



eCirculator Newsletter  
Winter Issue

January 2020

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## Letter from the President



Happy New Year! I hope everyone has had a wonderful holiday season, and I wish you all the best in 2020. This year is sure to be an exciting one for ISACB as we prepare for **our next biennial meeting in Tokyo**.

The meeting is will be held this year on **December 11<sup>th</sup>-12<sup>th</sup>**. More details will be announced soon and can be also found on our website ([isacb.org](http://isacb.org)). Please save the date, start making travel arrangements, and plan to submit an abstract for this exciting conference. If you have not attended ISACB meetings in the past, you have truly missed out on some unique experiences. We pride ourselves on providing a welcoming atmosphere that encourages networking, facilitates mentoring, promotes early career and women scientists and inspires discussions of cutting edge research.

Over the past few years, we have sought to continue the communications between our biennial meetings by partnering with other societies in off-year gatherings. This past year, we collaborated with the International Symposium on Vascular Tissue Engineering (ISVTE) to host an outstanding meeting in Zurich, Switzerland. I would like to personally thank Dr. **Beat Walpoth**, President of ISVTE, and Dr. **Simon Hoerstrup**, the local meeting chair, and Dr. **Christopher Breuer** of ISACB for helping ensure the success of this meeting. I would also like to thank Dr. **Melanie Generali** and Dr. **Debora Kehl** for helping organize the conference and for providing a summary and outstanding photos from the meeting in this issue of the eCirculator!

We look forward to continuing our off-year meeting tradition in 2021 by collaborating with the Cardiovascular Tissue Engineering (CVTE) Symposium to hold a meeting in Tianjin, China, hosted by Professor Deling Kong. We hope that this meeting, in addition to the biennial meeting in Tokyo, will expand ISACB visibility and interactions in East Asia. Please stay tuned for more information on these exciting events. Also, be sure to keep a look out for announcements regarding our informative Webinar series. These events are a great way to stay involved with ISACB year-round! I would like to close by thanking all ISACB members for your hard work in 2019. If you would like to become more involved in the society, please take a look at our website [isacb.org](http://isacb.org) for more information on committees and ways to contribute. Also, reach out to us with your news and announcements on Twitter ([@AppliedCVB](https://twitter.com/AppliedCVB)). I look forward to a great 2020, and I can't wait to see you all in Tokyo!

Elena Aikawa, MD PhD  
ISACB President

## ISACB + ISVTE 2019 in Zurich, Switzerland

**Combined International Symposium for Applied Cardiovascular Biology and Vascular Tissue Engineering,  
June 19-21, 2019, Zurich, Switzerland**

Enhancing development and clinical translation of basic research into cardiovascular therapies and diagnostic modalities - this was the goal. It was the first time that the International Society for Applied Cardiovascular Biology (ISACB) and the International Symposium on Vascular Tissue Engineering (ISVTE) held a combined symposium hosted by the Institute for Regenerative Medicine (IREM), University of Zurich.

By connecting these societies, conference participants were able to network with leading scientists, clinicians and industry partners in the field of cardiovascular research and tissue engineering. Pioneers in the field of tissue engineered vascular grafts such as Christopher Breuer and Toshiharu Shinoka shared their experiences and challenges in translating research into clinical trials. Marko Turina, a cardiac surgeon, gave a talk about the history of cardiovascular therapies, being one of the first people to surgically implant an artificial heart and perform operations to correct congenital heart defects.

We cannot thank everybody individually; therefore, we would like to thank all the invited speakers and participants for sharing their experience and creating a truly memorable event! Thank you for your presentations, your commitments as session chairs, abstract and poster reviewers or simply for the familiar and friendly atmosphere during the meeting. All accepted abstracts have been published in the "The International Journal of Artificial Organs" (Volume 42 Issue 1\_suppl, September 2019).

Congratulations once again to the poster award winners Nandan Nath (University of Pittsburgh, 1st place), Andreia Fernandes (ETH Zurich, 2nd place) and Melanie Generali (University of Zurich, 3rd place).

Special thanks to all our sponsors for their financial support: Wyss Zurich (Platinum), Biotechnet Switzerland (Gold), Sprüngli (Silver), Gunze (Silver), Preprotech (Silver), MCM Medsys (Bronze), LLS Rowiak (Bronze), Secant Group (Bronze) and the City of Zurich (Bronze).

This first combined conference provided a forum to disseminate state-of-the-art cardiovascular research, build relationships with one-another and renew and establish new collaborations and strategies for translating advancements derived from the understanding of the biology of cardiovascular disease to the care and management of patients. In sum, the meeting was a success thanks to the 142 motivated and enthusiastic participants.

