January 26, 2023





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Did someone forward this newsletter to you?

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

Not a NAVBO member?

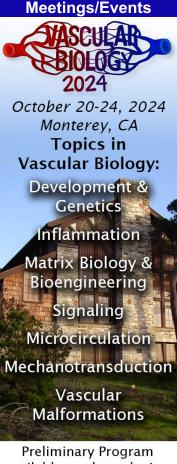
Subscribe Here

Starting in February the NewsBEAT will be published monthly rather than bi-weekly.

Earl P. Benditt Award

The NAVBO Meritorious Awards Committee and NAVBO Council are pleased to announce the selection of Miikka Vikkula, MD, PhD, as the 2023 recipient of the Earl P. Benditt Award, in recognition of his numerous contributions to our understanding of the genetic basis of lymphatic and vascular anomalies. Dr. Vikkula's research has focused on discovery of the genetic characteristics that drive development of a variety of vascular anomalies, notably Lymphedema and certain cancers. Significant among discoveries in Dr. Vikkula's lab was the ground-breaking recognition in 2009 that more than 50% of sporadic human vascular malformations are associated with somatic mutations in the angiopoietin receptor TIE2. This finding has led to targeting the over-activated endothelial TIE2-PI3K-AKT-mTOR signaling axis as a novel therapeutic strategy. Please join us at VB2023 at the Newport Harbor Island Resort this October to honor Dr. Vikkula as he receives this well-deserved award. Learn more about Dr.

Vikkula.



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









Judah Folkman Award

The NAVBO Meritorious Awards Committee and the NAVBO Council announce with pleasure the selection of Michael Potente, MD, as the recipient of the 2023 Judah Folkman Award in Vascular Biology, recognizing outstanding contributions from mid-career vascular biologists. Dr. Potente's research at the Max Planck Institute in Berlin is focused on understanding the role of intermediary metabolism in the regulation of angiogenesis. Of particular interest are the metabolic adaptations, governed by transcriptional mechanisms, required for endothelial cells to adopt a proliferative, migratory phenotype during an angiogenic response. This novel work has revealed that well-recognized pathways of endothelial cell differentiation and function, such as those involving Notch signaling, can be influenced in significant ways by the metabolic state of the cell. Please join us at VB2023 this October to honor Dr. Potente as he receives the Folkman Award in recognition of his accomplishments...and bright future... as a vascular biologist.

Call for Proposals for Vasculata 2024

Learn more about Dr. Potente.

Consider hosting Vasculata, NAVBO's intense 3-4 day summer course, at your institution. This year's Vasculata will be at Tulane University (more details to come soon) and last year's return to inperson was hosted at Duke University.

The goal of Vasculata is to provide an overview of contemporary vascular biology including background, current areas of interest and future directions for the discipline. Additionally, the meeting draws would-be vascular biologists to the field and promotes development of a peer network for early-stage investigators in the field. Graduate students, postdocs and undergraduate students are the key target audience, however, faculty level attendees from other fields who are seeking an overview of vascular biology often attend.

Vasculata is a key part of NAVBO's educational mission and plays an important role in the recruitment of students into the field of vascular biology.

The meeting is usually run on a low budget, reducing fundraising demands on organizers. Most of the speakers can be from your own university, or ones in the vicinity of the host site.

For more information about hosting Vasculata, click here to download the proposal form which outlines the process and describes how NAVBO will assist you. Feel free to call the NAVBO office at (301) 760-7745 if you have any questions. Proposals should be submitted by March 1, 2023.

Subscribe to the NAVBO Podcast!

Don't miss our first episode with Hasina Outtz Reed - 75 listeners have tuned in since our launch last week and we're getting great reviews! Members of NAVBO's Education Committee: Lisandra Vila Ellis, MD Anderson Cancer Center; Stryder Meadows, Tulane University; and Neha Ahuja, University of Texas

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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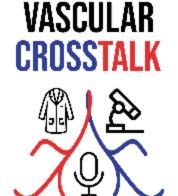


Event Partners



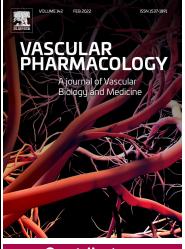
frontiers Impact Factor 6.050 in Cardiovascular





BY NAVBO

Southwestern, initiated Vascular Crosstalk, featuring a variety of NAVBO members. Enjoy monthly interviews featuring conversations with established PIs, as well as roundtables about different topics of interest to our NAVBO community. You can access our monthly episodes on your preferred podcast platform. Add Vascular Crosstalk to your podcast library!



