Baylor College of Medicine and Baylor St. Luke’s Medical Center have developed the first comprehensive, multi-specialty Lung Institute in the state of Texas, with a team of specialists led by world renowned lung disease expert and surgeon Dr. David Sugarbaker.

From asthma to lung cancer, the Institute offers advanced technology and individualized treatment, backed by Baylor's top-ranked genetics program, to patients from all over the world. It is based at Baylor St. Luke's Medical Center, part of CHI St. Luke's Health, and is accepting patients now.

Sugarbaker moved from Boston to Houston in July to establish the Lung Institute. Patients from around the world now are being treated in Houston, and Texas patients have found the best care close to home.

“If you’ve been told you have a difficult case, this is where you come. Patients come to us based on the reputation of the Lung Institute team for providing hope as well as superb medical care in even the most difficult medical conditions,” said Sugarbaker, director of the Lung Institute and professor and chief of the division of general thoracic surgery at Baylor. He also holds the endowed Olga Keith Wiess Chair of Surgery.

The Institute combines experts from more than a dozen pulmonary, surgery and related specialties at Baylor and Baylor St. Luke’s Medical Center, and taps into the resources of Baylor's internationally recognized genetics and genome sequencing programs.

This collaborative approach to treatment of lung disease means that patients are provided more options for a course of treatment.

“Patients with lung cancer can be treated with minimally invasive surgical techniques that can be combined with innovative chemotherapy strategies and new genetic information to produce individualized care plans,” he said.

New treatments are available for asthma, including surgical procedures that work on the nervous system of the lung itself. Mesothelioma is treated at the Lung Institute's Mesothelioma Treatment Center, which attracts patients from around the world.

“The medical team at the Mesothelioma Treatment Center has developed novel delivery systems for...
BAYLOR’S IMPACT IN BOTSWANA REACHES “MAJOR” MILESTONE

The 3 ½ years that Dr. Major Bradshaw spent in Botswana in southern Africa is sure to have a lasting benefit for the people of the country for years to come, and that impact is starting to be seen.

Bradshaw, previously Dean of Student Affairs and Education and Senior Vice President at Baylor College of Medicine, who is currently Physician Advisor to the Office of Philanthropy and Alumni Relations, served as founding dean of the first medical school in the country. His work and that of countless others came to fruition as the first group of medical students graduated from the University of Botswana School of Medicine this October.

Bradshaw and his wife, Susan, recently traveled back to Botswana for the commencement ceremonies, where they reunited with colleagues and the graduating medical students, whom they first met when the students were about 18 years old as premeds.

“It was a very personal thing for both of us to be back there. A lot of our lives and efforts have gone into creating that medical school, and there were a lot of ups and downs,” said Bradshaw. “It was very fulfilling to return for the first commencement.”

It was important to establish a medical school there because of the “brain drain” in the country. Since 1971, the government of Botswana had sent students around the world to study medicine—somewhere between 2,500 and 3,000 were sent abroad, but only about 91 came back.

Development of the medical school started when Dr. Mark Kline, J.S. Abercrombie Professor and Chair of Pediatrics and physician-in-chief at Texas Children’s Hospital, established the Botswana-Baylor Children’s Clinical Center of Excellence in 2003.

The Center provides care and treatment for HIV-infected children and families from around Botswana. At that time, the country had one of the highest rates of HIV in the world and no medical school to train doctors to provide care to these patients and many others. Around this time, Baylor had also signed a Memorandum of Understanding with the University of Botswana to provide consulting services.

When Kline returned from a trip to Botswana in April 2006, he ran into Bradshaw back in Houston

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BAYLOR RESEARCHERS RECOGNIZED WITH PRESTIGIOUS AAAS HONOR

Baylor College of Medicine scientists Drs. Margaret “Peggy” Goodell, Brendan Lee, David Nelson and Theodore Wensel have been named 2014 Fellows of the American Association for the Advancement of Science (AAAS)—the world’s largest general scientific society—an honor bestowed on AAAS members by their peers to acknowledge their distinguished efforts to advance science.

