Landmark KCC Study Finds Multidisciplinary Approach Key to Successful Treatment of Aggressive Prostate Cancer

“Shared decision making through a real-time, on-site discussion with different specialists about the risks and benefits of each treatment can decrease distress and post-treatment regret,” said lead investigator Leonard Gomella, MD, FACS.

A research team from the National Cancer Institute (NCI)-designated Kimmel Cancer Center (KCC) at Jefferson has concluded – for the first time – that a multidisciplinary clinic approach to aggressive prostate cancer can improve survival in patients. The results from the 15-year study of the multidisciplinary clinic were published in the November issue of Journal of Oncology Practice.

Since 1996, the KCC has offered newly diagnosed prostate cancer patients, and those needing additional consultation, the opportunity to be evaluated in a Multidisciplinary Genitourinary Cancer Clinic (MDGUCC). The clinic team works with patients and referring physicians to devise treatment plans that are tailored to the individual needs of each patient. The goals of this weekly clinic are to provide state-of-the-art oncology care and to serve as an educational resource for patients, their families and physicians in training.

“The primary goal of the MDGUCC approach to prostate cancer is to provide this balanced information in an open and interactive fashion, with all clinical specialists present at the same time,” said Leonard Gomella, MD, FACS, the Bernard W. Godwin, Jr. Professor of Prostate Cancer; Associate Director for Clinical Affairs at the KCC; Chair of the Department of Urology at Jefferson Medical College of Thomas Jefferson University; and lead investigator on this study. Learn about the study at www.jeffersonhospital.org/news.

Emergency Medicine Team Discovers Lead Contamination in Chinatown, Spurs FDA Study

It was last July in Philadelphia, when Gerald O’Malley, DO, a physician new to Jefferson decided to explore nearby Chinatown. Dr. O’Malley joined Jefferson from another local hospital and prior to that had completed a fellowship in medical toxicology at the University of Colorado/ Rocky Mountain Poison and Drug Center in Denver.

There he had been involved with studying the source of the lead poisoning problem which was pervasive among the Mexican population living in the area. The discovery: Lead was leaching into their food from the glazed pottery they brought with them from Mexico.

“While I walked around Chinatown, I passed many shops selling ceramic kitchenware,” recalls Dr. O’Malley, Director of Clinical Research, Emergency Medicine, at Jefferson. “Knowing that both Mexico and China are major sources of imports containing lead – and because of my experience with the Mexican community in Colorado – I wondered if those Chinese ceramics also contained lead.”

Dr. O’Malley discussed his concern with Thomas Gilmore, MD, also of Emergency Medicine, and they formulated a plan to purchase and test a sampling of Chinese ceramics. Together, with a team of interested medical students, the physicians systematically tested the items for lead content. Using a LeadCheck® test, one area on each item was rubbed with a lead-detecting solution. In 30 percent of the items, the area turned pink or red, with red indicating higher concentrations of lead.

Dr. Gilmore is quick to point out that the test wasn’t quantitative – it only confirms that there is some level of lead. “It’s possible that the items tested are within acceptable limits, so we can’t say they are illegal at this point. However, this makes for a reasonable inference that many are above the limit – especially those where the area became red.”

Sharing the Findings

With testing completed, Drs. O’Malley and Gilmore then contacted the United States Food and Drug Administration (FDA). The officials there were so alarmed at the significant number of affected items, that the agency is initiating further studies of imported Chinese and Mexican cookware.

The Centers for Disease Control and Prevention’s Advisory Committee on Childhood Lead Poisoning Prevention has also taken great interest in the findings, and believes the public health community has not appreciated the potential significance of this particular source of lead exposure.

see Emergency Medicine on page 2

NIH Awards Multi-Million Dollar Grant to Jefferson for External Imaging

“In the future, imaging multiple cancer genes might guide early treatment according to which cancer genes are active in solid tumors, and might even identify developing cancers before they form a tumor mass,” said Eric Wickstrom, PhD.

Thomas Jefferson University has been awarded a four-year, $2.5 million grant from the National Institutes of Health (NIH) for a study of cancer gene activation in lung cancer. The research team proposes to use imaging techniques to highlight a gene involved in solid tumors, thus helping to direct cancer therapy.

“We propose to detect a particulate activated cancer gene known as KRAS2 in lung tumors from outside the body by nuclear medicine genetic imaging,” said principal investigator Eric Wickstrom, PhD, Professor of Biochemistry & Molecular Biology at Jefferson Medical College of Thomas Jefferson University.

The clinical value of this study was underlined by co-investigator Edith P. Mitchell, MD, Clinical Professor of Medicine & Medical Oncology, who explained that “if the KRAS2 cancer gene has been activated by mutation, therapies directed against epidermal growth factor receptor (EGFR) will fail.”

Co-investigator Mathew L. Thakur, PhD, Professor of Radiology & Radiation Oncology, is an internationally acclaimed expert in nuclear medicine. He noted that these external imaging experiments will test for...
Generosity of Jefferson Community Shined Brightly During the Holidays

Over the Thanksgiving and Christmas holidays, the Jefferson community reached out to help others in a variety of ways.

Food Drives at Jefferson

• Camp Out Against Hunger Food Drive
  Before the Thanksgiving holiday, students from Thomas Jefferson University again coordinated a food drive on campus to support WMMR's Camp Out Against Hunger event, which supports Philabundance, the area's largest food donation distribution agency. The drive resulted in 460 pounds in food donations, up from 353 in 2009 and 300 the year before.

