

Center of Cancer Systems Biology at CSEMC will work to develop new insights into cancer prevention and treatment

The new Center of Cancer Systems Biology (CCSB) at Caritas St. Elizabeth's Medical Center was established in 2005. The CCSB is dedicated to a broad-based approach to cancer research and will maintain a sharp focus on cancer biology and treatment optimization.

Located on the first floor of the Center for Biomedical Research (CBR) building on the CSEMC campus, the CCSB will bring together diverse researchers from biological, mathematical, physical and clinical backgrounds to better understand the molecular and tissue-level events underlying cancer evolution and development. The new Center facilities consist of 24 workstations, known as lab benches; two equipment rooms; a "cold room" for experiments requiring controlled temperature, and two tissue culture rooms.

The team of lab investigators and research staff to be assembled at the Center of Cancer Systems Biology will work to develop novel approaches to the cancer problem, both at the molecular and at the systems level. As the CCSB solidifies its team members over the next year, it is anticipated it will become an internationally competitive research and training facility and research data repository in cancer systems biology.

Joining the CCSB as its founding director is renowned cancer researcher Lynn Hlatky, Ph.D., who joined CSEMC from the Dana-Farber Cancer Institute and the department of radiation oncology at Harvard Medical School, where she spent the past 17 years earning praise as a groundbreaking cancer researcher and dedicated teacher. She graduated from the University of California, Berkeley with a Ph.D. in Biophysics.

Hlatky brings to the CCSB the support of a recently awarded a \$10 million grant to establish and direct a multi-institutional NASA Specialized Center of Research (NSCOR) for the study of carcinogenesis, the process by which normal cells are transformed into cancer cells.

Based at Caritas St. Elizabeth's, the NSCOR will involve the collaboration of prominent scientists and will investigate the heightened cancer risks from space radiation faced by astronauts, and will offer valuable insights into cancer prevention and treatment in the general population.

As with other complex diseases, it is now widely believed that critical advances in cancer prevention and treatment will emerge not from narrow investi-



Renowned cancer researchers Lynn Hlatky, Ph.D., and Philip J. Hahnfeldt, Ph.D., at CSEMC's new Center of Cancer Systems Biology

gations, but from a broad multidisciplinary approach. Hlatky's vision of the new Center of Cancer Systems Biology is to integrate investigators with exceptional expertise in biological, molecular, clinical, epidemiological, biophysical, mathematical, and statistical backgrounds, with the shared goal of understanding cancer development and progression, and the ultimate purpose of optimizing cancer prevention and treatment. "I knew right away that she would make a significant contribution and help the CCSB achieve its goal of bringing bench research together with clinical application," noted Nicolaos E. Madias, M.D., chair of medicine at CSEMC.

In 2003, Hlatky was designated an "Expert in Cancer Biology" by the European Commission for Restructuring European Science. She lectures extensively worldwide and serves on federal, nonfederal, and international scientific granting committees.

Joining Hlatky at the CCSB from the Dana-Farber Cancer Institute and Harvard Medical School is Philip J. Hahnfeldt, Ph.D., an MIT-trained mathematician who has specialized in cancer systems analysis. Hahnfeldt has made substantial contributions to the fields of chemotherapy and cancer growth dynamics. He is currently investigating the network of gene interactions that drives tumor progression.

As Hlatky assembles her team, she, "looks forward to the Center of Cancer Systems Biology at Caritas St. Elizabeth's becoming an internationally competitive cancer research and training program, a vibrant theater of innovation in cancer prevention and treatment. We anticipate that the center will have a major impact on the advancement of all missions of the Caritas Christi Cancer Center - excellence in patient care, commitment to education and training, and innovative research."

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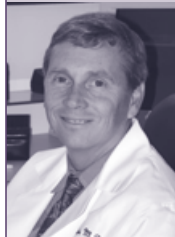
gamma cameras (continued from page 1)

System, or PACS, which digitally stores all diagnostic imaging performed at the medical center, including CT scans, MRIs, ultrasounds and X-rays.

Common nuclear medicine applications include cardiac stress tests to analyze the blood flow to and function of the heart muscle, diagnosis of hyperthyroidism, bone scans for orthopedic injuries, lung scans for blood clots and potentially cancerous tumors, and liver and gall bladder imaging to diagnose abnormal function or blockages.

An estimated 16 million nuclear medicine imaging and therapeutic procedures are performed each year in the United States. With the acquisition of these new cameras, CSEMC will perform over 3,000 nuclear medicine procedures annually. Of these, approximately 60% are cardiac studies, 20% are cancer-related and 20% involve benign conditions like inflammation or infection.

Robelen named chair of anesthesiology



Gary T. Robelen, M.D., has been named CSEMC's new chair of the department of anesthesiology and pain medicine. His appointment follows a nationwide search.

As a longtime CSEMC physician, Robelen has been serving as acting chair for the department since July 2005. Along with overseeing projects and innovations for the department, he has been one of the leaders in the redesign of the operating rooms' booking system and pre-admission testing system to offer better service

to both surgeons and surgical patients. Also during this time he has helped to create new educational opportunities for the anesthesiology residency program, as well as an updated library/teaching facility for the department's 34 residents and fellows. Robelen is a graduate of the Medical College of Wisconsin. He lives in Weston with his wife, Susan.