The Baylor scientists were recognized in the AAAS section on biological sciences for the following:

Goodell, Director of the Stem Cells and Regenerative Medicine Center and the Vivian L. Smith Chair in Regenerative Medicine at Baylor, for distinguished contributions to the field of stem cell biology, particularly genetic and epigenetic regulation of self-renewal and differentiation of hematopoietic stem cells.

Lee, the Robert and Janice McNair Endowed Chair in Molecular and Human Genetics at Baylor, for distinguished contributions to the field of translational genetic medicine particularly in causes, mechanisms, and treatment of inborn errors of metabolism and skeletal disorders.

Nelson, the Cullen Foundation Professor in Molecular Genetics at Baylor, for distinguished contributions to understanding how repeat expansions contribute to human disease, and for extraordinary service to the American Society of Human Genetics.

Wensel, Chair of the Verna and Marrs McLean Department of Biochemistry and Molecular Biology and the Robert A. Welch Chair in Chemistry at Baylor, for groundbreaking discoveries in the field of sensory signaling, including the roles of members of the regulators of G-protein signaling (RGS) family of proteins.

Goodell, Lee, Nelson and Wensel join nine other Baylor scientists as AAAS fellows, including Drs. Janet Butel, Tom Caskey, Mary Estes, Adam Kuspa, James Lupski, Jianpeng Ma, Bert O’Malley, Susan Rosenberg and Salih Wakil.

The AAAS announced 401 new Fellows who will be recognized on Feb. 14 at the AAAS Fellows Forum during the 2015 AAAS Annual Meeting in San Jose, Calif., and were formally announced in the AAAS News & Notes section of the journal Science on Nov. 28, 2014.
Dr. Matthew Ellis, an international leader in breast cancer genomics, has been named the newest McNair Scholar at Baylor College of Medicine.

The McNair Scholar program at Baylor identifies influential researchers in breast and pancreatic cancer, juvenile diabetes and neuroscience. It is supported by the Robert and Janice McNair Foundation and managed by the McNair Medical Institute.

Ellis was recruited to Baylor in September 2014 to serve as Director of the Lester and Sue Smith Breast Center at Baylor. He is a world renowned clinician and researcher of the molecular profiling of breast cancer.

His research has unveiled groundbreaking new information about mutations in breast cancer and their clinical relevance. He has been instrumental in developing a Genome Atlas and Therapeutic Road Map for estrogen receptor positive breast cancer. Most recently, he has found that metastatic breast tumors initially positive for the estrogen receptor frequently harbor mutations and translocations in the receptor that render the tumor resistant to endocrine therapies used to block estrogen.

Several laboratories are now trying to develop new drugs that will block these mutant receptors.

Ellis is a funded scholar of the Cancer Prevention and Research Institute of Texas and the Susan G. Komen Foundation for the Cure. He holds the C. Kent Osborne, M.D. Endowed Chair in Breast Cancer and serves as a professor of medicine and member of the NCI-designated Dan L. Duncan Cancer Center at Baylor.

Prior to coming to Baylor, Ellis was at Washington University School of Medicine, where he served as professor of medicine, head of breast oncology and head of medical oncology. Prior to Washington University, Ellis served on the faculty at Duke University and Georgetown University.

Ellis is a native of the United Kingdom. He completed his medical degree from Queens’ College & School of Clinical Medicine at the University of Cambridge in England, postgraduate clinical training at the Royal College of Physicians in London and Ph.D. training at the Royal Postgraduate Medical School at the University of London.

There are a total of 12 McNair Scholars at Baylor. To see a full list, visit the BCM McNair Scholars web page.
chemotherapy agents to offer patients cutting edge, surgically-based therapies for this devastating disease. By working together as one team, we bring a wealth of expertise to each patient treated at the Lung Institute,” Sugarbaker said.

Dr. Todd Rosengart, chair of surgery at Baylor, said, “We all are very excited to bring this new era of integrated health care delivery for the treatment of lung disease to the Houston metro area and to all of southeast Texas. The health and well-being of those afflicted with lung disease will significantly benefit from the wonderful care that will be provided by our Lung Institute team under the leadership of Dr. David Sugarbaker, a world class innovator in the treatment of lung cancer, mesothelioma and lung disease.”

