentations

Dr. Stephen George
Senior Scientist Award

Steven C. George, M.D., Ph.D. is Professor and Chair of the Department of Biomedical Engineering at the University of California, Davis. He received his bachelors degree in chemical engineering in 1987 from Northwestern University, M.D. from the University of Missouri School of Medicine in 1991, and Ph.D. from the University of Washington in chemical engineering in 1995. He was on the faculty at the University of California, Irvine for 19 years (1995-2014) where he pursued a range of research interests including pulmonary gas exchange, lung mechanics, vascularizing engineered tissues, and microphysiological systems ("organ-on-a-chip"). The NIH FIRST award in 1998 and the CAREER and Presidential Early Career Award for Scientists and Engineers (PECASE) from the National Science Foundation in 1999 have previously recognized his work. While at UCI, he served as the William J. Link Professor and founding Chair of the Department of Biomedical Engineering (2002-2009), the founding Director of the Edwards Lifesciences Center for Advanced Cardiovascular Technology (2009-2014), and was the founding PI on a T32 predoctoral training grant from the National Heart Lung and Blood Institute entitled "Cardiovascular Applied Research and Entrepreneurship" (CARE). In 2014 he transitioned to become the Elvera and William Stuckenberg Professor and Chair of Biomedical Engineering at Washington University in St. Louis, and in 2017 moved to the UC Davis. He became Chair of the department in January 2019. He was elected a fellow in the American Institute of Medical and Biological Engineering (AIMBE) in 2007, a fellow of the Biomedical Engineering Society in 2017, has published more than 140 peer-reviewed manuscripts, and has co-founded two early and active start-up companies (Aracari Biosciences in 2019 and Immunovalent Therapeutics in 2017). His work is currently funded by grants from the NIH that focus on creating tissue engineered models of the cardiac, pancreas, bone marrow, and cancer microenvironments using induced pluripotent stem cell and microfabrication technology.

Dr. Sarah Rowlinson
Educational Award

Dr. Sarah Rowlinson is a Lecturer and the Undergraduate Coordinator in the J. Crayton Pruitt Family Department of Biomedical Engineering with the University of Florida, Gainesville, FL, USA.

Her teaching efforts include course content development and delivery for two courses: Introduction to Biomedical Engineering (freshman) and Cellular Engineering Laboratory (junior). She maintains the dedicated teaching laboratory for the Cellular Engineering Course, and is currently conducting engineering education research in this environment; specifically (1) the use of novel documentation software and its influence on student participation and performance and (2) the use of gamification first-person perspective and cooperative/competitive learning using livestreaming of lab techniques. She is active in the community of scholarship of teaching and learning, with conference/workshop attendance and publications in field.

In her role as Undergraduate Coordinator, she oversees curriculum development, undergraduate advising, programmatic opportunities, and ABET accreditation for the program's 360 students. She is also faculty advisor for the local student chapter of the Biomedical Engineering Society and BMEntors. Rowlinson is interested in broadening participation of groups underrepresented in STEM and has supported national efforts by hosting several events sponsored by University of Florida and greater Gainesville community.

As a doctoral student she studied breast tissue engineering and was an Instructor for the Clemson University General Engineering Program. She also participated in the NSF's Innovation Corps for Learning (I-Corps L) program and was a research mentor through National Science Foundation's Research Experience for Undergraduates (REU) and Research Experience and Mentoring (REM).

Dr. Rowlinson is a member of the American Society for Engineering Education, Biomedical Engineering Society, and Society For Biomaterials.

