



## interLink

*Linking the international community of tissue engineers and regenerative medicine scientists*

### Letter from the President

Dear TERMIS Members,

Happy New Year!

The TERMIS-EU conducted a very successful conference in Rhodes at the end of May. The attendance numbers were the highest of any chapter conference to-date (again as TERMIS EU2017 being only our second conference over 1300 attendees), which is encouraging to the research occurring within the field. Rhodes was also a very appealing destination. Dimitrios Zeugolis and Maria Chatzinkolaidou, the co-chairs for the conference, were instrumental in the success of the conference and have provided an overview for you to review that is included later in this issue.

The TERMIS-AP + ABMC7 Congress was conducted in Brisbane, Australia in October was very well attended. The conference was held in conjunction with the 7<sup>th</sup> Asian Biomaterials Congress. The conference co-chairs, Yin Xiao and Justin Cooper-White organized a very engaging program that attracted over 800 attendees, which is a growing number of participants for Asia. Congratulations to Yin and Justin on organizing a fabulous conference to engage our members within the Asia-Pacific Chapter.

Recently, the TERMIS-AM hosted their conference in Orlando, Florida at the Loewes Sapphire Falls Resort. Cherie Stabler and Diego Mantovani, the conference co-chairs formulated an exciting program. The Plenary Speakers were *Dr. Joseph Wu, Dr. Milica Radisic and Dr. Vera Tiesler*. There was a focus on promoting and engaging the SYIS (students and young investigators) events and attracted nearly 700 participants.

We thank all of the registrants for participating and attending the TERMIS Chapter conferences as well as our sponsors and exhibitors for their continued contribution to the programs. Together, you make the TERMIS conferences one of the premier events within the field.

In 2019, the TERMIS Governing Board achieved a lot for our Society, some of these are mentioned below:

1. A new Mission
2. A code of Ethics
3. Brought in a new Secretary, Legal Counsel and Treasurer and initiated many new governance and best practice procedures with these three.
4. Created our Society's Diversity Statement
5. Initiated the first task for our FTERM to be active in nominating awardees to the chapters.
6. We have also helped encourage new measures through chapter councils for SYIS in AP.

We look forward to seeing you all in 2020. Take note of the 2020 Chapter Conferences dates as well as the 2021 TERMIS World Congress.

### **2021 TERMIS World Congress**

May 31 - June 4 in Maastricht, the Netherlands

Sincerely,  
R. Geoff Richards  
TERMIS President

## **Vascular Tissue Engineering Thematic Group**

Dear Colleagues,

The Thematic Group on Vascular Tissue Engineering (VTE) has actively participated in the organizing and in the Zurich congress held June 19-21, under the patronage of Profs. Simon Hoerstrup, Chris Breuer and myself. This combined International Symposium for Applied Cardiovascular Biology and Vascular Tissue Engineering was co-organized by the International Society for Applied Cardiovascular Biology (ISACB), together with the International Symposium on Vascular Tissue Engineering (ISVTE). This 3-day meeting was hosted at the University of Zurich by the Institute for Regenerative Medicine with the expert help of Drs. Melanie Generali and Debora Kehl. ([www.irem.uzh.ch/isacb-isvte-zh2019](http://www.irem.uzh.ch/isacb-isvte-zh2019))

Prof. Beat Walpoth organized a Vascular Tissue Engineering Symposium during the meeting of the European Society for Artificial Organs (ESAO) that was held in Hannover from 3-7 September, 2019. The theme was Tissue Engineered Vascular Grafts for Access in Hemodialysis, chaired by Prof. Giuseppe Faggian and myself with the following speakers: B.G. Stegmayr, B.H. Walpoth, J. Vienken, K. Kanda, L. Moroni and K.H. Schneider.

A further symposium on Vascular Tissue Engineering, organized by Prof. Anthony Weiss and myself, will be held at the Asiatic TERMIS Congress in Brisbane, Australia from 14-17 October 2019.

The next ISVTE meeting will be held in China in 2021 under the organization of Prof. Deling Kong.

After four years presiding this TERMIS Thematic Group and the ISVTE, I am happy to step down to hand over the place to younger colleagues. The new Chair will be Prof. Joris ROTMANS from Leiden, Netherlands, with the following two Vice-Chairs, Toshiharu SHINOKA, Columbus, USA, Deling KONG, Tianjin, China as well as two Secretaries: Xiumei MO, Shanghai, China, and Timothy PENNEL, Cape Town, South Africa.

