

Good News!

Wake Forest School of Medicine Cardiovascular Sciences Center

Second Quarter 2019



Editors' Choice: Mediterranean Diet Improves Diabetes Risk and Metabolism



Dr. Shively



Dr. Appt



Dr. Vitolins



Dr. Uberseder



Dr. Michaelson



Dr. Silverstein-Metzler



Dr. Register

The Obesity Society has chosen one of Comparative Medicine's/Clarkson Campus' studies as an **Editors' Choice** article for the May issue of Obesity. Articles chosen as Editors' Choice are handpicked by the editors and promoted to the media via a monthly embargo alert. Authors are Drs. Carol Shively, Susan Appt, Mara Vitolins, Beth Uberseder, Kristopher Michalson, Marnie Silverstein-Metzler, and Thomas Register. View the full article here:

<https://onlinelibrary.wiley.com/doi/10.1002/oby.22436>

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 **Wake Forest**
School of Medicine

CV COE Faculty Publications from April-July 2019

Over the last three months, Wake Forest School of Medicine CV COE faculty published **118 manuscripts** in peer-reviewed journals including *JAMA*, *Circulation*, *Lancet*, and *Nature Genetics*. Below are a few articles from the list. All of the publications can be found at <https://www.ncbi.nlm.nih.gov/sites/myncbi/IJSeQsdreOokM/collections/58713849/public/>



Dr. John Parks and colleagues recently had an article published in *Arteriosclerosis, Thrombosis, and Vascular Biology* titled, "Targeted Deletion of Hepatocyte Abca1 Increases Plasma HDL Reverse Cholesterol Transport via Biology."

John Parks, PhD

Dr. Dalane Kitzman co-authored an AHA/ACC scientific statement titled, "Home-Based Cardiac Rehabilitation is an Option to Overcome Barriers of Traditional Cardiac Rehabilitation," which was published in *Circulation* on May 13, generated an estimated 115,038,510 media impressions, meaning it was featured in media outlets with a potential combined total circulation of that amount. In addition, this article had an additional 80,705 views via the AHA social media channels.

Dr. Alain Bertoni and his fellow researchers published an article in *Circulation Cardiovascular Imaging* titled, Glycemic Markers and Subclinical Cardiovascular Disease: The Jackson Heart Study.



Dr. Lynne Wagenknecht and colleagues published a manuscript in *PLoS Medicine* titled, "Fatty Acid Biomarkers of Dairy Fat Consumption and Incidence of Type 2 Diabetes: A Pooled Analysis of Prospective Cohort Studies."

Lynne Wagenknecht, PhD

Drs. Barbara Pisani and **TJ O'Neill** published their manuscript in *The Journal of Heart and Lung Transplantation* titled, "Too Big to Fail?"

Recent Grant Awards by CVSC Faculty



Dr. Leanne Groban's (with Co-PI Dr. Emmanuel Opara) R21 titled, "Effects of Cell-Based Hormone Therapy on LV Diastolic Dysfunction and Hypertrophy Progression after Mid-Life Estrogen Loss was funded in early 2019 by NIA/NIH with a two-year total funding of \$435,972.

Leanne Groban, MD

Dr. Giselle Melendez's K award titled, "Cellular Senescence: A Novel Mechanism of Doxorubicin-Induced Cardiotoxicity" recently received funding. The study will examine cellular senescence and associated mitochondrial dysfunction and their links to myocardial fibrosis and left ventricular (LV) dysfunction induced by Anthracycline therapy. Dr. Melendez will receive funding from the NIH/NHLBI in the total amount of \$584,049 from 2019 through 2024.



Giselle Melendez, MD



Dr. Kylie Kavanagh's Summer Veterinary Student Research Fellows program at Wake Forest has been awarded \$60,772 through 2024. This proposed summer research program seeks to expose veterinary students to biomedical research through practical experience.

Kylie Kavanagh, DVM, MS, MPH

Dr. Dalane Kitzman's collaborative MESA grant application with pulmonary titled, SPIROMICS, received a perfect score and is scheduled to be funded by the NIH with a preliminary budget of \$619,375 for a period of 5 years. Dr. Kitzman is a coinvestigator on the project, which examines interactions between pulmonary dysfunction and heart failure.

