

Message

“Going into the unknown is how you expand what is known”
- Julien Smith, Author

Dear Colleagues,

Welcome to the inaugural release of our Internal Medicine Research Newsletter! Our goal is to document and disseminate information about ongoing research activities within the Department.

Research is defined by federal regulations at 45 CFR 46.102 (Protection of Human Subjects 2018) as “a systematic investigation including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge.”

Eastern Virginia Medical School is an academic health center dedicated to achieving excellence in medical and health professions education, research, and patient care. We value creating and fostering a diverse and cohesive faculty, professional staff, and student body. Adhering to the highest ethical standards, EVMS strives to improve healthcare delivery and to be recognized as a national center of intellectual and clinical strength in medicine.

The research we do today impacts our community tomorrow. As a leader in community engagement and interdisciplinary research, Eastern Virginia Medical School’s commitment to excellence is truly exceptional. We uphold three core values – *Excellence, Collegiality, Integrity* – in our daily research efforts.

Information

WORKSHOP & JOURNAL CLUB:

The purpose of our Research Workshop and Journal Club initiative is to provide education opportunities on study design, analysis, and publication to Internal Medicine residents, fellows, and faculty.

Workshops are designed to *teach* research skills, whereas Journal Club sessions are designed to *apply* these skills to published studies.

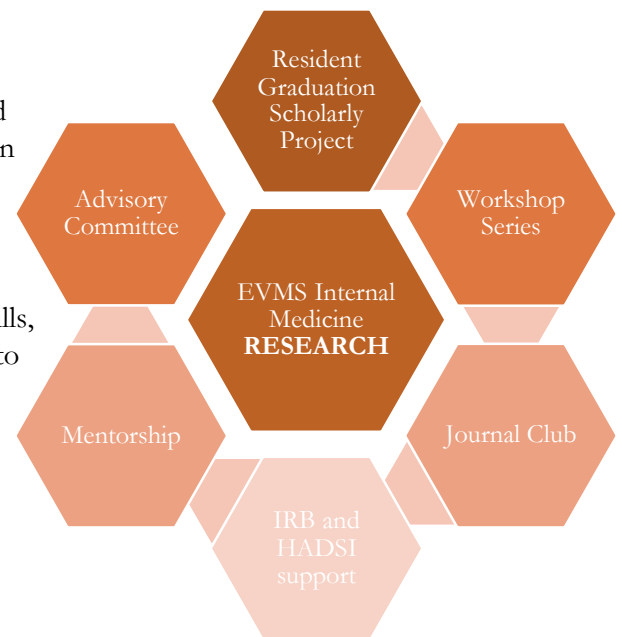
We launched our first workshop on Wednesday, April 20 with a presentation by Todd Hooten, MLIS on “Literature Search: Background and Understanding the Field.”

A recording of this lecture is available [here](#).

May 4 - Liza Botros MD, PhD will lead a session on “Systematic Literature Review and Meta-analysis 101”

May 18 - Liza Botros MD, PhD will present “How to write an abstract & present data”

All sessions are held on Wednesday, 8:30 – 9:30AM, in Hofheimer Hall, 5th Floor, Large Conference Room



SEEKING NOMINATIONS: The **Internal Medicine Research Advisory Committee (IMRAC)** advises our research team on strategic issues and resource allocation. Meetings are held virtually once a month (30 minutes). Please email Cindy Avila (AvilaCJ@evms.edu) if you would like to participate. Medical students, residents, fellows, and faculty are invited to join.

Contributors:
Cynthia J. Avila, MBS
Zooha Altaf, MD
Rehan Qayyum, MD,
MHS, SFHM, FAHA

SAVE THE DATE!

41st Annual
Research Day
Friday, June 10, 2022

Hofheimer Hall
BOA Auditorium
12:30PM

Researcher Spotlight

PUBLICATIONS AND AWARDS:

Congratulations to the following award recipients and authors for their most recent publications/presentations!

Madeline Dunstan, MS (Associate Director of Education & Instructor, Glennan Center for Geriatrics and Gerontology) will receive the EVMS Impact Award on Friday, April 22.

