Med School Watercooler

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

Thursday, May 31, 2018

Class of 2020 Medical Students to Receive White Coats June 16

The University of South Alabama College of Medicine will host its annual White Coat Ceremony at 10 a.m. June 16, 2018, at the USA Mitchell Center. During the ceremony, rising third-year medical students in the Class of 2020 will be cloaked with their white coats, the traditional dress of physicians for more than 100 years.

The keynote speaker will be Dr. John V. Marymont, vice president for medical affairs and dean of the USA College of Medicine.

Select students from the class of 2020, along with residents and faculty members, will be inducted into the Gold Humanism Honor Society during the ceremony. Inductees are selected by outgoing third-year medical students for practicing patient-centered medical care with altruism, integrity and compassion.

Each year, the USA Medical Alumni Association sponsors this event.

Posted by Med School Watercooler at 4:21 PM No comments:

USA COM Scientists Awarded Notable $9.9 Million NIH Grant

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Scientists at the University of South Alabama College of Medicine are searching for new therapies to treat lung vascular disease through improved understanding of lung cellular diversity. Their efforts were recently bolstered by a $9.9 million grant from the National Institutes of Health.

The continuation of this Program Project Grant (P01) from the NIH marks one of the largest competitive research grant awards in the history of USA.

Dr. Troy Stevens, Professor and Lenoir Louise Locke Chair of Physiology and Cell Biology at the USA College of Medicine and director of the USA Center for Lung Biology, serves as lead scientist on the project.

According to Dr. Stevens, endothelial cell dysfunction is a cardinal feature of pulmonary vascular disease, and while it is clear that the endothelium represents an attractive therapeutic target, it is also evident that a pan-endothelial approach will not be effective.

"Based upon a growing appreciation of the molecular diversity among endothelial cells in the arterial, capillary and venous lung vascular segments, our research seeks to identify molecular signatures that contribute to endothelial function within discrete vascular locations and understand how these molecules influence endothelial barrier function in the context of injury and repair," he said. "Identification of novel segment-restricted molecular signatures represents putative therapeutic targets, especially in inflammatory lung disease."

Each of the three projects in the competitive renewal is based on previous research at USA and either examines a novel molecular signature that has been identified within the lung capillary endothelium, contributes to this cell's unique response to inflammation, or represents a novel therapeutic target for inflammatory lung disease.

"We have a proven track record of utilizing this model to translate novel findings into clinical practice," Dr. Stevens said. "Historically, pulmonary endothelium was considered to be functionally homogeneous throughout the circulation. Work supported by this program project grant has revised this historic perception, advancing our understanding of the basic structure and function of arterial, capillary and vein endothelium."

Pointing to the success demonstrated by work supported in this P01, research projects associated with earlier funding cycles has led to the formation of several startup companies, testing of new therapeutic approaches, and novel technological advances in medicine.

Exscien – developed by pulmonary scientist Dr. Mark Gillespie, professor and chair of pharmacology at the USA College of Medicine – is a company that was initially founded on the discovery of new drugs to repair DNA and prevent and reverse acute lung injury. These drugs were developed and tested as part of a project in the P01, and they represent efforts to translate new therapies for treatment of acute lung injury.

During the second funding cycle, Dr. Mary Townsley, senior associate dean at the USA College of Medicine, then collaborated with GlaxoSmithKline to test the efficacy of an orally active TRPV4 blocker in preclinical models of congestive heart failure. She discovered that TRPV4 activation increases lung capillary

permeability, TRPV4 channels are highly expressed in lung capillary endothelium and their activation results in endothelial sloughing. Her research with TRPV4 represented the second translation of idea P01 to clinical practice.

Together, Dr. Silus Leavesley, associate professor of chemical and biomedical engineering at USA, and Dr. Tom Rich, associate professor of pharmacology at the USA College of Medicine, developed an excitation scanning-based HIFEX imaging system for clinical imaging, designed for detection of pathology-specific changes in the structure and molecular composition of tissues. "Based upon their pilot studies, they have developed a startup company, SpectraCyte, to implement and test hyperspectral imaging technologies in clinical endoscopy and bronchoscopy," Dr. Stevens said. "Their work represents the third transition of ideas and technologies supported by the program project grant into clinical practice."

As they move into the fourth funding cycle of the project, Dr. Stevens said the program will continue to advance the foundations of their knowledge on endothelial and vascular biology, translating meaningful scientific discoveries for clinical utility.

"Our program project grant team has developed major innovations for this competitive renewal, and incorporated the use of these innovations into each of the projects," Dr. Stevens said. "A novel element of our program is how we implement and utilize scientific cores."

Each core has both service and academic value, as they are used as innovation hubs for the betterment of program investigators and the broader scientific community. "For example, Core B isolates, cultures and distributes cells and performs bacterial inoculations for investigators upon request," Dr. Stevens said. "Core B is developing the use of acellular lung scaffolds as a means to validate endothelial cell identity; and in this funding cycle, it will address the role that lung scaffold mechanical properties play in establishing cell phenotype specification."