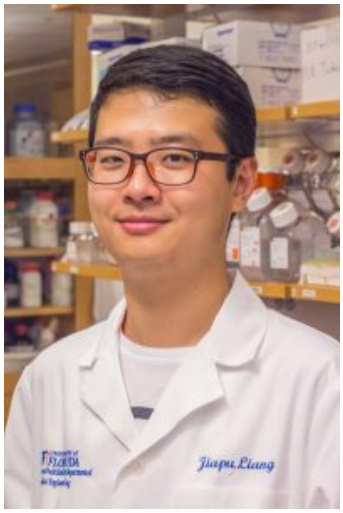
Sarah Rowlinson is a first-generation college student; she received the B.S. degree in biomedical engineering from the University of Miami, Coral Gables, FL, USA in 2012, and the Ph.D. degree in bioengineering from Clemson University, Clemson, SC, USA in 2017.

Dr. Ashley Brown
Young Investigator Award

Dr. Brown received a B.S. from Clemson University in Biosystems Engineering in 2006 and a Ph.D. from Georgia Tech in Bioengineering in 2011. Dr. Brown performed her postdoctoral studies in the School of Chemistry and Biochemistry and the Wallace H. Coulter Department of Biomedical Engineering at Georgia Tech and she was an American Heart Association (AHA) Postdoctoral Fellow. Dr. Brown joined the Joint Department of Biomedical Engineering at North Carolina State University and the University of North Carolina at Chapel Hill as an Assistant Professor in 2015. Her research focuses on developing novel microgel-based materials for a variety of biomedical applications including augmentation of hemostasis, enhanced wound healing, evaluation and modulation of cellular mechanotransduction and development of biosynthetic constructs for regenerative medicine. Dr. Brown's research is supported by the NIH, NSF, and AHA. Dr. Brown is also an NSF CAREER Award recipient and she was named a Biomaterials Science Emerging Investigator in 2019.

Jiapu Liang
Mary Ann Liebert, Inc. Outstanding Student Award

Jiapu Liang is a PhD candidate in the Department of Biomedical Engineering at the University of Florida. He is currently conducting research at the Stabler Diabetes Tissue Engineering Laboratory. His research focuses on the engineering of cell-based grafts for the treatment of Type 1 diabetes, specifically the development of a translational biomaterial platform for in situ oxygenation and drug release. When he is not working on the bench, he likes to go on food adventures to explore the world.



TERMIS-AM TWIGs Webinar Series

Join us on January 19, 2021 for the next TWIG webinar series being organized by the Musculoskeletal TWIG.

Dr. Barbara Boyan

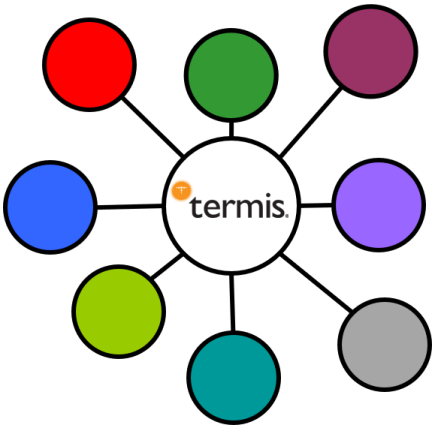
Barbara D. Boyan, Ph.D., the Alice T. and William H. Goodwin, Jr. Dean of VCU College of Engineering, is a nationally acclaimed researcher and entrepreneur. Her laboratory is focused on research in all aspects of bone and cartilage biology, from basic science studies on steroid hormone signaling to the use of cells for regenerative medicine strategies, focusing on how cells interact with biomaterial surfaces. Her work in the bone and cartilage field began with studies to understand the underlying mechanisms of mineralized tissue formation. Her recent research developments include novel technologies for controlling nanotexture on metal and polymer surfaces in order to study cell responses for regenerative medicine applications as well as elucidating the mechanisms used by steroid hormones like vitamin D and estrogen and microRNAs in the regulation of bone and cartilage cells.

Dr. Michael McClure

Dr. McClure is investigating the role of extracellular matrix and integrin signaling in skeletal muscle development, regeneration, and trauma. Research projects focus on regenerative rehabilitation using decellularized muscle grafts seeded with mesenchymal stem cells and muscle progenitors. Dr. McClure is a member of the Society for Biomaterials, Orthopaedic Research Society, Biomedical Engineering Society, and Tissue Engineering and Regenerative Medicine Society.

