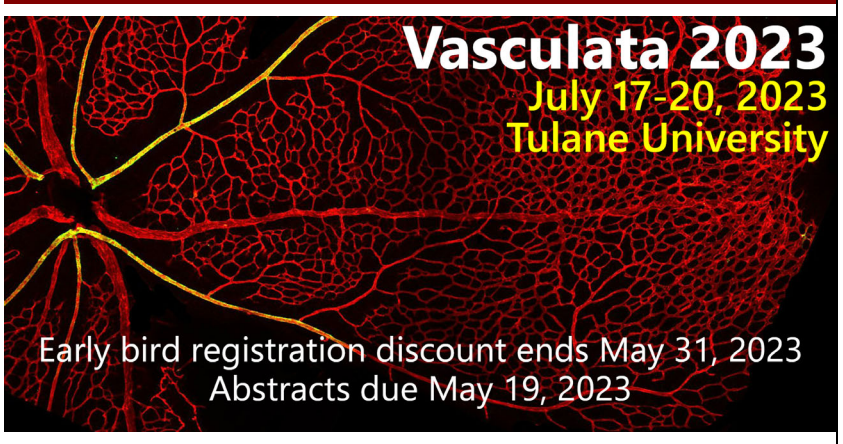
April 2023

NAVBO NewsBEAT

Vasculata 2023



See the Preliminary Program - https://navbo.org/vasculata

Vasculata 2023 will be held at Tulane University in New Orleans from July 17-20, 2023. The meeting is being organized by **Dr. Amitabh Pandey** of Tulane and will feature NAVBO members: **Wayne Orr**, LSU Health Science Center at Shreveport; **Jorge A Castorena-Gonzalez**, **Jennifer Fang** and **Stryder Meadows**, Tulane University; and **Patty Lee**, Icahn School of Medicine at Mount Sinai, as the Keynote Lecture.

Registration and abstract submission sites are open. Go to https://navbo.org/vasculata for more information.

Early bird registration ends May 31, 2023!
Click here to register

Abstract Submissions are due May 1, 2023
Submit your abstract
Selected abstracts will be chosen for short talks

Scholarships are available - complete this form.
Applications are due May 10 - see the website for details.

Lymphatic Forum 2023

The Lymphatic Forum 2023 (LF2023) will be held at the Banff Center from June 13-17, 2023. This is the fifth iteration of this biennial event that brings together researchers from around the world to present and discuss studies of lymphatics in health and disease. This year's event will address the significant role and functions of the lymphatic system in the various organs of the human body. *We received 117 abstracts!!* Be sure to register soon.
For more information and the full program, visit the web site: http://lymphaticforum.org

Register for the meeting here
Register before June 12, 2023

Download and post our flyer. Thank you!

Vascular Biology 2023

In this issue...

Did someone forward this newsletter to you?

Want keep up to date on opportunities in the vascular biology community?

Not a NAVBO member?

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Tune into NAVBO's Podcast - new episodes monthly.

VASCULAR CROSSTALK
BY NAVBO

Meetings/Events

Preliminary Program available on the web site

NAVBO
North American Vascular Biology Organization

VASCULAR BIOLOGY 2023

October 15-19, 2023

Newport, Rhode Island, USA

Visit the web site to view the entire program - **https://navbo.org/vb2023**

The meeting begins on Sunday evening, October 15 with a Keynote Lecture by **Luisa Iruela-Arispe**, Northwestern University and the Benditt Award Lecture by **Miikka Vikkula**, de Duve Institute, University of Louvain, and concludes on Thursday, October 19 at 1:00pm with a general session on Plasticity of the Vasculature. New this year, we will have concurrent sessions in all four "workshop" themes: Development & Genetics, Inflammation, Signaling, and Matrix Biology and Bioengineering. The **Microcirculatory Society** is meeting with us and we will host their Landis Award Lecture and Dr. Pooneh Bagher's President's Symposium.

Be sure to join us and register super early with a special discount!

Super Early Bird registration ends on June 30!
Register early to save big!!!!