He credits the level of expertise at USA for helping the USA Center for Lung Biology compete on a national level. "Program Project Grants are reviewed differently than other grants; they require an outstanding scientific score but they also have to address important NIH-established scientific priorities," he said. "All of our projects are scored on significance of the work, the quality of the investigator, the approach, the environment and how innovative the work is. The USA Center for Lung Biology has a history of success and has put together an infrastructure that produces a rich environment to conduct research."

Dr. Stevens said the findings from the grant will positively impact researchers, physicians in training and patients alike. "The work that we are doing here is currently being taught to clinical trainees and graduate students, and it is being implemented into the current state of knowledge in medicine," he said. "This is just the beginning, and I am excited to see what the future holds."

Program Project Grants provide support for integrated, multi-project research projects involving a number of independent investigators who share knowledge and common resources. Learn more about P01 grants here.

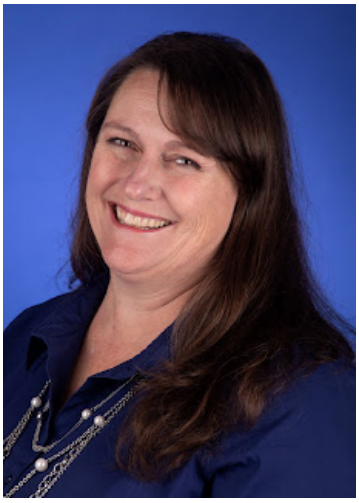
Posted by Med School Watercooler at 4:19 PM No comments:

Wednesday, May 30, 2018

USA COM Welcomes Coordinator of Clinical Education for Student Affairs

Dorothy Howard recently was appointed coordinator of clinical education in the office of student affairs at the University of South Alabama College of Medicine.

In her new position, Howard will be helping medical school students' transition from the classroom to the clinical learning environment, working with third-year medical students moving through rotations and coordinating visits with fourth-year medical students. "I am excited to be working in clinical education," she said.



Howard will work with Karen Braswell in the student affairs office in the Mastin Building.

Prior to her appointment, she worked as a secretary at USA Mitchell Cancer Institute.

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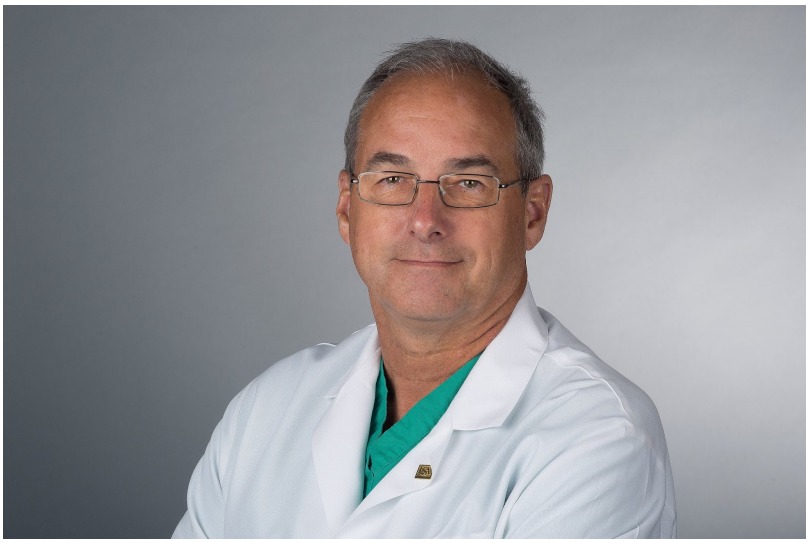
Monday, May 28, 2018

June Med School Café – 'Stop the Bleed'



The June Med School Café lecture will feature Dr. Sidney Brevard, professor of surgery at the University of South Alabama College of Medicine and a trauma and critical care surgeon with USA Health.

His lecture, titled 'Stop the Bleed,' will be held on June 15, 2018, at the USA Strada Patient Care Center Conference Room on the first floor. Lunch will be served at 11:30 a.m., and the presentation begins at noon.

At the lecture, Dr. Brevard will discuss the National Stop the Bleed Campaign, which helps average citizens learn how to control life-threatening bleeding until paramedics arrive.

Dr. Brevard earned his medical degree from the USA College of Medicine and completed his residency at Wilford Hall Medical Center USAF in San Antonio, Texas, and Louisiana State Health Science Center in Shreveport, La. He also completed his fellowship at Louisiana State Health Science Center.

The Med School Café lecture and lunch are provided free of charge, but reservations are required. For more information or to make reservations, please call Kim Partridge at (251) 460-7770.

Med School Café is a free community lecture series sponsored by USA Physicians

Group. Each month, faculty from the USA College of Medicine share their expertise on a specific medical condition, providing insight on the latest treatment available.

The USA Strada Patient Care Center is located at 1601 Center St. in Mobile.

Posted by Med School Watercooler at 11:54 AM No comments: