# Med School Waterco

NEWS FROM FREDERICK P. WHIDDON COLLEGE OF MEDICINE AT THE UNIVERSITY OF SOUTH ALABAMA

Thursday, June 6, 2024

### USA Health cardiology fellows earn American College of Cardiology awards



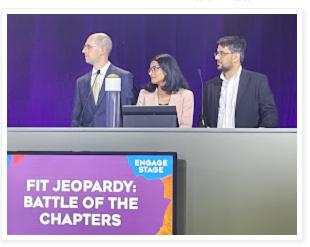
USA Health cardiology fellows celebrate their FIT Jeopardy championship at the 2024 Alabama Chapter ACC Winter Conference.

Two USA Health cardiology fellows were tapped as Fellow in Training (FIT) editorial board members for the American College of Cardiology for 2023-2024. Nupur Shah, M.D., chief cardiology fellow, and Mariam Riad, M.D., were among the 33 fellows selected from across the United States, and both are from the USA Health Cardiovascular Disease Fellowship Program.

Editorial fellows compose content for the FIT section website, which is dedicated to publishing non-clinical articles relevant to their peers. Fellows serve a one-year term.

The USA Health program also won the FIT Jeopardy: Battle of the Chapters competition for the ACC Alabama Chapter. "We get to keep the championship trophy with us until next year's competition," Shah said. "That also gave us a chance to participate in the National ACC in Atlanta. Though we didn't win there, it was an honor to participate."

The friendly competition allows FIT teams to test their clinical knowledge and compete for the title of International FIT Jeopardy Champion. The competition promotes a healthy rivalry between ACC chapters and provides educational value to both the contestants and the audience on a variety of topics ranging from imaging, intervention, and prevention.



In the ACC Alabama Chapter,

Shah is also a FIT representative and a member of the council board. She is also actively involved in the Women in Cardiology section at the ACC and advocates for more women in the field.

The Alabama Chapter of the American College of Cardiology is committed to improving heart health through continuing medical education, continuous quality improvement, patient-centered care, professionalism, and the influence of health care policy. Physicians, nurses, nurse practitioners, physician assistants, pharmacists and practice managers are among its members.

The American College of Cardiology, the professional home for the entire cardiovascular care team, and its 56,000 members, are dedicated to transforming cardiovascular care and improving heart health. The organization provides professional medical education, disseminates cardiovascular research through its world-renowned JACC journals, operates national registries to measure and improve care, and offers cardiovascular accreditation to hospitals and institutions.

Posted by Med School Watercooler at 2:49 PM



## USA student researcher accepted into prestigious national honor society

Anita Nguyen, a third-year biomedical science major at the University of South Alabama, had no research experience from high school. But now, she's planning to incorporate it into her future career as a dentist.

Nguyen, one of only 31 students nationwide who was accepted into the American Society for Biochemistry and Molecular Biology (ASBMB), is currently studying the stress response of salmonella through sRNA-mediated regulation for her Honors College thesis.

"I study the mechanism that causes the cell to decide to either undergo active stress resistance or persister formation," she said.

The student body president of the Honors College, Nguyen conducts research in the lab of Glen Borchert, Ph.D., a professor of pharmacology in the Whiddon

College of Medicine and a professor of biology in USA's College of Arts and Sciences.

"Shortly after recruiting Anita to join my research laboratory in May of 2023, I came to realize she is one of those rare exceptional students among a sea of impressive peers," Borchert said. "She has also proven to be a very quick study acquiring a myriad of technical lab skills that many students never quite master."

In Borchert's lab, the roles that noncoding RNAs and G4 structures play during growth and development, infectious disease, how misregulations contribute to various diseases and oncogenesis, and also how they evolve and contribute to speciation, are examined.



biomedical science.

Nguyen now serves as the lab manager and organizes STEM outreach, such as coordinating tours for Clark-Shaw Magnet Middle School students.

"Due to how impressed I was with her competency, I offered her a paid position as my lab manager in September of 2023 because I fully trust her to ensure smooth operations in this lab," he said. "She is also the first lab manager in the history of my lab to have earned a raise, as it was an exception I made based on her unrivaled commitment and efficiency."

Her leadership and involvement led to her induction in the ASBMB honors society, which is a prestigious distinction given to exceptional undergraduate juniors and seniors pursuing degrees in the molecular life sciences at colleges or universities with student chapters. Students are recognized for their academic achievement, research accomplishments and outreach activities.

Nguyen, who serves as the vice president of the USA chapter on campus, has her sights set on dentistry.

