HAMPTON RESEARCH BEAT

THE OFFICE OF THE VICE PRESIDENT FOR RESEARCH NEWSLETTER

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Photos Courtesy of VCU Communications Team

HU Hosts VCU Massey Cancer Center to Advance Cancer Equity Across Virginia

Hampton University (HU) welcomed Dr. Robert Winn, Director of the VCU Massey Comprehensive Cancer Center and a national leader in cancer research, along with his senior team, for a collaborative visit to the HU Proton Cancer Institute (HUPCI) and campus. HU President Darrell K. Williams, joined by Dr. Neelam Azad, Vice President for Research, and Bill Thomas, Associate VP for Governmental Relations, hosted the delegation. The HUPCI team included Scott Berry, Executive Director; Dr. Christopher Sinesi, Medical Director and Oncologist; Dr. Tyvin A. Rich, Radiation Oncologist; Erin Erdos, Director of Clinical Operations; Donna Sternberg, Chief Nurse; Tiffany Velez Rodgers, Marketing Director; Jason Stechele, Director of Information Technology; and Biniam Tesfamicael, Director of Physics. Civic officials also participated in the discussion, including Newport News Mayor Phillip Jones (who also serves as AVP for Institutional Effectiveness and Strategic Planning at HU), along with Hampton leaders Mary Bunting, City Manager; Steven Brown, Vice Mayor; Randy Bowman, Councilman; and Carolyn Campbell, Councilwoman.

The visit underscored HU's role as a convener of academic, medical, and civic leaders committed to reducing health inequities. Activities included tours of HUPCI, the HU Chapel, Legacy Park, and the HU Museum, as well as community engagement through the VCU Massey Cancer Center's outreach van, which was stationed on campus to provide cancer education and screening resources. Together, Hampton University and VCU Massey reaffirmed their commitment to building partnerships that advance cutting-edge research, deliver culturally responsive outreach, and strengthen community-driven strategies to reduce cancer disparities and improve health outcomes for underserved populations across Hampton Roads and beyond.

RESEARCH GRANTS

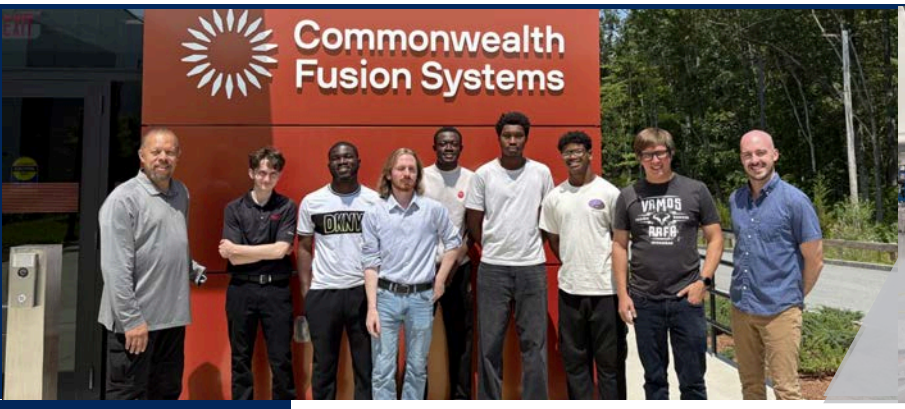
DR. CHENGAN DU

DR. ASWINI PRADHAN

DR. MICHELLE WADDELL

HU Secures $2.0 Million in Equipment Grants to Advance Research and Teaching

Hampton University has been awarded more than $2.0 million in federal equipment grants to strengthen its research and teaching infrastructure. **Dr. Chengan Du** of the School of Pharmacy earned two NIH awards, one for a state-of-the-art Time-of-Flight Mass Spectrometer and another for an Ion Trap Mass Spectrometer. From the School of Science, **Dr. Aswini Pradhan** received Department of Defense funding to acquire a Transmission Electron Microscope, while **Dr. Michelle Waddell** won NIH support for a Monolith X Microscale Thermophoresis instrument. Together, these investments significantly expand Hampton's research capacity, fueling innovation, discovery, and student training across disciplines.