We are also accepting abstracts - deadline is August 1, 2023!
Submit your abstract here

NAVBO Travel Awards to GRCs

NAVBO is once again sponsoring Travel Awards for our trainee members to attend the following Gordon Research Conferences:

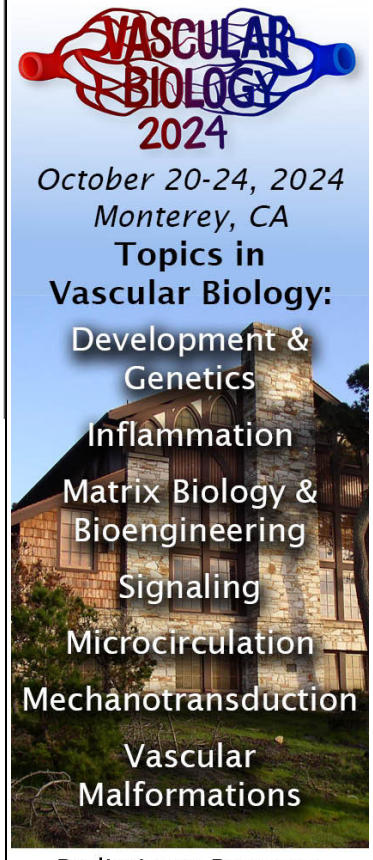
- Angiogenesis and Angiostability in Development, Disease and Engineered
- Atherosclerosis: Molecular Mechanisms, Genomic Modifiers and Emerging Therapies
- Biomechanics in Vascular Biology and Disease: Integrating Vascular Mechanics, Biology and Medicine

For more information, go to *https://www.navbo.org/trainee-awards/* and click on the "Travel Awards - GRC" tab.

Member News

Masanori Aikawa receives 2023 Hoeg Award from AHA
Join us in hearty congratulation of NAVBO stalwart Masanori Aikawa, MD, PhD, on his selection as winner of the 2023 Jeffrey M. Hoeg Arteriosclerosis, Thrombosis, and Vascular Biology Award for Basic Science and Clinical Research. The Hoeg Award, given by the American Heart Association, recognizes an established investigator in the prime of his/her career who has made an outstanding contribution to furthering understanding of the pathophysiology of atherosclerosis and/or the development of treatment strategies for its prevention through basic science and clinical research efforts. The award is in memory of Jeffrey M. Hoeg, MD, chief of the Section of Cell Biology within the Molecular Disease Branch of the NHLBI. Masanori will receive the award and deliver the Hoeg lecture in May at the AHA conference "Vascular Discovery 2023: From Genes to Medicine," in Boston. Well done, Masanori!

Welcome to our New Members:
Surendra Kumar Anand, University of South Florida
Ashim Bagchi, University of Arkansas for Medical Sciences
Yen-Lin Chen, University of Virginia - School of Medicine
Heidi Creed, Texas A&M University School of Medicine
Savieay Esparza,Virginia Polytechnic Institute and State University
Gelare Ghajar-Rahimi, University of Alabama at Birmingham
Sophie Guelfi, VIB-KULeuven Center for Cancer Biology
Jason Hanna, Purdue University
Emma Heeg, University of Calgary
Wen-Chuan Hsieh, Stanford University
Shedreanna Johnson, Texas A&M University
Mehdi Jorfi, Harvard
Saranya Kannan, Texas A&M University
Hassan Khalil, Brigham and Women's Hospital
Stacey Kwan, Brigham and Women's Hospital
Tally Latendresse, Montreal Heart Institute
Lauren Liebman, Georgia Institute of Technology



Preliminary Program available on the web site:
https://navbo.org/vb2024

NAVBO ONLINE

Webinars - 1st Thursday
InFocus Sessions - 2nd and 4th Thursdays
Journal Clubs - 3rd Thursdays
Special Sessions on Tuesdays
(check schedule)

IVBM 2022 Supporters

We gratefully acknowledge the support of the following societies, academic centers and corporations.

