Dr. Stephen Duncan, SmartState Chair in Regenerative Medicine, presented, “Stem Cells: The Great Pretenders” at the April Science Café. He explained how stem cells can mimic complex human diseases in the laboratory and offer a new way to identify drugs that can be used to treat disease in patients.

“Let’s say you have liver disease,” Duncan said. “We can take a skin cell biopsy. We can turn these into stem cells and then make your liver cells in a culture dish. So we can recreate a patient’s liver disease in the laboratory. That allows us to study the disease, but more importantly allows us to start looking for drugs that can be used to reverse that disease in the lab.”

The goal of the MUSC Science Café is to engage the public with science by offering entertaining talks on scientific subjects in a fun, non-technical way.

MUSC hosted the Science Café on Wednesday, April 27, at 5:30 p.m. upstairs at Charleston Beerworks located at 480 King Street in downtown Charleston.

MUSC Earns Joint Commission Comprehension Stroke Center Certification

The MUSC Health Comprehensive Stroke and Cerebrovascular Center is the first stroke center in the state of South Carolina to achieve formal recognition as a Comprehensive Stroke Center by the Joint Commission. Learn more about this new certification and the high level of stroke care at MUSC.
Dr. Kathleen Brady named as MUSC’s First Vice President for Research

Mark S. Sothmann, Ph.D., Vice President for Academic Affairs and Provost, announced the appointment of Dr. Kathleen T. Brady, M.D., Ph.D. as Vice President for Research at the Medical University of South Carolina.

In this role, Dr. Kathleen Brady has oversight of the Office of Research and its associated divisions, and will serve as MUSC’s Institutional Official for Research. She has responsibility for accreditation and regulatory affairs, university-wide promotion of research across its colleges and centers, representing the President and Provost of matters internally and externally, and identifying institutional research strategies and benchmarks through the university’s strategic plan.

Dr. Brady’s scientific leadership at MUSC has been extraordinary, starting with her appointment as an assistant professor in the Department of Psychiatry in 1989 through her being named a Distinguished University Professor in 2010, and her multiple key leadership responsibilities focused on research in the College of Medicine and university-wide. Since 2012, she has served as the Associate Provost for Clinical and Translational Science and in 2014 assumed the role as interim Associate Provost for Research.

Currently, Dr. Brady is the Director and Principal Investigator for the South Carolina Clinical & Translational Research (SCTR) Institute. The SCTR Institute was established in 2006 in response to the NIH CTSA Program, a Roadmap Initiative funded by the National Center for Research Resources, aimed at transforming approaches to research and discovery implementation.
New Office of Research Integrity Director

Kathleen T. Brady, MD, Ph.D., Vice President for Research, announced the recruitment of Aimee McRae-Clark, PharmD, as director of the Office of Research Integrity (ORI).

Dr. McRae-Clark was selected from a very strong group of internal candidates and will assume her role as director beginning May 2, 2016. This is an administrative position (50% effort) that reports to the Assistant Provost for Research Compliance and Regulatory Affairs, Dr. Patrick Flume. A professor with tenure in the Department of Psychiatry and Behavioral Sciences, and a professor in the Department of Neuroscience, Dr. McRae-Clark’s research centers on drug abuse. She recently received a Midcareer Investigator Award in Patient-Oriented Drug Abuse Research.

Dr. Kathy Magruder held the position as ORI director since 2010. During her tenure as director, Dr. Magruder has led several initiatives to improve process efficiencies and training outreach to our research community. We are indebted to her for her commitment and leadership.

PERK Scholars Awarded

MUSC is pleased to announce the inaugural scholars of the Fund to Retain Clinical Scientists award from the Doris Duke Charitable Foundation.

The recipients are Anne L. Andrews, M.D., Assistant Professor in the Department of Pediatrics, and Teddy McRackan, M.D., Assistant Professor and Director of the Lateral Skull Base Program in the Department of Otolaryngology - Head & Neck Surgery.

This Doris Duke award is aimed at improving the retention and advancement of junior-level physician scientists who face special challenges of balancing their professional work with caregiving responsibilities. The objective of MUSC’s program – called PERK (Program to Enhance the Retention of Clinicians) is to provide supplemental funds to support ongoing clinical research efforts of eligible faculty.