Register for the Webinar

Staying Connected in the Tissue Engineering Community



VIRTUAL WEBINAR SERIES

The TERMIS-AM Membership Committee has formulated a list of webinars being conducted in the region.

Communication and connectivity within the tissue engineering community are critical objectives of TERMIS. Staying connected and up to date with research in the field is more important now than ever before. In addition to bringing you TERMIS chapter meetings, World Congress, and TWIG seminars, we have curated a list of recurring virtual webinar series from other institutions in the region in diverse topics relevant to tissue engineering and regenerative medicine. If you are hosting a recurring virtual seminar series that you would like to add to the list, please contact matthew.wolf@nih.gov.

Opportunity to Serve in TERMIS

We are looking for enthusiastic active volunteers to serve on the **Bioreactor Technologies Thematic Group** with the aim to promote and develop all aspects of Bioreactors and their applications.

We are particularly keen to develop a group with diverse backgrounds and experiences.

If this if of interest, please send a CV and motivation letter to the Executive Administrator.

TERMIS-EU 2020 Abstracts

Abstracts from the postponed TERMIS-EU 2020 conference have been published in eCM journal

TERMIS-EU 2020 Abstracts

Save the Date
TERMIS-EU 2022 Conference

Tissue Engineering, Parts A, B and C
The official journal of TERMIS.

Tissue Engineering
Parts A, B, and C
Mary Ann Liebert, Inc. publishers

Tissue Engineering, the Official Journal of TERMIS, is proud to present the ***"Tissue Engineering Resource Center"*** to all TERMIS members, presenting helpful tools and resources for researchers around the world. Included in this resource center are videos and presentation materials from Workshops held at past TERMIS meetings. We will be adding many additional resources as we build this "tool box" so make sure to access our Resource Center on a regular basis. To gain access to the Tissue

Engineering Resource Center, please click here.

If you would like to contribute to the Tissue Engineering Resource Center, please email Sophie Reisz sreisz@liebertpub.com for more information.

Encourage Your Institution to Subscribe to *Tissue Engineering*

If your institution does not currently subscribe to the journal, *Tissue Engineering, Parts A, B, & C*, we ask that you please complete the library recommendation form to encourage your institution's librarian to subscribe to the journal today.

Library Recommendation Form

CÚRAM Investigating the Impact Orientation of Principal Investigators (PIs) Undertaking Publicly Funded Research in the Medical Device Sector

This study is investigating the impact orientation of principal investigators (PIs) undertaking publicly funded medical device research. In essence, we want to know how an investigator, in their work as PI of research projects, understand and address impact in your day to day activities as PI, engaged in basic, applied or translational scientific research towards the design and development of medical devices.
We hope to use the results of this survey to inform a suite of training materials and supports for early career researchers and new PIs involved in medical device research, to help them to enhance the impact potential of their research. Results will also be utilised in academic outputs.
For more information on the PI Impact Project, visit:
http://www.curamdevices.ie/curam/research/translational-research/

To Participate in the Survey

Employment Opportunities

Members of TERMIS have an opportunity to post job openings on the TERMIS website free for 30 days.

Please contact the Executive Administrator to post an opening.

Latest Openings Available

- Postdoctoral Research Scientist - Columbia University Vagelos College of Physicians and Surgeons
- Postdoctoral Researcher - "Senscence and healing of wounds" - Ludwig Boltzmann Society
- Pre-doctoral Researcher - "Senscence and healing wounds" - Ludwig Boltzmann Society

Visit the TERMIS Website for More Details

Meetings Endorsed by TERMIS

The meetings listed on the TERMIS website under Endorsed Meetings have been reviewed and approved by the TERMIS Endorsement Committee. If you are interested in TERMIS promoting your meeting, please complete the Endorsement Request Form.

View Complete List of Endorsed Meetings