Grant

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Brisa Palikuqi, UCSF
Thien Phan, Texas A&M University School of Medicine
Cynthia Pruss, Queen's University
Mohammad S. Razavi, Massachusetts General Hospital and Harvard Medical School
Anita Salamon, University of Virginia
Reetu Singh, Texas A&M University System
Saeed Siri, University of Notre Dame
Pamela Teneqexhi, University of Illinois at Chicago
Neda Vishlaghi, UT Southwestern
Nicolas Werschler, University of British Columbia

If you have news to share with your colleagues, send it to membership@navbo.org

NAVBO Committees

NAVBO is currently recruiting members for its Communications, Communities and Membership Committees. These committees offer their members the opportunity to engage with fellow NAVBO members.

Communities Committee - is responsible for triggering and maintaining engagement on the NAVBO Vascular Network, our online community. Currently this committee is spurring new conversations within the NAVBO community. Our goal is to engage members and grow participation within the community so that members will initiate conversations. Our immediate goal is to make the NAVBO members aware of this important tool, which provides the opportunity to tap into NAVBO's greatest resource, its members.

The Communities Committee is seeking any NAVBO member interested in engaging with the society and their fellow members.

Communications Committee – is responsible for our broad communications to the public. This includes our newsletter, web site and social media platforms. We are also currently working on NAVBO's Wikipedia page. If you are active on Twitter, Facebook, etc. consider joining this team.

The Communications Committee is seeking NAVBO members at any stage in their career who are interested in promoting NAVBO and its activities.

Membership Committee - is responsible for the retention of members, establishing and maintaining certain member benefits, and reaching to possible new members with our Trial Membership Program. Helping to retain members often means engaging with new members to establish their relationship with the society.

The Membership Committee is seeking NAVBO members at any stage in their career who are interested in building relationships and community with new members.

Complete this form.
Please note - Membership in a committee is limited to active NAVBO members.

Spotlight on Trainees

Help yourself in acquiring essential skills for career success
The current focus on professional development for trainees at the pre- and post-doctoral levels has provided incentive for firms like Publication Academy to develop course modules on a variety of topics related to successfully launching a scientific career. Modules aim to impart skills in publishing in high-impact journals, crafting competitive grant proposals, negotiating academic book contracts, and delivering high-impact paper and poster presentations at conferences. Does your institution participate? Trainees may wish to check with their career or professional development offices to see if resources akin to these are available to them.

Recent Member Publications

Differential role for rapid proteostasis in Rho GTPase-mediated control of quiescent endothelial integrity
Journal of Biological Chemistry
Endothelial monolayer permeability is regulated by actin dynamics and vesicular traffic. Recently, ubiquitination was also implicated in the integrity of quiescent endothelium, as it differentially controls the localization and stability of adhesion and signaling proteins. Read More

Microphysiological model of PIK3CA-driven vascular malformations reveals a role of dysregulated Rac1 and mTORC1/2 in lesion formation
Science Advances
Somatic activating mutations of PIK3CA are associated with development of vascular malformations (VMs). Here, we describe a microfluidic model of PIK3CA-driven VMs consisting of human umbilical vein endothelial cells expressing PIK3CA activating mutations embedded in three-dimensional hydrogels. Read More

Targeted PERK inhibition with biomimetic nanoclusters confers preventative and interventional benefits to elastase-

induced abdominal aortic aneurysms
Bioactive Materials
Abdominal aortic aneurysm (AAA) is a progressive aortic dilatation, causing ~80% mortality upon rupture. Currently, there is no approved drug therapy for AAA. Surgical repairs are invasive and risky and thus not recommended to patients with small AAAs which, however, account for ~90% of the newly diagnosed cases. Read More

Gene-repressing epigenetic reader EED unexpectedly enhances cyclinD1 gene activation
Molecular Therapy - Nucleic Acids
Epigenetically switched, proliferative vascular smooth muscle cells (SMCs) form neointima, engendering stenotic diseases. Histone-3 lysine-27 trimethylation (H3K27me3) and acetylation (H3K27ac) marks are associated with gene repression and activation, respectively. Read More