We are looking forward meeting you at the next biennial meeting in December 2020 in Tokyo, Japan!

Melanie and Debora  
Local Organization Team







**University of Zurich**  
UZH



**Institute for Regenerative Medicine • IREM**



## Representation and Inclusion at ISACB Meetings

### *A Report from ISACB Women's Leadership Committee*

The combined meeting of the International Society for Applied Cardiovascular Biology and Vascular Tissue Engineering (ISACB + ISVTE) was held in Zurich, Switzerland this past June. It was the second symposium held since the founding of the ISACB Women's Leadership Committee (WLC) and thus now provides us with two data points regarding female representation. The fields of Cardiology, Cardiothoracic Surgery, and Bioengineering have historically been male-dominated and part of the impetus behind forming the ISACB WLC is to provide awareness around the diversity of the members in our society and the respective fields of research, as well as help to foster the careers of individuals in minority groups.

In the accompanied graph, statistics from the 2018 meeting in Bordeaux are denoted by filled-in circles and 2019 Zurich meeting by open circles; male in blue, female in orange. As was the case in 2018, the 2019 meeting was a 60:40 male to female ratio for total attendees. At the 2019 meeting, there was a slight dip in the total number of female speakers as compared to 2018, however this decrease is mitigated by an excellent improvement in the number of females who were either an invited or keynote speaker; this category doubled, increasing from 13 to 32 percent.

We have all heard of the “leaky pipe” used to describe the fact that women leave the biomedical sciences at a great proportion than men<sup>1</sup>; one way to help combat this is to have female trainees and early career faculty “see” other women in leadership roles; ensuring that women are strongly represented as keynote or invited speakers is an excellent way to achieve this.

Shortly after the 2019 meeting, the ISACB WLC created a list of action items we think can help to promote diversity within the ISACB. Items on this list include:

1. The collection of demographic data at the time of registration, including self-assigned gender preferences as well as current career status, such that we get an accurate assessment of those attending our meetings

2. Assist in identifying minority group and early career faculty who can serve as chairs or keynote speakers of sessions
3. Create a forum to connect trainees and early career faculty with individuals willing to serve as sponsors and/or mentors.

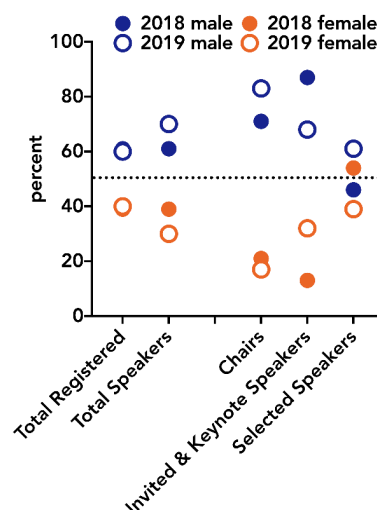
The WLC has been working with the ISACB Organizing Committee for the Tokyo meeting to help identify individuals who can serve as speakers, chairs, and keynotes. And while we are still in the early planning stages, we also hope to have a round table discussion that will highlight the variety of challenges that trainees and academics face in the academic biomedical sciences field.

We are excited to see how ISACB is growing and expanding and are strongly encouraged by the enthusiasm for our initiatives and the support and feedback provided by ISACB Leadership.

1. Grogan KE. How the entire scientific community can confront gender bias in the workplace. *Nat Ecol Evol.* 2019;3:3-6



Dr. Cynthia St. Hilaire  
Women's Leadership Committee Chair  
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## ISACB WEBINAR SERIES

The ISACB Webinar Series celebrated 5 years of topical webinars in December 2019. We have hosted over 40 speakers giving presentations from 6 different countries. Webinar recordings are now exceeding over 3000 views! We would like to extend our gratitude to Medtronic for their continued sponsorship of the ISACB Webinar Series. Their sponsorship funds help to defray the society's cost for the Adobe Connect license renewal each year. *Thank you!*

**MEMBERSHIP DISCOUNTS:** The ISACB is continuing to offer a membership discount to webinar registrants! The first 10 non-member webinar registrants received a promo code for 50% off a new ISACB membership\*.



**Updates on 2019 Webinars:** Our most recent ISACB Webinar was held on November 26, 2019. We were delighted to host **Dr. Anthony Weiss** from the University of Sydney and **Dr. Elena DiMartino** from the University of Calgary. Other speakers from 2019 included **Julie Phillippi PhD**- Chair of the Webinar Committee, **Scott Lemaire MD** and an Early Career Workshop featuring **Giovanni Ferrari PhD**-Co-Chair of the Mentorship and Early Career Committee, **Marie Billaud PhD**, **Damien LaPar MD** and **Juan Grau MD**. Recorded webinars can be accessed by ISACB Members on the society's website: [www.isacb.org/webinars](http://www.isacb.org/webinars).

