

LITE PUTS LAFAYETTE ON INTERNATIONAL MAP FOR BREAST CANCER EDUCATION

Lafayette, LA (May 29, 2008) – It wasn't a typical Memorial Day for local breast radiologist Dr. Robert Lapidus, Medical Director of Women's Imaging Centre in Lafayette, the new breast diagnostic facility which is affiliated with Women's and Children's Hospital, or for researchers at the Louisiana Immersive Technologies Enterprises (LITE) complex in Lafayette, Dr. Carolina Cruz-Neira, LITE's Executive Director and Chief Scientist, and Dr. Dirk Reiners, Assistant Professor of computer science of the University of Louisiana at Lafayette. Instead of attending a family outing, they were working with the world's preeminent figure in breast cancer diagnosis, Dr. Laszlo Tabar.

Dr. Tabar, the world's authority on breast imaging and known in international circles as the 'father of mammography,' conducted the Swedish studies in the late 1970's and early 1980's that proved that mammography screening programs would result in a significant reduction in breast cancer mortality. To this day, he remains at the cutting edge in breast cancer diagnosis. He is Professor of Radiology at Uppsala School of Medicine and Medical Director of Mammography, Falun Central Hospital in Falun, Sweden. Dr. Tabar has interpreted over 1,000,000 mammographic screening examinations since 1977, and has authored several text books on mammography as well as over 170 articles published in peer-reviewed medical journals. He has lectured thousands of physicians on six continents. At Dr. Tabar's Multimodality Approach to the Detection and Diagnosis of Occult Breast Cancer workshop this past March in Santiago, Chile, Dr. Tabar expressed his dream of being able to present microscopic sections of the various breast cancer sub types in a 3-dimensional format so that they would be better understood by radiologists, pathologists, surgeons, and other physicians, a feat he had been unable to accomplish. When Dr. Lapidus heard Dr. Tabar's dream articulated for the third time, Lapidus realized he had the resources to make this happen.

It turns out Dr. Lapidus has a relationship with the researchers at LITE in Lafayette. LITE is a \$27 million, 70,000-square foot facility located at the research park of the University of Louisiana at Lafayette. Redefining how organizations see, think about and use information and data, LITE's technological infrastructure encourages and enables the development of innovative solutions using advanced 3D visualization techniques, including immersive technologies, where a person could actually step in to and interact with a 3D image. This is all done through LITE's high-performance computing capabilities which can process unimaginable volumes of data at accelerated speeds.

When Dr. Lapidus returned from Chile, he contacted Dr. Carolina Cruz-Neira at LITE and explained the challenge. His explanation included the educational benefits of displaying the sub gross microscopic anatomy of malignant, as well as benign, breast conditions in 3D so that medical professionals would have a better intuitive understanding of the variants of normal breast tissue as well as the different types of breast cancer. Dr. Cruz-Neira was confident that LITE could come up with a solution to visualize the microscopic sections of breast cancer subtypes.

Four weeks later, after LITE researcher Aashish Chaudhary and Dr. Dirk Reiners wrote a new software program, the mission was accomplished. Upon presentation of the final product, Lapidus quickly contacted Dr. Tabar to explain what a fantastic program had been developed. When Dr. Tabar heard the news, he rapidly made plans to fly in to Lafayette to work with Dr. Lapidus, Dr. Cruz-Neira and Dr. Reiners to further refine the synergies of 3D technology as it can relate to imaging microscopic specimens of breast cancers and certain types of benign breast disease.

Dr. Reiners says, "This is just the beginning and, for proof-of-concept purposes, a great deal of more work can be done to take the 3D visualization of the microscopic sections to an even higher level."

Dr. Tabar and Dr. Lapidus are convinced that this technology will serve as a vehicle for better understanding of breast disease by physicians all over the world. According to Dr. Tabar, "This collaboration with Dr. Lapidus and LITE researchers will have a monumental impact on the way breast disease is taught to physicians around the world. Using this technique will improve communication amongst all team members that treat breast disease including radiologists, surgeons, pathologists, and medical oncologists. We are talking about a global issue."

Breast cancer forms in tissues of the breast, usually the ducts (tubes that carry milk to the nipple) and lobules (glands that make milk). It occurs in both men and women, although male breast cancer is rare. In 2008, there will be an estimated 200,000 new cases of breast cancer in the U.S. alone, resulting in over 40,000 deaths.

"At the end of the day," Dr. Lapidus says, "We need to use every last piece of technology available to combat this disease which all too commonly affects our sisters, mothers, and families."

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About LITE: LITE, the only facility of its kind in North America open to government, research and private industry, is a cooperative effort between the State of Louisiana, Lafayette Economic Development Authority (LEDA) and University of Louisiana at Lafayette (UL Lafayette). A state-of-the-art advanced supercomputing and data visualization facility, LITE uses 3-D and total immersive data visualization technologies powered by high-performance supercomputing capabilities and transmits via high-speed fiber optics. LITE technologies are available for government and academic research and private sector innovation, offering essential decision-making tools for collaborative research applications; product development, testing and validation; and training.

About Dr. Carolina Cruz-Neira: Dr. Cruz-Neira, Executive Director and Chief Scientist of LITE, is known as a worldwide pioneer in the field of virtual reality, both as a researcher and as an entrepreneur. Her work includes the technical design and implementation of the CAVE®, the first virtual reality projection cube ever built.

LITE, Lafayette Parish Consolidated Government and Lafayette Regional Airport are partners in a concerted technology-centered economic development effort in the Acadiana region of south Louisiana. The Lafayette area has a growing economy with a workforce, incentives and infrastructure designed to attract new businesses and business expansions specializing in technological advancements. For further information, please visit www.lite3d.com, www.lftairport.com and www.lafayettela.gov

About Women's Imaging Centre–Lafayette: *Women's Imaging Centre–Lafayette is an 11,000 square foot facility providing a multi-modality approach to breast imaging. Women's Imaging Centre offers precise detection technology and convenient treatment service in a spa-like environment. It offers full field digital mammography with CAD, ultrasound, automated whole breast ultrasound, DXA bone scan, and the Aurora Dedicated Breast MRI System. Women's Imaging Centre also performs minimally invasive biopsies through ultrasound, stereotactic and MRI guidance.*

The mission of the Women's Imaging Centre is to reach out to the women of the Lafayette, LA community—mothers, daughters and friends alike—to ask what's important to them regarding breast health, and what they expect and need from health care providers. Women's Imaging Centre–Lafayette is committed to meeting patient needs and exceeding their expectations. For more information, please visit www.womensimagingcentre.com.