Longitudinal analysis of mucosa-associated invariant T cells in sepsis reveals their early numerical decline with prognostic implications and a progressive loss of antimicrobial functions
Immunology and Cell Biology
Sepsis-elicited immunosuppression elevates the risk of secondary infections. We used a clinically relevant mouse model and serial peripheral blood samples from patients to assess the antimicrobial activities of mucosa-associated invariant T (MAIT) cells in sepsis. Read More

Organ and cell-specific biomarkers of Long-COVID identified with targeted proteomics and machine learning
Molecular Medicine
Survivors of acute COVID-19 often suffer prolonged, diffuse symptoms post-infection, referred to as “Long-COVID”. A lack of Long-COVID biomarkers and pathophysiological mechanisms limits effective diagnosis, treatment and disease surveillance. Read More

Cross-immunity against SARS-COV-2 variants of concern in naturally infected critically ill COVID-19 patients
Heliyon
Critically ill patients infected with SARS-CoV-2 display adaptive immunity, but it is unknown if they develop cross-reactivity to variants of concern (VOCs). We profiled cross-immunity against SARS-CoV-2 VOCs in naturally infected, non-vaccinated, critically ill COVID-19 patients. Read More

Investigation into the genetics of fetal congenital lymphatic anomalies
Prenatal Diagnosis
Objective: Congenital lymphatic anomalies (LAs) arise due to defects in lymphatic development and often present in utero as pleural effusion, chylothorax, nuchal and soft tissue edema, ascites, or hydrops. Many LAs are caused by single nucleotide variants, which are not detected on routine prenatal testing. Read More

Shear stress control of vascular leaks and atheromas through Tie2 activation by VE-PTP sequestration
EMBO Molecular Medicine
Objective: Congenital lymphatic anomalies (LAs) arise due to defects in lymphatic development and often present in utero as pleural effusion, chylothorax, nuchal and soft tissue edema, ascites, or hydrops. Many LAs are caused by single nucleotide variants, which are not detected on routine prenatal testing. Read More

If you have a recent paper that you would like to share with NAVBO NewsBEAT subscribers, send the title and link to membership@navbo.org. *Please note, only papers authored by current NAVBO members are accepted for inclusion.*

Industry News

NYAS announces lipidemia investigators as 2023 Ross Prize winners
The New York Academy of Sciences has announced that the 2023 Ross Prize Symposium will take place on Wednesday, May 31, 2023, recognizing Ross awardees Helen Hobbs and Jonathan Cohen of the UT Southwestern Medical Center. Drs. Hobbs and Cohen have pioneered the identification of genetic risk factors for dyslipidemias and metabolic liver disease, crucial for the design of new therapies to treat these and related disorders. The annual Ross Prize event is sponsored by the New York Academy of Sciences together with the Feinstein Institute for Medical Research and the journal Molecular Medicine.

Lymphatic mapping workshop proceedings available
NAVBO member and NHLBI Program Officer Selen Catania reports the release of “Yet to Be Charted: Mapping the Lymphatic System Across Body Scales and Expertise Domains,” an on-demand viewable recording of the 2021 workshop sponsored by NHLBI and the Boston Lymphatic Symposium that explored recent advances in lymphatic system mapping using single-cell technologies, lymphatic system-specific biomarkers, and new imaging approaches. A published report on the workshop activities appeared in February of this year. Dr. Catania notes that papers describing the proceedings of the September 2022 virtual

The Japanese Vascular Biology and Medicine Organization

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workshop, "Yet to Be Charted: Lymphatic System in Health and Disease," are in the works. Stay tuned!

A public peek at the modernized NLM clinical trials resource
Writing in NIH's Extramural Nexus, Anna Fine, Acting Director of ClinicalTrials.gov at the National Library of Medicine, describes the ongoing modernization effort at ClinicalTrials.gov, the world's largest database of privately and publicly funded clinical trials. This extraordinary resource provides swift and comprehensive access to clinical trial information for millions of patients, advocates, researchers, and the general public. A key milestone is on the horizon in June 2023, when the current website will be replaced by the retuned ClinicalTrials.gov site. This updated site will include improved functionality for searching, viewing, and downloading information about clinical trials. NLM will host a virtual public meeting on April 25 to provide a detailed look.