**Coming up in 2020:** Upcoming topics in 2019 will include a Mentee-focused seminar on January 8, 2020 by **Dr. Frederick Schoen**, who also delivered our inaugural webinar in 2014, and remains our most popular speaker in the archive at 587 views! Click the "Register Now" button below to sign up for this free webinar!

Other upcoming speakers in 2020 include **Robert Tranquillo PhD** and **Carlijn Bouten PhD** (February 20, 2020), **Janice Tsui MD** and **Luke Brewster MD PhD** (August 2020), **Paul Fedak MD PhD** and **Sara Nunes Vasconcelos PhD** (November 2020). Stay tuned for special webinar events on best practices in mentoring, industry publishing, networking, and more! Please send your suggestions for topics and speakers to [isacbwebinars@gmail.com](mailto:isacbwebinars@gmail.com). Self-nominations are welcome! Visit our **Webinars website** to access recorded versions, view upcoming topics, and register for the next event.



### Upcoming Webinars

*"Strategies for Empowered Mentee-ing"*  
January 8, 2020  
12pm (EST)

#### 2020 Speakers:

Robert Tranquillo PhD- University of Minnesota  
Carlijn Bouten PhD- Eindhoven University of Technology  
Janice Tsui MD- University College of London  
Luke Brewster MD PhD- Emory University  
Paul Fedak MD PhD- University of Calgary  
Sara Nunes Vasconcelos PhD- University of Toronto

**Register Now**

**Webinar committee members:** Julie Phillippi, PhD (Chair), Josh Hutcheson, PhD, and Michael Wolf



Webinar Corner contributor:  
Dr. Julie Phillippi, ISACB Webinar Committee  
Chair

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## ISACB Member News

### ELECTED OFFICES:

**Masanori Aikawa, MD, PhD** of Brigham and Women's Hospital, Harvard Medical School was elected as President of the North American Vascular Biology Organization (NAVBO). His three-year term (President-Elect 2019-2020; President 2020-2021; Past President 2021-2022) started in July.

### PROMOTIONS:

**Elena Aikawa, PhD** of Brigham and Women's Hospital, Harvard Medical School was promoted to Professor and received an honorary degree from Harvard Medical School.

**Julie Phillippi, PhD** of the University of Pittsburgh was promoted to Associate Professor with Tenure.

**Elena Aikawa, PhD** of Brigham and Women's Hospital, Harvard Medical School received the Innovation Evergreen Fund Award from Brigham at Women's Hospital in collaboration with junior investigator Su Ryon Shin. The title of the project is *Engineering 3D heart valves using smart biomaterials and programmable 4D bioprinting technology*.

### HONORS and AWARDS:

**Sara Nunes de Vasconcelos, PhD** of the University of Toronto received a CMBE-BMES Young Innovator Award. This included recognition at the 2019 meeting of the Biomedical Engineering Society. The award recognized recently published work:

**Altalhi W, Hatkar R, Hoying JB, Aghazadeh Y, Nunes SS.** Type I Diabetes Delays Perfusion and Engraftment of 3D Constructs by Impinging on Angiogenesis; Which can be Rescued by Hepatocyte Growth Factor Supplementation. *Cell Mol Bioeng.* 2019 Sep 17;12(5):541-542.

### PUBLICATIONS:

**Craig Goergen, PhD** of Purdue University recently published the following paper:

**Sangha GS, Busch A, Acuna A, Berman AG, Phillips EH, Trenner M, Eckstein HH, Maegdefessel L, Goergen CJ.** Effects of Iliac Stenosis on Abdominal Aortic Aneurysm Formation in Mice and Humans. *J Vasc Res.* 2019;56(5):217-229.

**Michael Sacks, PhD** of The University of Texas at Austin recently published the following paper:

**Khang A, Gonzalez Rodriguez A, Schroeder ME, Sansom J, Lejeune E, Anseth KS, Sacks MS.** Quantifying heart valve interstitial cell contractile state using highly tunable poly(ethylene glycol) hydrogels. *Acta Biomater.* 2019 Sep 15;96:354-367.