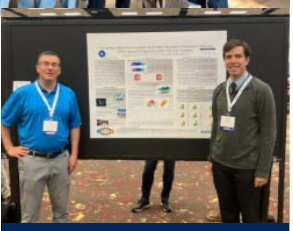


RESEARCH TRAINING

(L to R): Dr. Eric Sheppard, Patrick Janes, Bishop Asare, James Garner, Wisdom Jagoi, Abdul Hamidu, Brenden Forrest, Dr. Georg Harrer, Dr. Ben Stevens, Kamar Mann (not pictured)

Hampton University Students Gain Hands-On Fusion Research Experience in Massachusetts

Hampton University's Stellarator for Training and Research (STAR_Lite) project is advancing experiential education in fusion science through international collaborations and industry partnerships. Under the leadership of Drs. Lowe, Naik, and Harrer, the initiative is constructing a stellarator experiment while building international collaborations with leading plasma scientists. As part of the HU Fusion Summer Research Program, seven interns traveled to Woburn, Massachusetts, from July 28 – August 1, 2025, for immersive training in magnetic coil development. Guided by Dr. Georg Harrer, Assistant Professor of Physics, and Dr. Eric Sheppard, Assistant Vice President for Research, students worked directly with industry partners and premier research institutions. The team included Hampton students Bishop Asare (Chemical Engineering), Abdul-Majeed Hamidu (Computer Engineering), Wisdom Jagoi (Electrical Engineering), Brenden Forrest (Electrical Engineering), and Kamar Mann (Electrical Engineering), alongside Noah James Garner (Computer Science, Fayetteville State University) and Patrick Janes (Mechanical Engineering and Physics, University of Alabama).
The students engaged directly with Type One Energy, where they observed coil fabrication and practiced steel rod bending, and visited the MIT Plasma Science and Fusion Center to connect with researchers and tour facilities. They also explored Commonwealth Fusion Systems, guided by Dr. Ben Stephens, who introduced them to the prototype reactor site that will become the world's first commercial fusion power plant in Virginia. Reflecting on the experience, Dr. Harrer remarked, "The fusion industry is buzzing right now, and we are in the privileged position that people are very excited about the STAR_Lite project and meeting our students."



(L to R): Dr. Stephen Guimond Theodore Mackey, graduate student in APS, Severe Weather Research. This photo was taken during the American Meteorological Society 21st Mesoscale Atmospheric Processes Conference on June 25, 2025 in Boise, Idaho.

Extreme Weather Wreaks Havoc

Hampton University is equipping students to meet one of the greatest challenges of our time: understanding and responding to extreme weather. In the newly designed undergraduate course by associate professor Dr. Stephen Guimond, Physical Science 102/104: An Introduction to Climate Science, students are learning the basics of atmospheric physics and engaging in the applied science that drives forecasting, which can save lives, protect property and inform global climate policy. Read more

PUBLICATION

Hampton University Scientist Cracks Billion-Dollar Crop Mystery

Dr. Naoufal Lakhssassi is pictured here in his lab with his students Nyla Howard, Zeida Wright, and Morgan Robinson.

Hampton University is turning heads in the global agriculture scene, thanks to a high-impact discovery by Dr. Naoufal Lakhssassi, plant geneticist and professor in the Department of Biological Sciences. In a landmark study published in Nature Communications Biology (2025), Dr. Lakhssassi and collaborators at the University of Missouri and Southern Illinois University identified two novel genes that can dramatically boost soybean resistance to one of farming's most destructive pests: the soybean cyst nematode (SCN). Read More.

MEET OUR STAFF

Kelly TaylorMM

We welcome Ms. Taylor as Administrative Assistant to the Assistant Vice President for Research, bringing over 20 years of experience in office procedures and customer service to support compliance committees and advance research excellence at Hampton University.

A'Rissa Marshall

Ms. Marshall, a Hampton University alumna with a B.S. in Computer Science and pursuing an M.S. in Cybersecurity, she brings diverse experiences—from an IT audit intern, service leadership and community activities—to her roles in the Grants Management and the Title III Offices.

RESEARCH TRIVIA

Who was the first person to invent and demonstrate laserphaco cataract surgery, a type of excimer laser tool surgery.

A. Charles Kelman B. Patricia Bath C. James T. Wood D. Harold Ridley

CORRECT ANSWER: B

Link to the website:
Hampton Research Beat

For more information contact us
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