Zhang Y., Ren R., Yang L., Zhang H., Shi Y., **Okhravi H.**, Vitello M., **Sandford L.**, Tang X. "Sleep in Alzheimer's disease: a systematic review and meta-analysis of polysomnographic findings" *Translational Psychology* (2022) 12:136

Sharma K.D., Colangelo T., Mills A. "Trazodone-induced parkinsonism: A case report" *International Journal of Clinical Pharmacology and Therapeutics* (2022) 60:184-187

Carrasco A., Okhravi H., Appleby B., Cali I. "Atypical Case of VV1 Creutzfeldt-Jakob Disease Subtype: Case Report" *Frontiers in Neurology*. (accepted for publication)

FNU A., Sharma K., Sanborn K., Goodman B. "My Back Hurts: A Case of Occult Myeloma Threatening The Spinal Cord" (SGIM Poster Presentation)

Sharma K., Niknejad B., Okhravi H. "Inflammatory cerebral amyloid angiopathy or another Alzheimer's disease" (AGS Poster Presentation)

Lieb D., Hill K. "Incorporating Health Equity into Endocrine Fellowship Curriculum" (EVMS 4th Annual Educational Scholarship Day Poster Presentation)

Derber C., Mills A., Talbot E., Connelly D. "Implementation of a Student-Led Peer Coaching Program for the Internal Medicine Clerkship" (EVMS 4th Annual Educational Scholarship Day Oral Presentation)

MUTAZ ALKABANI, MD:

Tell us a little about yourself



“Conducting research is similar to learning how to walk. It is a step-by-step process that takes time to sharpen these skills”

MA: I am a third-year Internal Medicine resident at Eastern Virginia Medical School (EVMS). I graduated from Jordan University of Science and Technology in Irbid, Jordan and I will be pursuing my training in Cardiovascular Diseases at Inova Heart and Vascular Institute. I have special interests in heart failure, transplant, and management of cardiogenic shock, aspiring to improve access to advanced options for underprivileged patients with end-stage heart failure. My first research publication was during medical school, a case study that reflects the healthcare status of Syrian refugees in Lebanon. My research experience during residency includes case reports, observational studies and quality improvement projects.

You recently published a paper on “Serum Klotho and pulse pressure; insight from NHANES” in the *International Journal of Cardiology*. Walk us through the timeline for this project.

MA: The idea of the project was proposed by our department chair Dr. Rehan Qayyum, who has been a great mentor throughout the project. The aim of the study is to investigate the association between klotho protein and pulse pressure.

HADSI ROUND 7 PILOT FUNDING

*Currently accepting
applications!*

Email Carter Overton
for more details at
OvertoCZ@evms.edu

Letter of Intent
deadline
Friday, June 24, 2022
5PM

I had the privilege to work on this project along with my colleagues Dr. Gaurang Prabhu (Internal Medicine PGY3) and Justin Lagbo (Medical Student). Under Dr. Qayyum's mentorship, we submitted the manuscript in December 2021. It was accepted in January 2022 after it was edited according to the reviewers' feedback. The study was published in the International Journal of Cardiology in February 2022.

Why did you use NHANES?

MA: NHANES is an open-access database that provides nationwide vital and health statistics for the purpose of assessing the health and nutrition status of adults and children in the United States. The data are collected through individual interviews, physical examinations, and laboratory testing. It is important to know that data is collected from a nationally representative sample that includes different races and ethnic groups in the United States, which is important to confidentially generalize the findings of the studies. In our case, data on the association between klotho protein and pulse pressure was very limited as previous studies included specific patient populations. Using the NHANES we were able to produce a more inclusive study representing different groups in the United States. The NHANES is very useful to access data collected continuously for over 20 years. It is also time-saving, as data collection can be the most time-consuming step of observational studies. Due to the wide range of data available within the NHANES, it is important to carefully determine the set of variables that is relevant to the study design.

Looking back on your experience with this project, would you have done anything differently?

MA: An important step in research production is statistical analysis. Our mentors besides biostatisticians from the Healthcare Analytics and Delivery Science Institute (HADSI) at EVMS provide assistance in running statistical analyses on clinical data. However, running statistical tests is a skill that I would like to learn as I progress in my training. I plan on being more involved in statistical analysis in my future research projects.

