(July 22, 2010 Stillwater, OK) – Oklahoma State University Center for Veterinary Health Sciences proudly announces that the Oklahoma Center for Adult Stem Cell Research (OCASCR) awarded three new research grants to the investigators in the OSU Adult Stem Cell Focus Group (SCFG). Each project is led by a Department of Physiological Sciences faculty member at OSU's veterinary center. Principal investigators for these projects are Drs. Lin Liu, Pamela Lloyd and Myron Hinsdale.

Liu will reprogram adult stem cells for cell-based therapy of pulmonary diseases. Results may determine if adult stem cells can be used to cure chronic obstructive pulmonary disease.

"The goal of the SCFG is to bring researchers from different disciplines in the veterinary center, Engineering, and OSU Health Sciences Center into this exciting area of adult stem cell therapy," says Liu. "We hope to establish nationally visible adult stem cell research and training programs via collaborative efforts."

Lloyd will manipulate growth factor signaling to recruit progenitor cells for repairing lung vasculature, which could have implications for the treatment of emphysema.

"Our lab will study how adult stem cells can be harnessed to help repair blood vessels in the lung," states Lloyd. "This research may one day lead to new treatments for patients with emphysema."

Hinsdale will study how proteoglycans affect stem cell behavior and its ability to repair lung damage.

"Our emphasis is on using adult stem cells to help repair damaged lungs," explains Hinsdale. "We think that the web of proteins that adult stem cells produce around themselves can be manipulated to encourage this. This funding helps us perform early experiments to test this and through collaborations, increases the connectivity between OSU and other research institutions in the state in the area of adult stem cell research."

"The OCASCR funding provides an opportunity for the SCFG to develop a thematic multiple-investigator program in an emerging area of research—using adult stem cells to treat human and animal diseases," states Carey Pope, Ph.D., Department Head of Physiological Sciences and Sitlington Chair in Toxicology at the veterinary center. "It will also promote adult stem cell research across the OSU campus as well as create a new training environment for postdoctoral fellows and graduate students."

OSU's SCFG will be able to hire three postdoctoral fellows, who will be co-mentored by the three principal investigators and participate in joint meetings of the three laboratories. Grant funding is $72,800 per project, totaling $218,400.

The Oklahoma State University Center for Veterinary Health Sciences is one of 28 veterinary colleges in the United States and is fully accredited by the Council on Education of the American Veterinary Medical Association. The center's Boren Veterinary Medical Teaching Hospital is open to the public and provides routine and specialized care for small and large animals. It also offers 24-hour emergency care and is certified by the American Animal Hospital Association. For more information, visit www.cvhs.okstate.edu or call (405) 744-7000.

OCASCR (www.ocascr.org) was created with funding by the Oklahoma Tobacco Settlement Endowment Trust to build Oklahoma excellence in one of the fastest growing areas of medical research and to serve as a trusted resource for public information. The center opened in April 2010 and will enhance adult stem cell research by providing grant funding for researchers, encouraging recruitment of scientists and providing education to the people of Oklahoma.

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