The specialties that are working together in the Lung Institute include medical oncology, pulmonary medicine, radiation oncology and radiology. The various programs participating include CHI’s Lung Cancer Center of Excellence, and Baylor and Baylor St. Luke’s Medical Center programs and centers, including cystic fibrosis, COPD and asthma, pulmonary hypertension, pulmonary fibrosis, sleep center, interstitial lung disease program, lung and heart transplant program, mesothelioma treatment center, minimally invasive thoracic surgery center, lung cancer program (part of Baylor’s NCI-designated Dan L. Duncan Cancer Center), and the lung cancer screening program.

“The multidisciplinary approach coordinates the delivery of the many talents of the institute team to the patient at the most opportune time,” Sugarbaker said.

In addition, the Institute offers holistic care for patients and their families. Full time chaplaincy services, social workers, physical therapists, dieticians and patient navigators help patients and their families deal with the stress of illness. These efforts allow patients and their families to take an active role in their own care plans.

For appointments or more information visit the Baylor College of Medicine Lung Institute at Baylor St. Luke’s Medical Center or call 713.798.6376.

and asked if he knew someone who would want to travel to Botswana to help establish the country’s first medical school, Bradshaw said he knew just the person for the job—himself.

Two months later, Bradshaw and his wife moved to Botswana, where he was the only faculty member for the medical school for one year. Because of the MOU, Bradshaw was able to maintain his role as a faculty member at Baylor while in Botswana.

Bradshaw met with deans of medical schools throughout Southern Africa and then developed a curriculum for the new school. He hosted the curriculum deans from those medical schools as well as from Australia and from Baylor College of Medicine to critique the curriculum he developed.

In many places outside of the United States, students enter medical school straight out of high school and train for six years. This would be the case in Botswana. The first class was selected after one year of premed work at the University. Bradshaw noted that because of the young age of the students, there was a heavy emphasis on ethics, professionalism and communication early in their medical training. Two years of training were heavily focused on problem-based learning in the basic sciences, which was followed by three additional years of clinical training.

The curriculum also devoted a significant amount of time training in surgery, because once these students complete their training, they can be sent to a small village, where they are likely to be the only physician available for hundreds of miles and must be able to perform a variety of medical care.

“In true Baylor style, we started in a remodeled warehouse,” said Bradshaw, referring to Baylor’s early years in Houston where classes were held in a converted Sears, Roebuck & Co. building.

Bradshaw worked with architects to build a basic science building as well as a 450-bed, 800,000 square foot academic hospital.

He emphasized when developing the curriculum that if they wanted people to stay and practice in Botswana, they needed to have residency programs in the country. Internal medicine, pediatrics, family medicine, general surgery, obstetrics and gynecology and emergency medicine residencies have been established.

Currently, there are 250 students enrolled in the medical school, which has been elevated to the Faculty of Medicine within the University of Botswana rather than being a part of the Faculty of Health Sciences.

Thirty-two of the 36 students from the original medical school class graduated this fall, and although the other four were delayed for various reasons, they will graduate. All graduates are doing internships in Botswana, after which they will choose to stay or leave for residency.

“It will benefit the people of Botswana in the long run because I really think that the majority of these young people are going to stay,” said Bradshaw. “The people of Botswana in general love their country. They are attached to the land, their families and to their cattle; it’s just a culture of wonderful people. The education environment is there now, so those students can see opportunities.”

“We had a gala dinner the Thursday night before graduation, and I told the students that they are going to be caring, compassionate, excellent physicians and clinicians and also that they’re going to be leaders in their community and in the nation. They’ll be real leaders in Botswana because of their education and their position, and I think they will have an impact beyond just the practice of medicine.”

At the commencement ceremony, the vice chancellor of the University of Botswana recognized that the first graduating medical school class was a major milestone in the development of the country. He also recognized Bradshaw and Baylor’s contributions in establishing the medical school.