Contributors

Call for Award Nominations



Nominations are now being accepted for these awards through March 15, 2023.

The **Stephen M. Schwartz Award** recognizes an outstanding mentor. This is a great opportunity to recognize your mentor!

Our newest award, the **Florence Sabin Award**, recognizes an individual who has distinguished themselves in at least one of the following areas: promoting diversity, equity, and inclusion in social issues which benefit underrepresented groups, public health, or public service to the broader community.

Click here for information about nominating a colleague.

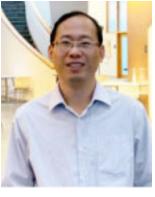
Committee Recruitment



NAVBO is currently recruiting members for its Online Program, Communications and Communities Committees. These committees offer their members the opportunity to engage with fellow NAVBO members in exciting ways.

If you are interested, detailed information about each committee and an application form are on our web site click here.

Lessons Learned



Dr. Yanbo Fan

My name is Yanbo Fan. I have been an Assistant Professor of Cancer Cell Biology and Cardiovascular Health and Disease at the University of Cincinnati College of Medicine since Oct 2019. Although I have learned a lot from my mentor, effective management of the lab, including recruitment, budgeting, project progress, animal protocol, manuscript writing, and grant preparation, still needs to be learned as a PI. I am grateful for the

support from my mentors, colleagues, and administrators.

Recruitment is a critical factor for a new lab. The increased cos of lab expenses but limited funding would be significant issues for many new Pls who have to deal with it. When recruiting lab members, motivation is as important as the previous research experience of the researcher. The passions and dedication of a researcher create more possibilities and lead to success. Supervising the postdoc fellows and graduate students promptly and regularly could help resolve problems and facilitate the project's progress. As a Pl, I learned how to assign tasks/projects to the appropriate lab members according to their experience and skills and set reasonable expectations. It is noteworthy that maintaining the lab in a positive and aspiring environment can facilitate interactions among lab members.

Read more from Dr. Fan here.

ACS Pharmacology & Translational Science







Science Advances

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The Japanese Vascular Biology and Medicine Organization



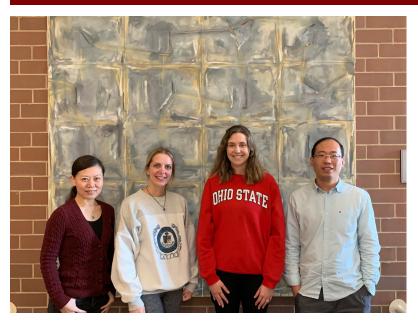
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BIOLOGY SOCIETY



Lab of the Month



Lab of the Month - January 2023

The Lab of Dr. Yanbo Fan

This month we are highlighting the lab of Dr. Yanbo Fan, Assistant Professor at University of Cincinnati College of Medicine. Find out more about his lab by visiting his page in our Lab of the Month listing.

Lymphatic Forum 2023



The Banff Center - June 13-17, 2023

The Lymphatic Forum 2023 (LF2023) 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. For more information and the full program, visit the web site: http://lymphaticforum.org

Register for the meeting here Early bird deadline is April 10, 2023

Submit your abstract here Deadline is March 15, 2023

Download and post our flyer. Thank you!