Do you have any advice for residents who are new to research but want to get involved?

MA: Conducting research is similar to learning how to walk. It is a step-by-step process that takes time to sharpen these skills. However, do not feel intimidated to become engaged in research. Our mentors will spare no efforts in supporting our research projects. EVMS offers several resources to support research production including assistance in literature review, study designs, data analytics, manuscript proofreading, and finding the best journal to submit the paper. Research is crucial during residency to enhance medical knowledge in order to provide our patients with better care and strengthen our candidacy when it comes to obtaining training positions, especially in competitive fields. I recommend my colleagues to be engaged early in their training to experience the different pathways of medical research and choose the path they are most interested in pursuing throughout their career.

Do you have a research project for a student this summer and/or need help with one? With some EVMS medical students still searching for summer opportunities, the Medical Student Research Opportunities (METRO) Office is asking any faculty/residents/fellows who can accommodate a medical student in their research activities to email metro@evms.edu. Research activities may focus on basic science, clinical work, education opportunities, quality improvement, community health, and other areas. METRO will follow up with you for more information about your projects.

Reporting

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#IMResearchEVMS



RESEARCH TEAM:

Cynthia “Cindy” Avila, MBS (*Research Manager*) received her undergraduate degree in the History, Philosophy, and Social Studies of Science and Medicine with a concentration in medical ethics from The University of Chicago. After graduating, Mrs. Avila worked at The UofC Hospitals MacLean Center under the guidance of Mark Siegler, MD who established the field of clinical medical ethics. Mrs. Avila then completed a Health Careers Program at Harvard University and worked with Elliott Kieff, MD, PhD (former Chair of Virology) in the Division of Infectious Disease at Brigham & Women’s Hospital. Cindy received her Master’s in Biomedical Science from Duke University School of Medicine. She has worked as a Clinical Research Coordinator at Virginia Eye Consultants, specializing in cataract studies (Salvat Laboratories), Meibomian Gland Dysfunction (Bausch & Lomb) and Fuchs Corneal Dystrophy trials (AERIE Pharmaceuticals). Cindy has contributed to numerous publications, including a chapter in the book *Critical Dialogues in the Medical Humanities*. She is thrilled to be at EVMS and share her passion for research with residents, fellows, and faculty!



Liza Botros, MD, PhD (*Research Faculty*) completed her biomedical sciences and medical degree at the University of Amsterdam in The Netherlands in 2016. Her combined background in biomedical sciences and medicine makes Dr. Botros a highly translationally orientated researcher. She then pursued a PhD in the Department of Physiology and Pulmonology in Amsterdam. Dr. Botros has research skills in molecular and cell biological techniques, experience coordinating two therapeutic clinical trials and several imaging quantifications. Dr. Botros moved to Virginia with her family this past year. “I feel very excited to start working as research faculty at EVMS and would like to bring in lots of enthusiasm about bench-to-bed research ... I feel that research is essential to add new value to the medical field, and thus to future patients. I look forward to meeting you all!”



Zooha Altaf, MD (*Research Volunteer*) earned her Bachelor of Medicine and Bachelor of Surgery (MBBS) from Fatima Jinnah Medical University, Pakistan in 2019. After graduating, Dr. Altaf worked as a medical officer in the Combined Military Hospital. Her areas of interest include Hematology and Oncology, health care disparities, and cross-cultural medicine.

Dr. Altaf aspires to improve health care through research and innovation. Medical research is an intellectually satisfying and rewarding activity with the vast potential to open new pathways of professional growth. Dr. Altaf believes research helps to provide the best patient care with the latest knowledge. “We are living healthier, longer, and productive lives due to the decades of investment in the field of medical research.”

FACULTY: We are updating our research database and need your help! Please email Zooha (AltafZ@evms.edu) with a list of any research ideas, or titles of studies already submitted to IRB that are currently active.

Please send
research updates to
AvilaCJ@evms.edu
for consideration in the
upcoming newsletter!