This new funding program, directed by Kathleen T. Brady, M.D., Ph.D., Vice President for Research and Director and Principal Director for the SC Clinical & Translational Research (SCTR) Institute, represents an exciting opportunity for MUSC to leverage its robust portfolio of mentoring and career development awards.
Trainees, scholars, and investigators trained in clinical, basic and translational research gathered in the Drug Discovery Auditorium on Thursday, April 26, 2016 for a chance to showcase their research and meet with others who share similar interests as part of MUSC’s Translational Research Day.

Christopher P. Austin, M.D., director of the National Center for Advancing Translational Sciences (NCATS) at the National Institutes of Health (NIH), provided the keynote address.

Dr. Austin directs the National Center’s work to improve the translation of observations in the laboratory, clinic and community into interventions that reach and benefit patients — from diagnostics and therapeutics to medical procedures and behavioral changes.

Under his direction, NCATS researchers and collaborators are developing new technologies, resources and collaborative research models; demonstrating their usefulness, and disseminating the data, analysis and methodologies for use by the worldwide research community.

The research event provided a forum for scholars to display translational-based research to the MUSC community via 5-minute elevator talks and poster presentations.

The Center for Genomic Medicine held an inaugural retreat following Translational Research Day in room 112 of the Bioengineering Building.

The retreat’s keynote speaker was Charles Lee, Ph.D., Scientific Director and Professor of the Jackson Laboratory for Genomic Medicine.
New Public-Facing Research Website

The Office of the Vice President for Research is excited to launch a new website (research.musc.edu) that will serve as the public face of research at the Medical University of South Carolina.

“As South Carolina’s most influential biomedical research institution, MUSC is home to world-renowned researchers, and we are fostering the next generation of researchers and innovators,” says Kathleen Brady, M.D. Ph.D. Vice President of Research. “With this website, MUSC is thrilled to be able to showcase the caliber of research that takes place at MUSC with audiences around the country.”

Aimed at an external audience that includes academia, government, industry, community advocacy groups, media, students and members of the general public, the new website will raise the profile of research at the Medical University of South Carolina through digital storytelling. The site will feature stories on faculty and students while highlighting research news and connecting users to MUSC faculty members via the Our Research area.

The website highlights the impact research makes on the health of our community and serves as a tool to raise awareness among the general public about exciting developments in lay-friendly language.

Features to check out include:

- Our top stories featuring the latest new advances from research in managing diabetes to regenerative medicine
- A featured researcher section that profiles the stories and faces behind the research being done and
- An events section that keeps you up to date on everything from MUSC’s Science Cafes to research seminars.

“This is an exciting time for research at our university,” says Brady. “We are incredibly proud to share the cutting-edge discoveries that are happening in South Carolina with our stakeholders and with communities around the nation.”
EurekAlert Shows Results at MUSC

EurekAlert, an online, global news service operated by AAAS, the science society, provides a central place through which leading research universities and medical centers can bring their news to the media.

Dr. Kimberly McGhee, Progress Notes editor, spearheads this project for MUSC Brand and MUSC Health Campaigns. Under her leadership, EurekAlert led to the Department of Energy’s Office of Science posting the MUSC news release about Dr. Deepak Bastia’s research, which could provide insight into aging and cancer, on their homepage. They also tweeted about the release, sending a link to their followers @doescience.

In addition, a EurekAlert release about research by Dr. Joshua H. Lipschutz, Professor in the Department of Medicine, was picked up by the American Society of Nephrology and highlighted in the organization’s In the Loop, daily eNews briefing, that helps physicians stay well informed of breaking news.

Please help the EurekAlert team stay abreast of your achievements by emailing research-comm@musc.edu or complete the online form. The EurekAlert Team will review all submissions and make decisions about which to post based on the strategic priorities of the institution, the potential of the material to garner national attention, and available writing resources.

This new platform will elevate the reputation of MUSC and our health care researchers and scientists. For more information, please contact Dr. McGhee at mcgheek@musc.edu.

