



FOR IMMEDIATE RELEASE

July 14, 2010

Lisa O'Deay
Mary Bird Perkins Cancer Center
(225) 215-1306
lodeay@marybird.com

Ashley Berthelot
LSU Public Affairs
(225) 578-3870
Aberth4@lsu.edu

Mary Bird Perkins Cancer Center Receives \$2.2 Million to Research New Paradigm for Radiation Therapy

The U.S. Army Medical Research Acquisition Activity recently awarded Mary Bird Perkins Cancer Center (MBP) a \$2.2 million research contract. The award will support research on how radiation therapy can better target cancer cells microscopically (individual tumor cells) and macroscopically (both normal and tumor cells).

Principal investigator, Kenneth Hogstrom, Ph.D., MBP, commented, "We are researching a new paradigm in which cancer will be treated on a cell by cell basis – targeting cancer cells while avoiding normal cells mixed within the target volume." It is hoped that such therapies will allow a greater dose to the cancer with minimal damage to normal tissue, which will increase cures for many cancers.

This study would not be possible without the LSU CAMD (Center for Advanced Microstructures and Devices) synchrotron, which provides the monoenergetic x-ray source used to irradiate cells. Through the award, MBP will collaborate with scientists at the LSU synchrotron and the Department of Physics and Astronomy.

"This collaborative effort, led by Kip Matthews, Ph.D., subcontractor principal investigator at LSU, will allow us to build a new state-of-the-art biomedical beamline at CAMD that facilitates the present research as well as enabling future cancer-targeting research by LSU and other scientists," said interim CAMD Director, Rich Kurtz, Ph.D. If successful, this targeted therapy could be translated into Mary Bird Perkins using future technology called electron-laser accelerators.

“Mary Bird Perkins is very excited about entering and contributing to basic science that will help answer questions that could serve as building blocks for future advances in the radiation treatment of cancer,” said Todd Stevens, president and CEO, MBP.

MBP has multiple radiation devices that effectively and efficiently target tumor volumes for each specific patient, and it has multiple applied research programs aimed at improving these therapies. This grant, however, funds MBP’s first major effort in basic research by studying a new paradigm for radiation therapy.

About Mary Bird Perkins Cancer Center:

MBP is a community-based organization focused solely on cancer care. Founded almost 40 years ago in Baton Rouge by a group of community organizers, the overriding goal was to provide high-quality services to patients regardless of their ability to pay. Today MBP has five locations across southeast Louisiana (Baton Rouge, Covington, Gonzales, Hammond and Houma) and is not only a leader in providing state of the art radiation therapy, but it is bringing screenings and early detection programs, education, and research into the 18-parish service area it covers. Through a series of innovative partnerships, MBP is succeeding in its mission “to improve survivorship and lessen the burden of cancer through expert treatment, compassionate care, early detection, research and education.”

About Louisiana State University:

LSU is the flagship institution of the Louisiana State University System, and the largest institution of higher education in Louisiana in terms of student enrollment. In 2009, the University enrolled 21,000 undergraduate and 4,000 graduate students in 17 schools and colleges. Several of LSU's graduate schools, such as the E.J. Ourso College of Business and the Paul M. Hebert Law Center, have received national recognition in their respective fields of study. Designated as a land-grant, sea-grant and space-grant institution, LSU is also noted for its extensive research facilities, operating some 800 sponsored research projects funded by agencies such as the National Institutes of Health, the National Science Foundation, the National Endowment for the Humanities, and the National Aeronautics and Space Administration.

About the joint LSU-MBP Medical Physics Program:

The joint LSU-MBP medical physics program is an applied physics program within the LSU Department of Physics and Astronomy. It is equally supported by LSU and MBP. The LSU M.S. in Medical Physics and Health Physics Program is one of 18 graduate programs in the United States

accredited by the Commission on Accreditation of Medical Physics Educational Programs, Inc. (CAMPEP). Adjunct faculty members at MBP teach the clinical and specialty courses in radiation oncology, and faculty members at LSU teach the basic radiation sciences. MBP operates a prominent research program in radiation oncology physics concentrating on applied and basic research in radiation oncology physics, and LSU concentrates on basic research in x-ray and gamma-ray imaging. The program's 25 graduate students (Fall2009) perform research theses en route to the M.S. and Ph.D. degrees. Dr. Kenneth Hogstrom, professor and director of the program, holds the Dr. Charles M. Smith Chair of Medical Physics at LSU, and he serves as Chief of Physics at MBP. Graduates of the program staff many of the radiation oncology centers in Louisiana, and results of applied research in the program benefits patients at MBP and throughout the world.

###