I greatly enjoyed creating and serving this TERMIS Thematic Group, thank all my collaborators, and wish all my successors a very fruitful scientific and social continuation.

On behalf of the Committee:

Beat H. Walpoth, MD  
Past President of the ISVTE & past Chair of the TERMIS Thematic Group



## **Employment Opportunities**

### **Current Job Openings**

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.

# 2019 TERMIS-EU Workshop



The banner features the TERMIS logo, a photograph of the Nantes skyline, and text for the 'TERMIS-EU WORKSHOP 3D BIOPRINTING IN CANCER RESEARCH' held on August 26-27, 2019, at the Cité des Congrès de Nantes, France.

**MAJOR SPONSORS:** Advanced Cell Technology, ALLEVI, Aspect Biosystems, JANUS Biosciences, SIEMENS, CELLINK, regenHU.

**SPONSORS:** biogex, chemo-metec, fluidicell, micreight, polets, REGENMAT, RIBA.

**START-UP:** Bioprint, HCS, INNOC, LUMI BI.

## 3D Bioprinting Workshop in Cancer Research

The TERMIS-EU 3D Bioprinting Workshop in Cancer research, held in Nantes, France the 26 and 27 of August had more than 150 participants who came from 30 different countries. Twenty enterprises participated and five Hands-on were performed. We want to thank very much all the participants, the sponsors, all the speakers and our Keynote speakers, Ibrahim Ozbolat (PennState University), Jos Malda (Utrecht Medical Center) and John Jackson (Wake Forest University). We would also want to thank TERMIS for supporting our event and the local institutions, specially 3D FAB ( 3D Fabric of Advanced Biology), Phy-OS Lab, ICO, Bioretage and the École Centrale de Nantes.

Once again thank you very much for coming to Nantes. Hope to see you all soon in the next TERMIS Event.

*Luciano Vidal, Christophe Marquette, Pierre Layolle*

# 2019 TERMIS-EU Conference



**TERMIS EU 2019** | **27-31 May 2019 / Rhodes, Greece**

Tissue Engineering Therapies:  
From Concept to Clinical Translation & Commercialisation

The banner features the TERMIS logo and a photograph of the Rhodes Palace.

TERMIS is the most prominent organisation in the field of tissue engineering and regenerative medicine globally. TERMIS promotes education, research, innovation, clinical translation and social responsibility within the field of tissue engineering and regenerative medicine through regular meetings, training courses, scientific and lay publications, outreach activities and other forms of communication. TERMIS also provides an international forum for the informed discussion of challenges and achievements of tissue engineering therapies.

Almost 1,400 people from 56 countries attended the TERMIS EU 2019 meeting, which was held from the 27th to the 31st of May 2019 at Rodos Palace, Rhodes, Greece. The theme of the meeting was 'Tissue Engineering Therapies: From concept to clinical translation and commercialisation'. TERMIS EU 2019 hosted 74 Invited Symposia and 125 General Sessions with 283 invited speakers, 580 podium presentations and 302 poster presentations in tissue engineering and regenerative medicine tools, technologies and discoveries; clinical trials; regulatory approval of new devices; scaling up; commercialisation; career development of young investigators; women leadership and representation; education; and outreach. Numerous sessions and activities were organised to enhance employability and career development of early stage researchers, including the Business Plan Competition that aspires to equip innovative early career researchers with knowledge and experience to transfer life-changing ideas from bench to clinic and market. The Industry and the Clinical Sessions critically discussed advances and shortfalls in commercialisation and clinical translation of tissue engineering therapies. The Welcome Reception, the Get Together and the Soiree (all included in the registration) provided the perfect atmosphere for catching up with old friends and making new ones. Russia was selected as the Guest Nation and was represented by Peter Timashev. TERMIS EU 2019 had 50 Sponsors and Exhibitors, clearly illustrating the clinical / commercial arm of the meeting.