Member News

Welcome to our New Members:

Roli Adollo, UCL

Emmanuel Bajon, Sainte-Justine Hospital Research Center Kaitlin Ferrari, University of South Florida Morsani College of Medicine

Thomas Register, Wake Forest School of Medicine

In memoriam: Susan Smyth, MD, PhD

We are sad to report the recent death of Susan Smyth, Executive Vice-Chancellor and Dean of the College of Medicine at the University of Arkansas College of Medicine in Little Rock. Dr. Smyth, an MD/PhD graduate of UNC-Chapel Hill and a nationally respected cardiologist and translational researcher, was a NAVBO member for over 20 years and had held leadership positions

at the University of Kentucky prior to her move to the UAMS. While at Kentucky, she, along with David Harrison, organized the Vasculata gathering held at Vanderbilt University in 2012. In addition, Dr. Smyth served on the NAVBO Meritorious Awards Committee from 2008-2011. Our personal and professional condolences go out to her family and colleagues as we mourn her loss.

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

Spotlight on Trainees

Relief for student loan debt still a prospect?

The Biden administration's plan advanced in August 2022 proposed loan forgiveness between \$10,000 and \$20,000 of federal student loan debt for borrowers making less than \$125,000 per year. While the plan has encountered serious legal and political

Applied
Cardiovascular
Biology



Guests









Academic Summa Cum Laude





BRIGHAM AND WOMEN'S
HOSPITAL
CARDIOVASCULAR MEDICINE

UNIVERSITY OF ILLINOIS
COLLEGE OF MEDICINE

Magna Cum Laude

M Northwestern Medicine' Feinberg School of Medicine



Cum Laude





challenges, the White House and US Department of Education remain committed to its implementation. Indications are that these qualifications would include relief of federal loans in support of graduate education as well as undergraduate. Stay tuned!

Originally published in our January 12 issue

Recent Member Publications

The mitochondrial Ca2+ uniporter channel synergizes with fluid shear stress to induce mitochondrial Ca2+ oscillations Scientific Reports

The mitochondrial calcium (Ca2+) uniporter (MCU) channel is responsible for mitochondrial Ca2+ influx. Its expression was found to be upregulated in endothelial cells (ECs) under cardiovascular disease conditions. Since the role of MCU in regulating cytosolic Ca2+ homeostasis in ECs exposed to shear stress (SS) is unknown, we studied mitochondrial Ca2+ dynamics (that is known to decode cytosolic Ca2+ signaling) in sheared ECs. Read more

The age of bone marrow dictates the clonality of smooth muscle-derived cells in atherosclerotic plaques

Nature Aging

Aging is the predominant risk factor for atherosclerosis—the leading cause of death. Rare smooth muscle cell (SMC) progenitors clonally expand, giving rise to up to ~70% of atherosclerotic plaque cells; however, the effect of age on SMC clonality is not known. Our results indicate that aged bone marrow (BM)-derived cells noncell autonomously induce SMC polyclonality and worsen atherosclerosis. Read more



High altitude differentially modulates potassium channel-evoked vasodilatation in pregnant human myometrial arteries

The Journal of Physiology
High-altitude (>2500 m or 8200 ft) residence
reduces uterine artery blood flow during
pregnancy, contributing to an increased
incidence of preeclampsia and intrauterine
growth restriction. However, not all
pregnancies are affected by the chronic
hypoxic conditions of high-altitude residence.

Issue cover includes a figure from this article. 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

Distinguishing fact from fiction

Cabell's, an analytics company that seeks to "...provide academics with accurate information and reputable outlets for publication," has released The Predator Effect: Understanding the Past, Present and Future of Deceptive Academic Journals by Simon Linacre. Available for download, Linacre's book reviews the history of scientific publication in academic journals and explores the mixed blessings imparted by the advent of digital communications and Open-Access. Is it the case that "...we are losing the arms race when it comes to research integrity and publishing ethics," or can the next wave of digital advances work to restore, rather than further undermine, the public's trust in academic research?

Comments sought on NIH peer review revisions

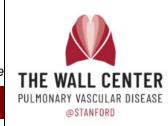
In December 2022, the NIH issued an RFI (NOT-OD-23-034) on its "Proposed Simplified Review Framework for NIH Research Project Grant Applications." The draft framework, which seeks to allow peer reviewers to refocus on judging scientific merit in a manner less subject to bias, will reorganize five major regulatory criteria under three scored categories (Importance; Feasibility and Rigor; Expertise and Resources) and reduce the number of non-score driving review considerations that reviewers evaluate. Comments on the proposed revisions must be submitted by March 10, 2023, to ensure consideration.