In the News

Beginning in March, four of our Wake Forest Baptist Health Cardiologist began seeing patients at our newly opened Heart and Vascular Practice in Elkin. Our physicians will provide general cardiology care and the clinic is conveniently located next to Hugh Chatham Memorial Hospital where diagnostic testing can be performed if needed. **Dr. David Kay** will be leading the practice along with his team of skilled and highly qualified board certified cardiologists, **Drs. Maria “Octavia” Rangel, Walter Tan, and Li Zhou.** Read the news release here:

<https://newsroom.wakehealth.edu/News-Releases/2019/03/Wake-Forest-Baptist-Opens-Heart-and-Vascular-Practice-in-Elkin>

CVSC Visiting Professors 2019-2020

We have an exciting lineup scheduled for the 2019-2020 academic year, full of top-notch **CV Medicine Research Grand Rounds** Guest Speakers. Save the date for these “can’t miss” seminars! Grand Rounds are held Friday Morning at 7:30 am in the Medical School Board Room (Gray Building, 1st Floor).



Tom Brott	Mayo Clinic (Jacksonville)	November 7, 2019
Stavros Drakos	University of Utah	December 6, 2019
Phillip Levy	Wayne State University	December 13, 2019
Ann Marie Navar	Duke University	January 10, 2020
Lynne Stevenson	Tufts Medical Center	January 24, 2020
David Goff	NHLBI	TBA
Susan Redline	Harvard University	TBA
Navin Kapur	Tufts Medical Center	TBA

Invited Presentations

Dr. Li Zhou was invited to give a poster presentation at the American Society of Echocardiography Scientific Sessions in Portland, Oregon on June 24. The title of her presentation was, “Off-Axis Imaging of the Left Ventricular Outflow Tract by Two-Dimensional Echocardiography Leads to Underestimation of Aortic Valve Area.”

Dr. Liliya Yamaleyeva was an invited speaker at the ASPET Symposium during the Experimental Biology Meeting in Orlando, Florida on April 6. The title of her talk was, “Hemodynamic Effects of Apelin in Preeclampsia” as part of the symposium, “An Apel(-in) a Day Keeps Cardiovascular Disorders at Bay?”

Lauren Eyadiel, PA-C, mentored by **Dr. Barbara Pisani**, has been invited to present her abstract titled “Should I Stay or Should I Go? A Review of LVAD Explants” at the ASAIO annual conference in San Francisco, CA, June 26-29.

Thank you to **Dr. Patricia Gallagher** for her presentation titled, “Angiotensin-(1-7): A Novel Therapeutic for Cardiovascular Disease” given during the 2019 Annual Women & Cardiovascular Health Event which took place on February 26 at Biotech Place.

Awards and Accomplishments



Karl Richardson, MD

Dr. Karl Richardson's abstract titled, "Clinical Reasoning and HER Stewardship: Development of a Reliable Documentation Assessment Tool," received an award for top abstract in the Educational Initiatives Research category at the Alliance for Academic Internal Medicine National Conference in April. Also, congratulations to Dr. Richardson on becoming the Associate Program Director for the Internal Medicine Residency this summer.

Dr. Li Zhou came in second place receiving the Silver Award in the **Department of Internal Medicine's 13th Annual Research Symposium** on May 15. Her award was for the category of QI Research Junior Faculty and her poster was titled, "Off-Axis Imaging of the Left Ventricular Outflow Tract by Two-Dimensional Echocardiography Leads to Underestimation of Aortic Valve Area."



Fatima Ryalat

Fatima Ryalat, a graduate student mentored by **Dr. Debra Diz**, has received the 2019 Vevo Travel Award-Vascular Track sponsored by FUJIFILM Visual Sonics Inc. to attend Experimental Biology for her submission of "Muscadine Grape Extract Treatment Improves Aortic Pulse Wave Velocity and Superior Mesenteric Artery Pulsatility Index in Hypertensive Transgenic (mRen2)27 Female Rats." The abstract was presented at the Experimental Biology 2019 Sessions.