The theme of the TERMIS EU 2019 Debate was 'This House believes that the ethical boundaries associated with regenerative medicine procedures should be more rigorously applied than those for conventional pharmacological or medical device technology applications'. It was chaired by David F Williams. Alicia El Haj and Stuart B Goodman supported the motion, whilst Anthony Weiss and Katja Schenke-Layland went against the motion. The theme of the TERMIS EU 2019 SYIS Debate was 'This House believes that unblinded peer-review will result in good science'. It was chaired by David F Williams, Diana Gaspar and Dilip Thomas. Carlos J Peniche Silva, Felor Biniazan and Parvaiz A. Shiekh supported the motion, whilst Emily Growney Kalaf, James Britton and Meletios Nikolaos Doulgkeroglou went against the motion.

Antonios G Mikos (Biomaterials for tissue engineering and modeling disease), Manuela E. Gomes (Magnetically assisted tissue engineering technologies for tendon regeneration), Nektarios Tavernarakis (Regulation and roles of autophagy in the brain), Seppo Yla-Hertuala (Vascular endothelial growth factors. From basic science to clinical trials) and Wim E. Hennink (Polymeric nanoparticles for the intracellular delivery of biotherapeutics for cancer treatment) delivered inspiring plenary talks. Liesbet Geris (In silico regenerative medicine: From living implants to digital patients) received the TERMIS EU Robert Brown Early Career Principal Investigator Award. Rui L. Reis (My career: A lifetime of TERM research and innovation & a lifer of TERMIS) received the TERMIS EU Career Achievement Award. David F. Williams (Do not go gentle into that good night) received the Chairs' Life Achievement & Contribution Award. Further 21 awards were given to SYIS and BPC members (SYIS Podium Winners: 1st Mireia Hoyos-Nogués, 2nd Vianney Delplace; SYIS Poster Winners: 1st Andrea Schwab, 2nd Daniela Frauchiger; RSC Biomaterials Science Podium Winners: 1st Alexandre Trotier, 2nd Qasim Majid, 3rd Daniella Duarte Campos; RSC Biomaterials Science Poster Winners: 1st Ana Cartaxo, 2nd Pascal Gervois, 3rd Camille Marijon; RSC Journal of Materials Chemistry Part B Podium Winners: 1st Mariana Carranca, 2nd Alessandro Torchio, 3rd Michele Carrabba; RSC Journal of Materials Chemistry Part B Poster Winners: 1st Marisa Assunção, 2nd Raphael Canadas, 3rd Maria Markou; SYIS Debate Winning Team: James Britton, Meletios Nikolaos Doulgkeroglou, Emily Growney Kalaf; BPC Awards: 1st Place Nicholas Rousseau and Jeanne Volatron, 2nd Place: Pregenerate and Julie Rosser).

Podium and poster abstracts were published at European Cells & Materials Periodical: Abstract Collections (Collection 3), whilst a Special Issue entitled 'Highlights from TERMIS EU 2019' has been organised with Frontiers in Bioengineering and Biotechnology.

We are grateful for your support, we hope that you enjoyed the meeting and we are looking forward to meeting you again in future TERMIS meetings.

Maria Chatzinkolaidou, TERMIS EU 2019 Programme Chair, FORTH, University of Crete, Greece

Dimitrios I. Zeugolis, TERMIS EU 2019 Chair, REMODEL, NUI Galway, Ireland



## Speech by Prof. David Williams at the 2019 TERMIS-EU Conference

The text of Prof. Williams' speech can be viewed on the TERMIS website.

*"Do Not Go Gentle Into That Good Night"*

[Link to David's Speech](#)



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## 2020 Chapter Conferences



[Registration is OPEN!](#)

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## 2020 TERMIS-EU Business Plan Competition



- ✓ Questions about how to commercialise your research?
- ✓ Do you need help getting your TERM startup off the ground?
- ✓ Would you benefit from expert mentorship and a cash prize?

The TERMIS Business Plan Competition is what you've been waiting for!

#### What is the TERMIS BPC?

The Tissue Engineering and Regenerative Medicine International Society (TERMIS) Business Plan Competition (BPC) is the only business plan competition focused on the TERM fields. The program is aimed at early-stage startup companies looking for guidance and mentorship in the creation of a mature and investable business plan. Teams compete for one of three prize-winning finalist positions. Finalists are introduced to two experienced industry mentors who help in the development of a mature and investable business plan. All finalists will deliver an 'investor pitch' to a panel of judges at the TERMIS-EU 2020 Conference (26<sup>th</sup>-29<sup>th</sup> May, in Manchester, UK), where our panel undertake a critical analysis of your business, and cash prizes are awarded!