Plumbing big data for indications of statin risks and benefits

As described by Linda Searing in The Washington Post, an international team of researchers reports in the journal Neurology that current use of statin drugs was associated with reduced risk of intracerebral hemorrhage at either lobar or non-lobar sites. The study took advantage of linked nationwide registries in Denmark that enabled investigators not only to identify patients with verified, site-determined ICH diagnoses but also match them by age, sex, and calendar year to general population (non-ICH) controls. A nationwide prescription registry then was queried to learn prior statin use timing and dosage.

Originally published in our January 12 issue

Summer Program



Contributors



WRI / WIHURI RESEARCE



Exhibitors







FUJIFILM

VISUALSONICS







Miltenyi Biotec











10 weeks of hands-on experience in cardiovascular research within our laboratories, professional skill-building, and seminars focused on STEM careers, how to apply to medical school and other allied health programs, and how to navigate graduate and medical school.





Apply Now:
Deadline: February 1, 2023
Complete an MCW SPUR (yes, SPUR) application, selecting
"cardiovascular research" within





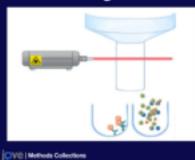




Summer Program at the Medical College of Wisconsin (click on the VISUALSONICS image for more info)

Call for Papers/Proposals

Emerging Methods in Profiling Endothelial Cells at Single-Cell Resolution





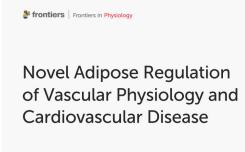


Are you using leading-edge techniques to profile endothelial cells at single-cell resolution? Consider submitting your work to a new JoVE collection guest-edited by NAVBO members, **Dr Zhen Bouman Chen** (2020 Springer Junior Investigator Award winner) and Dr. Naseeb Malhi at City of Hope! For more information or to submit an abstract, please email zhenchen@coh.org or follow this link.

Did you know?

You can connect with fellow NAVBO members through the Vascular Network Community

Respond to emails that you receive through the NAVBO Vascular Network or visit the site and post questions, comments and start conversations. The NAVBO Mentoring Program is within the Community site, so visit today!



Carolina Restini, Michigan State University, United States Cameron G McCarthy, University of South Carolina, United States Jessica Faulkner, Augusta University, United States

Novel Adipose Regulation of Vascular Physiology and Cardiovascular Disease hosted by Drs. Carolina Restini (Michigan State University), Cameron G. McCarthy (University of South Carolina School of Medicine) and Jessica L. Faulkner (Medical College of Georgia at Augusta University).

It is well established that adipose tissue has profound influence on organ function via paracrine and endocrine signaling. Specifically, adipose tissue is able to expresses and secrete various bioactive molecules (e.g. adipokines). However, depending on the type of fat (brown or white), the organ, and the embryological origin, adipose tissues may diverge in the production/secretion of specific metabolites and how they subsequently affect organ function. Therefore, how adipose tissue contributes to homeostatic vascular physiology and the pathogenesis of cardiovascular disease is farreaching, as are possible therapeutic targets. In this issue, we aim to bring together a collection of state-of-the-art articles that illustrates this potential and contributes significantly to combating the prevalence and incidence of cardiovascular disease by targeting adipose tissue depots. Submit your paper here





