

Message

Dear Colleagues,

Welcome to Volume 1, Issue 6 of our Department of Internal Medicine Research Newsletter! The goal of this newsletter is to document and distribute information about ongoing research activities within the Department.

August has been full of research activity and September promises the same. On August 11th, Dr. Rehan Qayyum led a well-attended workshop on “Idea to Question: Developing a Research Question”. Then on August 25th, Dr. Liza Botros continued the series with a presentation on “How to Choose a Study Design”.

Major events this month include the EVMS Research Day abstract deadline (September 9th, 2022), with the conference to be held on Friday, Oct. 14, 2022! This is the time to engage our medical students, residents, and fellows and help them submit their scholarly work. We are here to help you!

Looking ahead: On September 8, 2022, at 5:00 PM, Dr. Andrew Plunk will give a talk on ‘Grant Writing 101’ in the large conference room on the 5th floor of Hofhiemer Hall.

PUBLICATIONS & PRESENTATIONS:

1. **Moen SO**, Goodrich-Harris A, Stephenson EL, **Flemmer MC**. West Nile virus in a patient with Good's syndrome. *Oxf Med Case Reports*. 2022 Aug 18;2022(8):omac081. doi: 10.1093/omcr/omac081. PMID: 35991500 [Publication]
2. Malek R, Shibli-Rahhal A, Correa R, Szmuiłowicz ED, Morgan F, Luthra P, Sirisena I, Gianoukakis A, Praw SS, **Lieb DC**, Haw JS, Mayson SE. An Assessment of Diversity, Inclusion, and Health Equity Training in Endocrinology Fellowship Programs in the United States. *Endocr Pract*. 2022 Aug 16:S1530-891X(22)00599-7. doi: 10.1016/j.eprac.2022.08.010. Epub ahead of print. PMID: 35985561. [Publication]
3. Cundra L, **Saadeh M**, **Vallabhaneni M**, Houston K, **D’Souza S**, **Johnson D**. “Dietary Modulation of the Gut Microbiome in Inflammatory Bowel Disease” *Recent Progress in Nutrition* 2022, 2(3):1-24 [Publication]
4. Patel A, Houston K, **Saadeh M**, **Vilela A**, **Yoo BS**, **D’Souza SM**, **Johnson DA**. “Role of Diet in the Pathogenesis of Colorectal Polyps and Cancer.” *Recent Progress in Nutrition* 2022; 2(3):1-2 [Publication]
5. **Okhravi H**, Gupta A, Jain S, Maly K, Nesbitt C, Gujjar S, Murthy T, **Wainwright L**, **King D**. “Feasibility of using wearable technology to monitor agitation and sleep in patients with Alzheimer’s dementia: Lessons learned” *Alzheimer’s Association AAIC 2022 Conference, San Diego* [Poster/Interview]
6. Temtam A, Cruz E, **Okhravi H**, **Strock D**, **Sternick M**, Iftexharuddin K. “Advanced Machine Learning Approach to Increase Diagnostic Accuracy in Atypical Alzheimer’s Disease Cases” *Alzheimer’s Association AAIC 2022 Conference, San Diego* [Poster]



Katie McDonough interview with Dr. Hamid Okhravi

Thank you to our IM faculty mentors who supported Summer Scholar projects this year!

1. Kripa Ahuja, **Catherine Derber MD**, Margaret Baumgarten MD, Fang Fang PhD “Impact of Telemedicine on Care of Patients Living with HIV in the Hampton Roads Area” [Poster]
2. Cortny Cushman, **Carolina Casellini MD** “Diagnostic Utility of Structural and Functional Nerve Function Measures for the Identification of Peripheral Neuropathy in Subjects with Type 2 Diabetes” [Poster]
3. Catherine Nguyen MS, **Henri K. Parsons PhD**, Jordan Pettaway MS, **Elias S. Siraj MD & Carolina M. Cassellini MD** “Utilizing QOL Tools to Examine Presence of Fatigue in Diabetes Mellitus Subjects” [Poster]
4. Mark Velasquez, Laren Alexis Walters, Carrie Elzie PhD, **Hamid Okhravi MD**, and Daniel Cohen MD “Use of Virtual Reality to Improve Empathy and Self-Efficacy in Caregivers of Dementia Patients” [Poster]
5. Myles Perry, Mahlete Yared, Chris Fungwe, Mekbib L. Gameda, Patti Kiger M.Ed., **Jason Dukes MD** “A Needs Assessment Exploring the Quality of Care for Patients with Sickle Cell Disease” [Poster]

CONFERENCES & MEETINGS:

EVMS Research Day abstract submission [deadline](#) is Friday, September 9, 2022. Medical students, residents, and fellows can submit case reports, review articles, or traditional research reports. Please encourage your mentees to submit their work. If you need help, contact Ms. Avila.