The Cardiovascular Sciences Center would like to congratulate **Dr. Jason Stopyra**, Assistant Professor in the Department of Emergency Medicine; **Dr. Parag Chevli**, Assistant Professor in the Department of Internal Medicine, Section on Hospital Medicine; and **Dr. Amer Aladin**, T32 Fellow in the Cardiovascular Research Fellowship Program of the Section on Cardiovascular Medicine within the Department of Internal Medicine. We would like to mention that **Dr. Christopher Schaich**, also a T32 Fellow in the Cardiovascular Research Fellowship Program and an instructor in Hypertension and Vascular Research, will receive his MS in Clinical and Population Translational Sciences, graduating in August this year.



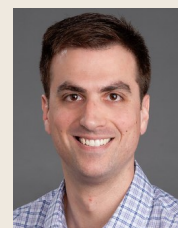
Jason Stopyra, MD



Parag Chevli, MD



Amer Aladin, MD



Christopher Schaich, PhD, MS

Several Cardiology faculty were the proud recipients of Internal Medicine Faculty Residency Program Awards this year.



Walter Tan, MD

Dr. Walter Tan, Associate Professor of Cardiology, was recognized by the Internal Medicine residents by receiving the **Master Teacher Award**.

Dr. Octavia Rangel Assistant Professor of Cardiology, received the **William R. Hazzard ACM Recognition of Excellence Award** for her work in Geriatric Medicine.



Octavia Rangel, MD



Brandon Stacey, MD

Dr. Brandon Stacey, Associate Professor of Cardiology, received the **Clinical Science Teaching Award** from the class of 2019 and the class of 2020.

Dr. Bharathi Upadyha, Associate Professor of Cardiology, received the **Clerkship Best Teacher Award**.

2018 Top 10 papers from the Department of Internal Medicine were announced in May. Six of the top ten papers were authored by CVSC members!
 Congratulations to these outstanding authors on this accomplishment.



Hariom Yadav, PhD: “Human-Origin Probiotic Cocktail Increases Short-Chain Fatty Acid Production Via Modulation of Mice and Human Gut Microbiome”

Hariom Yadav, PhD

Leah Solberg Woods, PhD: “Genetic Fine-Mapping and Identification of Candidate Genes and Variants for Adiposity Traits in Outbred Rats”

David Herrington, MD, MHS: “Proteomic Architecture of Human Coronary and Aortic Atherosclerosis”

Barry Freedman, MD, FACP: “FGF23 Concentration and APOL1 Genotype Are Novel Predictors of Mortality in African Americans with Type 2 Diabetes.”



Barry Freedman, MD, FACP



Dalane Kitzman, MD: “Regional Adipose Distribution and Its Relationship to Exercise Intolerance in Older Obese Patients Who Have Heart Failure with Preserved Ejection Fraction.”

Dalane Kitzman, MD

Deanna Jones, MD: “Frequency of Transition from Stage A to Stage B Heart Failure after Initiating Potentially Cardiotoxic Chemotherapy.”



Timothy Hughes, PhD: “Arterial Stiffness and Dementia Pathology: Atherosclerosis Risk in Communities (ARIC)-PET Study.”

Timothy Hughes, PhD

CV Medicine Faculty Awards

At the close of every academic year, the graduating group of Cardiovascular Medicine fellows present awards to faculty whom they have been mentored by over the duration of their CV Medicine fellowship. These awards are voted on by the fellows and presented to the faculty at the graduation dinner in June. The recipients of the awards are considered by the fellows to be dedicated to providing outstanding education and support throughout their training and are looked to as one of the best teachers in their respective fields. Congratulations to the following award recipients!