## JOB OPPORTUNITIES

### ***Postdoctoral Opening in Dr. Ngan Huang's Laboratory for Tissue Engineering***

A postdoctoral position is available in the laboratory of **Ngan F Huang, PhD**, Assistant Professor in the Department of Cardiothoracic Surgery at Stanford University School of Medicine (<http://med.stanford.edu/huanglab.html>). We are interested in tissue engineering of cardiovascular and skeletal muscle tissues using cells derived from induced pluripotent stem cells and instructive biomaterials. We are looking for highly motivated postdoctoral candidates with a PhD in bioengineering or other engineering discipline, with deep knowledge in stem cell biology and biomaterials. Interested applicants should send a CV and cover letter outlining research experience and interests to Dr. Huang at [ngantina@stanford.edu](mailto:ngantina@stanford.edu).

### ***Postdoctoral Position in Microvascular/Vascular Tissue Engineering***

The Thoracic Aortic Disease Research Lab at the University of Pittsburgh is seeking a Post-Doctoral Research Fellow to join our interdisciplinary team of basic scientists, bioengineers, and clinicians to conduct NIH-supported research in bioengineered models of human aortic disease. Our laboratory within the Departments of Cardiothoracic Surgery and Bioengineering and the McGowan Institute for Regenerative Medicine established and maintains a large human aortic tissue and vascular primary cell bank to aid our investigations of the cellular and molecular mechanisms that mediate thoracic aortic aneurysm. The prospective candidate will have a PhD in bioengineering, or similar field of study and a self-motivated interest in pursuing an independent research trajectory in cardiovascular biology. The successful candidate will have experience in vascular and microvascular biology, vascular tissue engineering, ECM biology, ECM biomaterials, decellularization protocols, bioreactor-based culture models, 3-D cell culture, fluid mechanics, RNA and protein isolation from tissue and cultured cells, real-time PCR, Western blotting, molecular biology, histology, immunocytochemistry and fluorescence microscopy. The candidate should be evidently self-driven, demonstrate independent research productivity, possess excellent interpersonal skills and high caliber professional conduct, and be able to interface with clinicians, research associates, students, and faculty. Prior post-doctoral research experience and a track record of independent funding acquisition is highly advantageous. The candidate should also exhibit excellent English written and oral communication skills and will be expected to publish in peer-reviewed journals, present results at scientific conferences, apply for external funding opportunities, and participate in the preparation of grant applications from the team.

As a part of the postdoctoral experience, the applicant can expect to receive career mentoring from clinical and basic science faculty in developing a research program, writing research proposals, and to participate in career development activities. Applicants should E-mail their CV, cover letter and three reference letters attesting to the candidate's qualifications and scientific acumen to the attention of **Dr. Julie Phillippi** [phillippija@upmc.edu](mailto:phillippija@upmc.edu). This position is available immediately.

The University of Pittsburgh affirms and actively promotes the rights of all individuals to equal opportunity in education and employment without regard to race, color, sex, national origin, age, religion, marital status, disability, veteran status, sexual orientation, gender identity, gender expression, or any other protected class.

## Meeting Announcements





On behalf of the Basic Vascular Science Spring meeting organising committee, **Janice Tsui, MD** invites ISACB members to consider submitting an abstract for the upcoming meeting in Leiden on May 15-16, 2020. More information can be found at <https://www.bvssm.com/>



**Experimental Biology 2020**

**April 4-7, 2020**

**San Diego, CA**

ISACB is a Guest Society of the American Association for Anatomy

Mini-Symposium *"Building human blood vessels"*

Speakers:

**Christopher Breuer, MD (ISACB Member)**

**Nicolas L'Heureux, PhD (ISACB Member)**

**Laura Niklason, MD PhD**

ISACB members are eligible for member registration discounts!

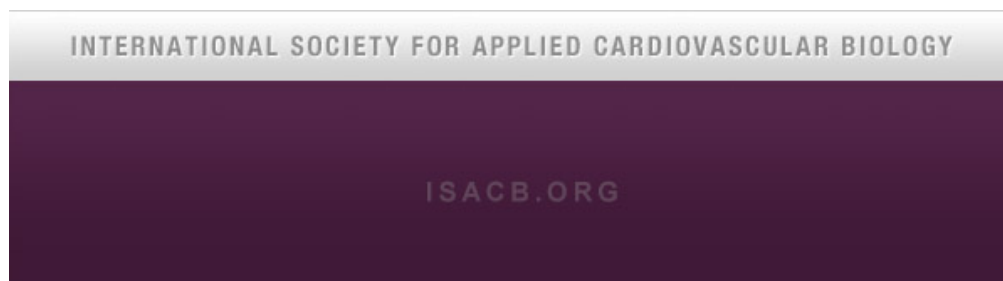
Abstract submission is now closed.

**Experimental Biology website**



## Join the ISACB

If you are not already a member, please consider joining today. The link to membership information is [isacb.org/membership-information](https://isacb.org/membership-information).



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