Summer Programs

Institute for Public Health
Summer Research Program

CARDIOVASCULAR DISEASE & HEMATOLOGY

Students in our *new* SummeR reseArch DIversity ProgrAm iN Cardiovascular Disease & HEmatology (RADIANCE) track learn about the broad scope of heart and blood disorders and their interdisciplinary and multidimensional impact.

Washington University in St. Louis
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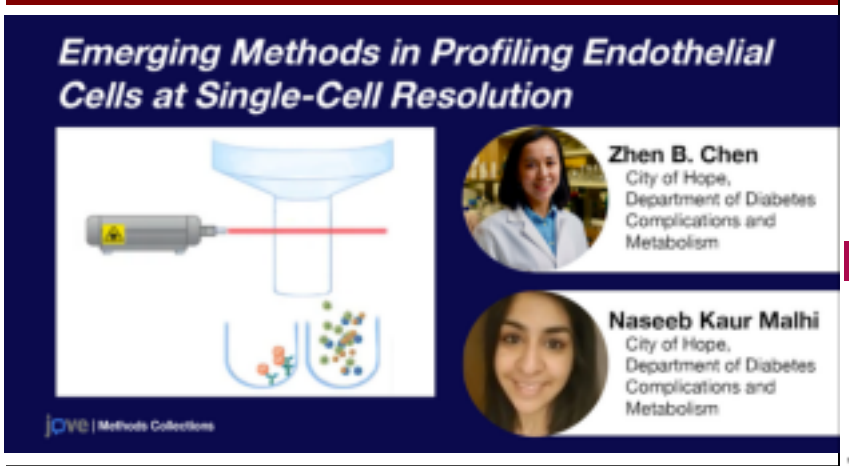
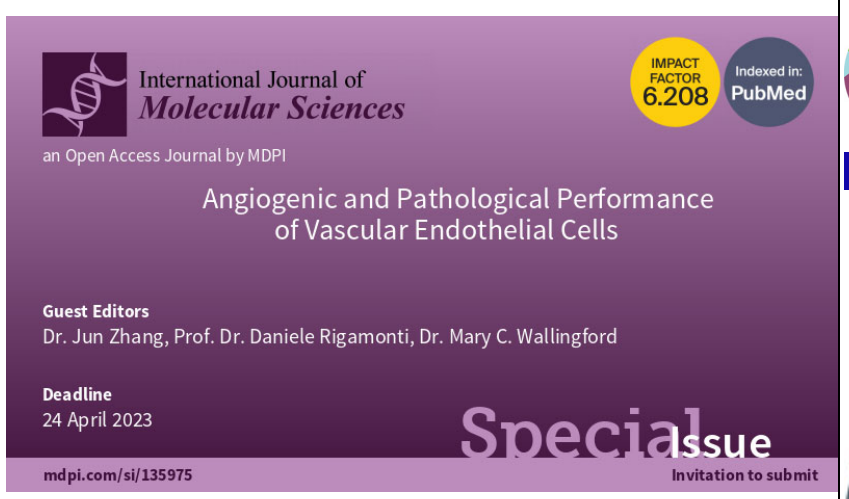
This program is supported by the National Heart, Lung, and Blood Institute (NHLBI).

Contact us: radiance@wustl.edu

Click here for more information.

Call for Papers/Proposals





Special Issue **"Angiogenic and Pathological Performance of Vascular Endothelial Cells"** *co-edited by our NAVBO members, Dr. Jun Zhang (TTUHSC) and Dr. Mary C. Wallingford (Tufts).* Soliciting contributions from experts from NAVBO community in the vascular endothelial cell (EC) research field. This issue will focus on the angiogenic and pathological performance of vascular/microvascular ECs, covering activation, proliferation, migration, invasion, tube formation, the clonal expansion of ECs and cell junctions, maintenance and the malformations of vasculatures and the blood–brain barrier (BBB). Papers will be published in IJMS (International Journal of Molecular Sciences, impact factor, 6.208) are welcome in order to include results at both the cellular and molecular level. **For detailed Manuscript Submission Information,** please go to website