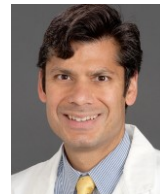
Prashant Bhawe, MD - Overall Faculty Award

Sanjay Gandhi, MD - Invasive Faculty Award

Bharathi Upadhyya -Non-Invasive Faculty Award



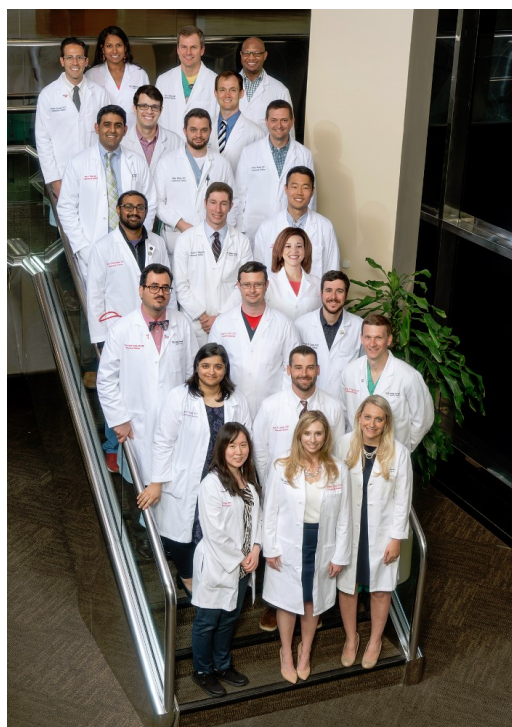
Prashant Bhawe, MD



Sanjay Gandhi, MD



Bharathi Upadhyya, MD



2018-2019
 CV Medicine Fellows

Events

The **2019 Annual Women & Cardiovascular Health Event**, which was held on February 26 at Biotech Place, was a great success. Thank you to **Drs. David Soto-Pantoja and Liliya Yamaleyeva** for organizing and planning the event.

The **19th Annual Graduate Student & Postdoc Research Day** was Friday, March 22, at Biotech Place. More than 100 graduate students and postdoctoral fellows from over 30 academic programs from the graduate school presented poster presentations and participated in a Three-Minute Thesis Competition (3MT).

The **Women's Health Research Day** presented by Women in Medicine and Science (WIMS) was held April 17 in the Commons Conference Rooms. The title of the conference was, "What's on HER Mind? Gender Difference in Cognitive Function."

The **7th Annual Mid Atlantic PREP and IMSD Research Symposium (MAPRS)** was held at Biotech Place May 23-24 and was a huge success. Several CVSC faculty, staff and trainees participated in the 2019 MAPRS in various capacities. Thank you to all those that provided support and contributed.



Career Development Corner

On June 3, 2019, the following Excellence in Cardiovascular Sciences (EICS) summer students arrived:

Student	Mentor	Department
Julman Bottino	Giselle Melendez	Cardiology
Rei Bufi	Chia-Chi Chuang Key	Molecular Medicine
Maurice Johnson	Leah Solberg-Woods	Molecular Medicine
Hayoung Lee	Rong Chen	Physiology and Pharmacology
Maren Plant	Matt Quinn	Pathology - Comparative Medicine
Joseph White	Andrew Bishop	Molecular Medicine
Kaila Loera	Leslie Poole	Biochemistry
Chelsea Salmon	Allyn Howlett	Physiology and Pharmacology
Shannon Kelty	Ann Tallant	Surgery/Hypertension
Zipporah Cornelius	Katherine Cook	Surgery/Hypertension
Jose Luna	Hariom Yadav	Molecular Medicine
Shaniya Singh	Nicole Levi	Plastic & Reconstructive Surgery
Daija McKenzie	Andrew South	Pediatric Nephrology
Erica Weaver	Liliya Yamaleyeva	Surgery/Hypertension

Please join us for **2019 Excellence in Cardiovascular Sciences (EICS) Summer Research Program Poster Symposium**, on **Friday, August 2nd**, from 9:30 to 11:00, in the Atrium at Biotech Place. Fourteen undergraduate students from all over the country have been working in our cardiovascular laboratories during the summer and they will present posters describing their summer studies. Light snacks will be served. The symposium will be followed by a brief ceremony, to provide the students with certificates celebrating their participation in our program. Join us and let these bright young students share with you their summer studies.