Research Communications

Do you have exciting research news or findings that you would like to see shared with the community? Email research-comm@musc.edu with some basic information about what you would like shared, and you will be contacted by a communications expert!
What Every Entrepreneur Needs to Know: Establishing a Startup in the Life Sciences

On Friday, March 4th, the College of Medicine Center for the Advancement, Recruitment, and Retention of Women in Science (ARROWS), the MUSC Foundation for Research Development (FRD), and the South Carolina Medical Translational Technology Program (SC MedTransTech) hosted a workshop on What Every Entrepreneur Needs to Know: Establishing a Startup in the Life Sciences.

With about 40 attendees, the workshop began with a “nuts & bolts” guide to starting a company featuring local attorneys Jamison Cox, JD and Micah S. Johnson, with Smith Cox and Associates, and James Streetman, CPA and founding partner of Streetman, Jones & Powers, LLC.

They spoke on the differences in forming a corporation versus a limited liability company and the ownership and management choices that go along with each. They also spoke on documentation processes, working with multiple owners and hiring practices.

The keynote speaker for this event was Amy Salzhauer. She is a managing partner at Good Growth Capital, a new investment firm designed to find and fund amazing innovations and entrepreneurs in underfunded markets.

Amy’s light-hearted approach and enthusiasm made this topic seem less overwhelming. She spoke on the basics of founding a startup in the life sciences, how to present effectively to potential investors, specific tools to understand risk, financial models and strategies, and negotiating terms with investors.

Look to the future to see some amazing scientific innovations come out of budding and current entrepreneurs that attended this event!

Negotiating Your Way to a Satisfying Career in Academic Medicine

SCTR, in partnership with ARROWS and the Women’s Scholars Initiative, will host the Annual Mentorship Training Symposium on Friday, June 24, 8:00 a.m. – 1:00 p.m. in the Drug Discovery Building. The symposium, "Negotiating Your Way to a Satisfying Career in Academic Medicine", will feature keynote speaker Jennifer Woodward, PhD, Associate Vice Provost for Research Operations at the University of Pittsburgh, as well as breakout sessions for scholars, researchers, and clinician-educators.
IDEA Spring 2016 Program

The Integrated Departmental Research Administrators (IDEA) Spring 2016 program concluded with 19 proud graduates. The class represents three colleges (Medicine, Nursing & Pharmacy) and various departments/divisions (Cardiology, Medicine, Public Health, Obstetrics & Gynecology, Neuroscience, Infectious Diseases, Pediatrics, Radiology & Radiological Sciences, Psychiatry, Neonatology), and five from the SCTR Institute.

The 10-week session included 17 classes for a total of 36 hours of instruction time. Participants completed 15 quizzes (more than 150 questions) and produced an average score of 91. In addition to the program curriculum, a revised series of the Corporate Sponsored Research classes were piloted.

The IDEA Instructors include 23 leaders that represent the College of Medicine, College of Health Professions, College of Pharmacy, SCTR, Hollings Cancer Center, Office of Research Integrity, Office of Research Development, Office of Sponsored Programs, Office of Grants & Contracts Accounting and Veterans Affairs.

Recent Issues in Rigor and Transparency

Elizabeth G. Hill, Ph.D., Vice Chair for Academic Programs and Associate Professor of Biostatistics in the Department of Public Health Services, spoke on NIH Scientific Rigor and Reproducibility at the Apple Tree session on April 13, 2016.

Dr. Hill discussed, “What’s all the Fuss about Rigor, Transparency and Reproducibility? Statistical Significance and P-Values.” She reviewed the literature from NIH regarding some high-profile cases of irreproducibility, examined sources of error in biomedical research, addressed the costs of irreproducibility, and summarized some of NIH recent initiatives about Rigor and Transparency.

NIH identified irreproducibility as the accumulation of errors in four areas of the research process. They include: reference materials, experimental design, laboratory protocols, and data analysis and reporting. She reviewed the NIH and BioMed Central checklists and the EQUATOR (Enhancing the QUAlity and Transparency Of health Research) Network which is an international initiative that seeks to improve the reliability and value of published health research literature by promoting transparent and accurate reporting and wider use of robust reporting guidelines.

To learn more about this important topic and listen to the session, click here.