"I aspire to become a dentist who prioritizes the health of patients and the advancement of dental technology through research," she said. "As a student researcher, I have gained a strong respect for researchers during my time in a lab at the University of South Alabama.

"Therefore, I would like to incorporate aspects of research into my career as a dentist. I strive to find a balance between the research development of technological advancements in dental treatments and my desire to cater to the well-being of my patients."

Students in the Honors College at USA are encouraged to seek research opportunities to serve as the foundation for their senior honors thesis. Having had no previous research experience, Nguyen feels fortunate to have gotten involved in the ASBMB and Borchert's lab for the opportunities she's received.

"It was such an honor to receive acceptance to the ASBMB Honor Society,  $X\Omega\Lambda$ , since there were only 31 students selected nationally," she said. "In April, I had the opportunity to go to the national DiscoverBMB conference in San Antonio, where I met plenty of intelligent and insightful students there and loved learning about the different research projects that they are pursuing."

There, Nguyen also competed in the poster competition.

"Particularly of note, Anita is very well-spoken, and her ASBMB presentation proved that she is quite knowledgeable about her project and can think on her feet," Borchert said. "Not only is she a precise orator, but she also thoughtfully organized the format of her poster so that any audience member who may not be entirely familiar with the field can understand her project's purpose."

Founded in 1906, the ASBMB is an international nonprofit scientific and educational organization – one of the largest molecular life science societies in the world – that counts students, researchers, educators and industry professionals among its more than 11,000 members.

Its mission is to advance the science of biochemistry and molecular biology through scientific and educational journals, scientific meetings, advocacy for research and education, career development support, and promoting the diversity of individuals entering the scientific workforce.

Posted by Med School Watercooler at 1:33 PM



Tuesday, June 4, 2024

#### Sarkar appointed to BCRFA Medical Advisory Council



Chandrani Sarkar, Ph.D., has been appointed to the Breast Cancer Research Foundation of Alabama's Medical Advisory Council to support cutting-edge breast cancer research initiatives across the state. Sarkar is a cancer researcher at the USA Health Mitchell Cancer Institute and an assistant professor of pathology at the Whiddon College of Medicine.

The Medical Advisory Council consists of volunteer scientists who identify and recommend the most promising research projects in Alabama for potential funding by the BCRFA. Council members

conduct a scientific evaluation of proposals to ensure resources are directed toward innovative ideas in breast cancer research.

"As a member of the Medical Advisory Council, I will have a chance to raise awareness for the organization's mission to help find a cure for breast cancer by funding the most impactful research ideas and increasing community awareness,"

Sarkar said. "I will advocate for allocating funds to scientific endeavors that push the boundaries of conventional thinking and explore innovative research ideas."

Sarkar has been involved in cancer research, with an emphasis on the role of the tumor microenvironment in cancer progression, particularly the role of tumor neovascularization, since her predoctoral years. Her research focuses on the roles of neurohormones and neuromodulators in the tumor microenvironment during cancer development and metastatic progression. The research team has identified that the neurotransmitters dopamine and neuropeptide Y play critical roles in regulating the process of angiogenesis and, hence, the progression of tumors.

Sarkar's research efforts have led to publications in high-impact peer-reviewed journals. She has also authored book chapters and presented her work at national and international professional meetings.

The Breast Cancer Research Foundation of Alabama has invested more than \$15 million in Alabama-based breast cancer research since 1996.

Posted by Med School Watercooler at 12:56 PM



Monday, June 3, 2024

#### Summer research program kicks off at Whiddon COM



Students attend summer research program orientation.

Last week, 34 rising secondyear medical students and 17 incoming first-year medical students attended orientation and officially began the Whiddon College of Medicine's 2024 Medical Student Summer Research Program.

The eight-week program pairs medical students with faculty mentors, and students devote

30 to 40 hours a week to a research project. The summer experience includes hands-on research related to basic science and/or clinical medicine, and a seminar program that focuses on various scientific and clinical topics. Through the program, students develop an appreciation of how research contributes to the knowledge and practice of medicine.

Each Friday, medical student participants will present a brief overview of their research projects. The program will culminate with student presentations on the 51st Annual Medical Student Summer Research Day, scheduled for Friday, July 26. Troy Moon, M.D., M.P.H., professor of tropical medicine and pediatrics at Tulane University School of Public Health and Tropical Medicine, will deliver the keynote lecture.

Chair of the summer research program is Robert Barrington, Ph.D., and coordinators are Skye Andrade and Marcina Lang. Support for the program is provided by the Dean's Office.

Learn more about the Medical Student Summer Research Program.



Program coordinators Skye Andrade and Marcina Lang welcome students to orientation.