First Place	Second Place	Third Place
£3,000	£2,000	£1,000

#### Why should I enter?

Startups coming out of academia looking for venture capital investment often lack the requisite experience to develop a reasonable and investable business plan, particularly in the TERM fields, where products often face complex routes to market, high levels of funding, and an accordingly high risk profile. For academics entering the entrepreneurial world who may lack business expertise, effective mentorship is critical to increasing the chance of success.

"The TERMIS-EU BPC was a very enriching experience for STENTiT. It provided us with highly valuable feedback and new contacts to high-profile experts in the field, whose interaction prevailed beyond the competition. It was a great pleasure for us to participate."

- Sol Cabera, STENTiT Co-Founder, TERMIS-EU BPC 2017 Winner

"The BPC competition gave me the push and support to believe in myself and my business. I have been thoroughly enjoying my new career as a CEO and am excited by the possibilities of Cytochroma!"

- Kate Cameron, Cytochroma Founder, TERMIS-EU BPC 2017 Finalist

#### Sounds great! How can I get involved?

Please visit us at [termisbpc.org](http://termisbpc.org) for further information, and to apply through a simple online form. For any comments or queries, you can also contact us at [info@termisbpc.org](mailto:info@termisbpc.org). For information about the TERMIS-EU 2020 Conference, please visit [termis.org/eu-2020](http://termis.org/eu-2020).



#### IMPORTANT DATES TO REMEMBER:

Symposia Submission Deadline: 31st January 2020

Abstract Submission Opens: 1st January 2020

Abstract Submission Deadline: 30th April 2020

## 2020 TERMIS-AM Conference



**2020 Call for Sessions and Pre-Conference Workshops is Now Open!  
Deadline to submit is Monday, February 17, 2020**

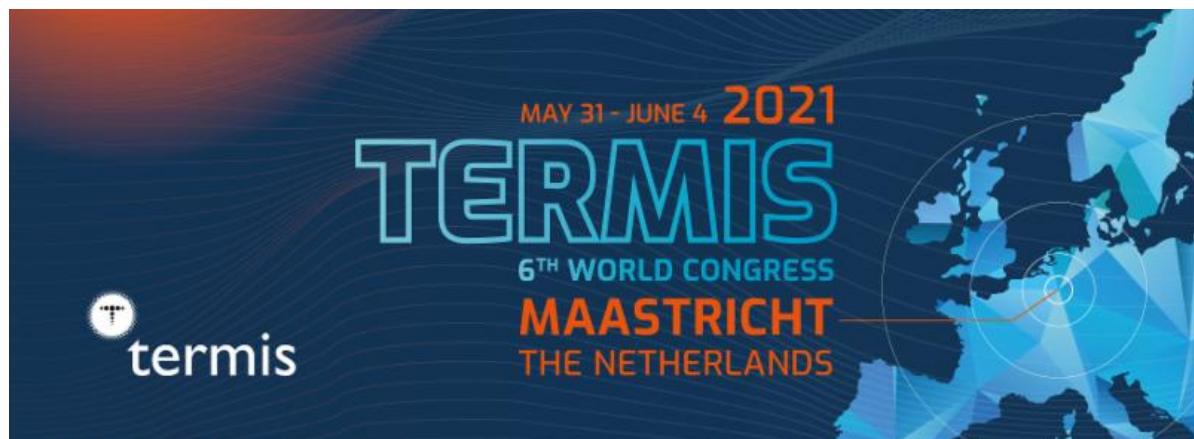
[Session Submission Form - TWIG Form](#)

[Session Submission Form - General Form](#)

[Workshop Submission Form](#)

*\*\*If you are a Thematic Working Interest Group (TWIG) chair or are submitting a proposal on behalf of a TWIG, please use the TWIG Form. For all others, please use the general submission form.*

## 2021 TERMIS World Congress



Mark your Calendar - 31 May - 4 June

The 6th TERMIS World Congress will be held in **Maastricht, The Netherlands** from **31 May - 4 June**.