Scholarship

Internal Medicine Research Advisory Committee (IMRAC) will meet next on Wednesday, Sept. 28 from 5-6PM! Hof. Hall, 5th Floor, Large Conference Room

Announcements

Upcoming Events

Hofheimer Hall, 5th floor
Large Conference Room

Researcher Spotlight



#IMResearchEVMS



Please send research updates to Cindy Avila AvilaCJ@evms.edu for consideration in our upcoming newsletters

RESEARCH WORKSHOPS:

September 8, 2022 (5-6 PM) **“Grant Writing 101”** led by Dr. Andy Plunk. Dr. Plunk is an Associate Professor in the Division of Community Health and Research within the Dept. of Pediatrics. He serves as Director for Community Outreach and Partnership and leads the Community Inclusion and Health Equity (CIHE) Initiative. Dr. Plunk is the PI for several NIH-funded studies. His studies focus on the impact of policy on health, social, and economic outcomes on marginalized communities. Dr. Plunk earned his PhD in Health Care Ethics from St. Louis University and holds a MPH from Missouri State University.



September 22, 2022 (5-6 PM) **“Writing for Medical Journals”** led by Dr. Rehan Qayyum. Dr. Qayyum will review the general guidelines for preparing a manuscript, organization of a manuscript, and manuscript submission process. Dr. Qayyum is Chair of the Department of Internal Medicine and has extensive experience in writing for medical journals. He has given talks on similar topics to a variety of audiences.



October 6, 2022 (5-6 PM) Mark your calendar for fun at the Research Journal Club – we will be discussing a clinical article that used a cross-sectional study design. As always, there will be plenty of time for discussion and learning. We discuss study design, epidemiological principles, and some biostatistical rules. Previously, we have covered retrospective cohort study design and prospective cohort study design.

Carolina Casselini, MD:

Tell us a little about yourself:

I was born and raised in Buenos Aires, Argentina, where I obtained my medical degree and specialized in Internal Medicine and Rheumatology. I switched gears when I came to the U.S. 11 years ago to join Dr. Aaron Vinik’s lab. Since my arrival, my primary focus has been on diabetes clinical research, including cardiovascular diseases, diabetic neuropathies, obesity, pre-diabetes and the metabolic syndrome. I have always been passionate about research and working at EVMS has given me the opportunity to fully pursue this career path. I also appreciate the opportunity to interact with students and fellows, helping them develop and conduct their own research efforts.

On October 6, 2022, the Department of Internal Medicine will host a Journal Club on “cross-sectional studies.” You recently published a paper using this study design. (Casellini CM, et al. Cardiac and Sudomotor Autonomic Function in Subjects with Psoriasis With and Without Metabolic Syndrome. *Metab Syndr Relat Disord.* 2022;20(4):234-242). Please tell us about your research question, why you chose this design, and any limitations:

Our lab and others have identified the relationship between inflammation in chronic diseases and nerve injury. This led us to explore nerve dysfunction in other chronic inflammatory diseases like psoriasis. In collaboration with Dr. Abby Van Voorhees, we investigated the prevalence of autonomic nerve dysfunction in subjects with psoriasis. We chose a cross sectional design for this small pilot study to gather preliminary information, as there is not much data published on this topic. Recruiting participants was challenging given that most patients with psoriasis are already on medications that target chronic inflammation.

How have your research interests changed over time?

I am dedicated to identifying mechanisms of nerve damage that will guide us to early detection, and new therapeutic approaches oriented to prevent or ameliorate progression of this debilitating disease for which there is no effective therapy available. I have participated in the development and validation of two clinical tools to evaluate the impact of diabetes, neuropathy, and fatigue on quality of life. More recently, I am interested in community-based lifestyle interventions, targeting underserved communities with obesity and diabetes. Under the direction of Dr. Elias Siraj, I am currently involved in clinical studies addressing obesity, cardiovascular diseases, and other endocrine diseases. I have also started collaborating with Dr. Hamid Okhravi on dementia and Alzheimer’s disease research.

What studies are you currently working on?

Work from our lab, in collaboration with UCSD, demonstrated that anti-muscarinic agents affect nerve regeneration, improving pain and quality of life in patients with diabetic neuropathy. We just completed Phase 2 trials to confirm these findings. We are conducting a clinical trial to test the efficacy of a plasmid DNA compound on diabetic neuropathy outcomes. Our group has recently been funded to conduct a m-Health based dietary intervention in underserved African American communities in Norfolk, which is launching next month; and an exercise intervention program for African American women, in collaboration with NSU. Furthermore, under the leadership of Dr. Davis Lieb, our research team has launched the Western Tidewater United project, with the goal of understanding, improving and tracking diabetes care in the area. I am also participating in cardiovascular outcome trials with GLP-1 receptor agonists in obese patients; and in Alzheimer’s disease prevention and treatment trials with novel monoclonal antibodies.