Barrier Formation and Homeostasis in the Vertebrate Brain
In this Special Edition, the guest editors, including **Ramani Ramchandran, Medical College of Wisconsin**, invite you to submit articles that study the various barriers associated with child and adult brains, such as the blood–brain barrier, blood–retinal barrier, blood–lymph barrier and the blood–cerebrospinal fluid barrier. Studies focused on cell–cell interactions and the mechanisms underlying barrier formation or disruption are welcome. Approaches utilizing 3D microfluidic-based primary cell culture model systems, organoids, induced pluripotent stem cells, zebrafish, rodent model systems and human brain tissue are welcome. Computational modelling studies that mimic and provide novel hypotheses in barrier formation will also be considered. In general, we are interested in a multi-faceted
innovative approach to barrier formation in vertebrates, and its role in disease. Endothelial barrier formation in tissues outside the brain will also be considered on a case-by-case basis.
Original articles, reviews, hypotheses, and perspectives are welcome. Studies must be focused on basic science using in vitro, in vivo, and pre-clinical models. Manuscripts with exclusive clinical studies will not be considered.
https://www.mdpi.com/si/151961
Deadline for manuscript submission is June 15, 2023.

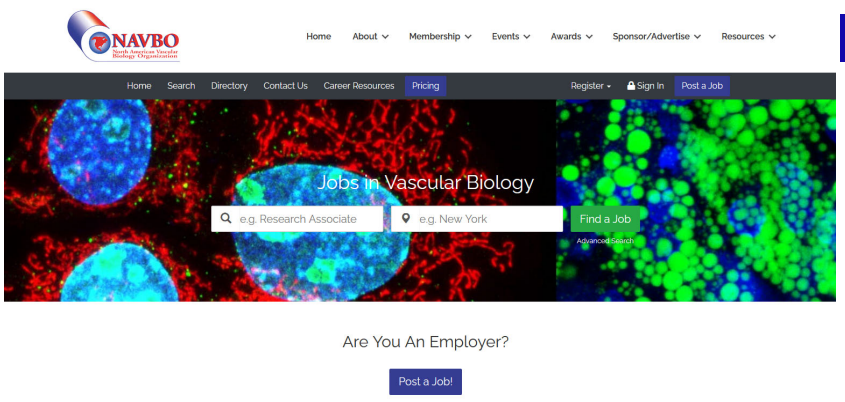
Calendar of Events

April 13, 2023	InFocus - New Technologies in Vascular Biology
April 18, 2023	Symposium: Vascular Smooth Muscle Cells
April 19, 2023	UK cell adhesion Webinar 19th April 2023: Prof Kairbaan Hodivala-Dilke
April 20, 2023	Journal Club - April 2023
April 24 - 25, 2023	7th Annual Stanford Drug Discovery Symposium (SDDS 2023)
April 27, 2023	InFocus - Vascular Epigenetics
May 4, 2023	Webinar with IVBM Speakers Courtney Griffin and Cindy St. Hilaire
June 13 - 17, 2023	Lymphatic Forum 2023
June 18 - 23, 2023	GRC - Molecular Mechanisms, Genomic Modifiers and Emerging Therapies
July 17 - 20, 2023	Vasculata 2023
July 30 - August 4, 2023	GRC - Angiogenesis and Angiostability in Development, Disease and Engineered Tissues
August 6 - 11, 2023	Gordon Research Conferences 2023 in Biomechanics on Vascular Biology and Disease
October 5 - 7, 2023	Lipedema World Congress
October 15 - 19, 2023	Vascular Biology 2023
October 24 - 27, 2023	Critical Issues in Tumor Microenvironment: Angiogenesis, Metastasis and Immunology

Visit the NAVBO Calendar of Events for more meetings

Job Postings

Postdoctoral Scholar	Northwestern University, Feinberg School of Medicine	Chicago, IL
Postdoctoral Fellow	University of Illinois at Chicago	Chicago, IL
Research Technician	Harvard	Boston, MA
PhD studentship	UCL Institute of Ophthalmology	London, England, United Kingdom
Post Doctoral Research Associate	The University of Illinois at Chicago	Chicago, IL



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