The Conference Chairs:

Prof. dr. Lorenzo Moroni  
MERLN Institute - Maastricht University

Prof. dr. Liesbet Geris  
University of Liège – KU Leuven

Prof. dr. med. Stefan Jockenhövel  
RWTH University Aachen

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## TERMIS-AM Announcements

### 2020 TERMIS-AM Awards Program - Call for Nomination Packages

I am pleased to announce that the opening of the TERMIS-AM's awards program for 2020. The Awards Committee has established an awards program to recognize achievements accomplished by its members residing within the Americas.

The complete list of awards is available online. Nomination packages for any TERMIS-AM award should be submitted to Sarah Wilburn by June 1, 2020. 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 2020 TERMIS-AM conference in Toronto, ON.

Please submit your nomination packages to:

TERMIS-AM Awards Committee  
c/o Sarah Wilburn  
TERMIS Executive Administrator  
E: [swilburn@termis.org](mailto:swilburn@termis.org)

Please contact us if you have any questions.

Sincerely,  
William Wagner  
TERMIS-AM Awards Committee Chair

[TERMIS-AM Awards Program Details](#)

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### Commercialization & Regulation Thematic Working Interest Group (TWIG) Seeking Vice-Chair and Secretary

If you are interested in participating with this TWIG, please email [Suzanne Tabbaa](#) by **Saturday, February 1, 2020** with the following information:

- (1) Send CV
- (2) Short paragraph on your relevant experience
- (3) Short paragraph on why you are interested in serving on Commercialization TWIG

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### 2019 TERMIS-AM Award Recipients

During the 2019 TERMIS-AM conference conducted in Orlando, Florida, the recipients of the 2019 TERMIS-AM Awards were provided with an opportunity to present their work.

We would like to congratulate each of them.

Lifetime Achievement Award: Stephen Badylak, DVM, PhD, MD

Senior Scientist Award: Farshid Guilak, PhD

Educational Award: Natasha Maurmann, PhD

Young Investigator Award: Jason Wertheim, MD, PhD

Innovation/Commercialization Award: Milica Radisic, PhD & Gordana Vunjak-Novakovic, PhD

Mary Ann Liebert, Inc. Outstanding Student Award: Adam Jorgensen

### 2019 TERMIS-AM Award Recipients

## TERMIS-EU Announcements

### 2020 TERMIS-EU Awards Program

**The deadline to submit nominations for the 2020 TERMIS-EU Awards Program is:**

**31st January 2020**

[The complete list of awards as well as the guidelines are viewable here.](#)

### 2023 TERMIS-EU Conference: Call for Proposals

**DEADLINE TO SUBMIT PROPOSALS IS 29TH FEBRUARY 2020**

On behalf of the TERMIS-EU, we would like to announce the solicitation of proposals for consideration to host the 2023 TERMIS-EU Conference.

If you are interested in hosting the 2023 TERMIS-EU conference, please contact the Executive Administrator, [swilburn@termis.org](mailto:swilburn@termis.org), to request the meeting host application form, the conference hosting guidelines and a sample contract.

After the deadline, the proposals are reviewed by the TERMIS-EU Council. The proposers are asked to present their proposals during the TERMIS-EU Council meeting that will be held during the 2020 TERMIS-EU Conference in Manchester, UK.

The deadline for submitting proposals for consideration to host the 2023 TERMIS-EU conference is 29th February 2020.

To request a meeting host application form, the sample of the meeting fixed fee contract, and the guidelines for hosting a TERMIS conference, please contact the Executive Administrator, [swilburn@termis.org](mailto:swilburn@termis.org).

## TERMIS-AP Announcements

### 2019 TERMIS-AP Award Recipients

The TERMIS-AP would like to congratulate the recipient of the 2019 Outstanding Scientist Award.

Seung-Yup Ku, MD, PhD  
Department of Obstetrics and Gynecology  
Seoul National University Hospital



## 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](#)

## *Tissue Engineering Resource Center*

*Tissue Engineering* is the preeminent, biomedical journal advancing the field with cutting-edge research and applications on all aspects of tissue growth and regeneration. The Journal is proud to facilitate and advance research and communication across academia, industry, and government, as well as provide authors with tools to support their contribution to this evolving field of science.

[More Information](#)