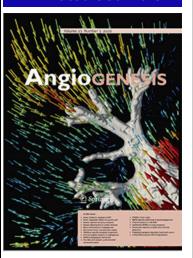
Corporate Members





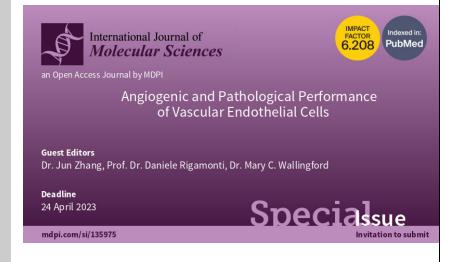


Affiliated Journals

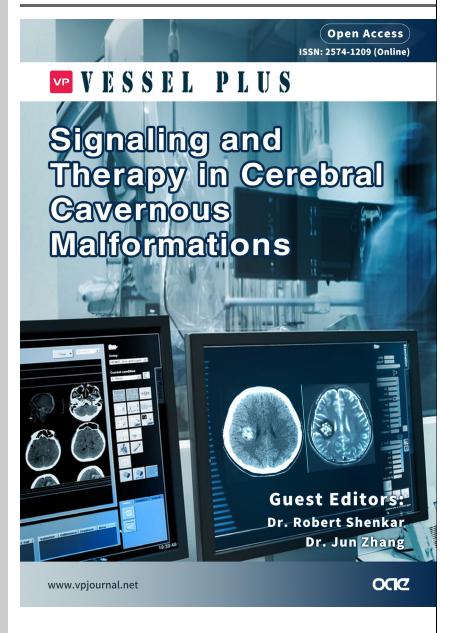


Cardiovascular **Pathology**





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

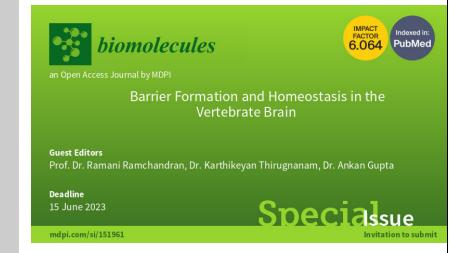


Special issue title: **Signaling and Therapy in Cerebral Cavernous Malformations**

Introduction: Cerebral cavernous malformations (CCMs) are ectatic capillary-venous malformations that develop in approximately 0.5% of the population. These malformations, which can vary in size from 2 millimeters to several centimeters in diameter, may be hereditary but most often occur on their own. As opposed to other kinds of hemangiomas, CCM vessels, which have the appearance of a small mulberry, develop and create problems in the brain or spinal cord. Patients with CCMs may develop headaches, focal neurologic deficits, seizures, and hemorrhages. In this special issue, we aim to report latest advances of CCMs.

Submit your paper here

Submission Deadline: March 31, 2023



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			
January 26, 2023	InFocus - Endothelial Flow Sensing		
Jan. 31 - Feb. 3, 2023	VAC 2023		
Feb. 1, 2023	UK Cell Adhesion Society Webinar February		
Feb. 2, 2023	Webinar with Dr. Delphine Gomez, Springer Award Recipient		
Feb. 7, 2023	Frontiers in Cardiovascular Sciences Seminar Series with Young-Sup Yoon		
Feb. 9, 2023	InFocus - Marfan Syndrome		
Feb. 16, 2023	Journal Club - February 2023		
Feb. 21, 2023	Frontiers in Cardiovascular Sciences Seminar Series with Thomas Quertermous		
February 2023	FASB Short Course - Center for Complex Biological Systems		
March 21, 2023	Frontiers in Cardiovascular Sciences Seminar Series with Sharon Gerecht		
June 13 - 17, 2023	Lymphatic Forum 2023		
August 6 - 11, 2023	Gordon Research Conferences 2023 in Biomechanics on Vascular Biology and Disease		

Visit the NAVBO Calendar of Events for more meetings

Job Postings

Job Title	Company	Location
Yale University School of Medicine	Weill Cornell Medical College	New Haven, CT
Postdoctoral Researcher in Cell & Developmental Biology	University of Virginia	Charlottesville, VA
Post-doctoral and/or Staff Specialist positions in vascular biology	UCSF	San Francisco, CA
Postdoctoral Research Associate	The University of Illinois at Chicago	Chicago, IL
Postdoc - Yale University - Vascular or Lung Biology	Yale University School of Medicine	New Haven, CT
Postdoctoral Fellowship Opportunities in Regenerative Medicine	University of Illinois College of Medicine	Chicago, IL
JOHNS HOPKINS FELLOWSHIP IN VASCULAR AND CARDIAC IMMUNOLOGY	Johns Hopkins Medicine	Baltimore, MD
PostDoctoral/staff scientist	Temple University School of Medicine	Philadelphia, PA
Postdoctoral Scholar	Northwestern University, Feinberg	Chicago, IL