• IS Drive
  Information Systems (IS) staff members held their Annual Food Drive to take a "byte" out of hunger in the Philadelphia area. Staff members assembled boxes of food for Mercy Hospice and gave a generous donation to Philabundance.

• Recovery Council Thanksgiving Food Drive
  Associated with the Department of Psychiatry and Human Behavior's Division of Substance Abuse Programs, the Recovery Council is a group of patients who have achieved long-term abstinence from substance use and who now wish to give back to their community. Before Thanksgiving, the council coordinated a food drive that fed 55 families in need. Each family received a turkey, vegetables, fixings and dessert. The goal of the drive was to help these families avoid having to choose between paying bills and having a good, nutritious holiday meal.

• Methodist Hospital Thanksgiving Drive
  Staff members in departments throughout the hospital filled 44 food baskets and Facilities staff delivered the dinners to needy families. The baskets included turkeys and all the trimmings. The recipient families were identified by the local schools and churches in South Philadelphia.

Adopt-a-Family Gift Drive

Jefferson staff members helped women, children and families at three city shelters over the holidays by again conducting the Adopt-a-Family drive. Throughout the Jefferson Center City campus, Christmas trees were set up in several building lobbies with gift requests noted on hanging ornaments. Other basic needs were noted in stories published on the Jefferson Intranet. More than 1,000 gifts were donated to help an estimated 300 moms, dads and kids.

Salvation Army Stocking Drive

Members of the staff at the TJU Office of Research Administration collected toys for kids during this annual drive and assembled the Christmas stockings to be donated. The department looks forward to continuing its involvement with the drive.

Thanks to all our staff members, students and patients who made these drives a success.

Breast Cancer Research Breakthrough at KCC: Shutting Down Inflammation Stops Cancer Onset, Progression

“These studies provide the rationale for more selective anti-inflammatory therapy directed just to the breast,” says co-author Michael Lisanti, MD, PhD.

It took 12 years and the creation of a highly sophisticated transgenic mouse, but researchers at the Kimmel Cancer Center at Jefferson have finally proven a long suspected theory: inflammation in the breast is key to the development and progression of breast cancer.

In the December 15 issue of Cancer Research, the scientists stated they can now definitively show that an inflammatory process within the breast itself promotes growth of breast cancer stem cells responsible for tumor development.

They also demonstrate that inactivating this inflammation selectively within the breast reduced activity of these stem cells, and stopped breast cancer from forming.

“These studies show for the first time that inactivating the NFkappaB inflammatory pathway in the breast epithelium blocks the onset and progression of breast cancer in living animals,” says Richard G. Pestell, MD, PhD, Director, Kimmel Cancer Center and Chairman of Cancer Biology.

“This finding has clinical implications,” says co-author Michael Lisanti, MD, PhD, Leader of the Program in Molecular Biology and Genetics of Cancer at Jefferson. “Suppressing the whole body’s inflammatory process has side effects. These studies provide the rationale for more selective anti-inflammatory therapy directed just to the breast.”

In November, the University was presented with a commissioned portrait of Stan Smullens, MD, Chief Medical Officer for Jefferson Health System, in honor of his many years of dedication to patient care and his work at JHS. Friends, colleagues and his wife, SaraKay, were on hand for the unveiling.

Multi-Million Dollar Grant continued from page 1

the possibility of detecting KRAS2 cancer gene signals from lung lesions that are resistant to EGFR antagonists.

All three Jefferson professors are members of the Kimmel Cancer Center.

According to co-investigator Koon Yan Pak, PhD, President and CEO of Molecular Targeting Technologies, Inc., who has translated a series of nuclear medicine diagnostic agents into clinical practice, “We are excited by this collaboration with Jefferson; our priority for this award is to translate basic science discoveries into regular clinical use against lung cancer.”

Currently, Drs. Winkelstrom, Thakur, and Pak are developing nuclear medicine agents to image the activity of the HER2 cancer gene in suspicious breast lesions, supported by another grant from the NCI. Drs. Winkelstrom and Thakur have previously shown that the breast cancer markers CCND1 and VPAC1 can be seen from outside the body with their unique nuclear medicine genetic imaging agents.

Learn about the research at www.jeffersonhospital.org/news.

Emergency Medicine continued from page 1

“The next step in our study [at Jefferson] is for our team to identify the actual levels of lead through a leaching test,” said Dr. O’Malley.

“The results of that will quantitatively identify whether or not the levels exceed governmental allowable limits. If it’s as high as we suspect, we’ll work on eliminating this public health hazard and treating people affected by it.”

The team is working with the Chinatown Health Clinic and hopes to conduct a mass screening of the Chinese community. They have already had dialogue with the shopkeepers to let them know that some of the wares they sell may have harmful lead contaminants.

A Local Connection, a Global Impact

Theodore Christopher, MD, Chair of Emergency Medicine, lauds the work of Drs. O’Malley and Gilmore and believes an initiative like this supports the mission of the Emergency Department to focus on both community and global health concerns.

“This is an important study that will heighten the awareness of lead contamination in many different sources. It also confirms that medical professionals need to do a more in-depth job of assessing a patient’s social history and background, which may play a very important role in diagnosis of symptoms.”

February 2011 – April 2011

Jeff NEWS

Fund A Care for Pancreatic Cancer board members visited the pancreatic cancer research team here in the fall, and presented a check for $15,000. The funding – raised by the Run Over Cancer 5K in July and the efforts of Knights of Pythias chapters in Pennsylvania – supports Jefferson’s Pancreatic Cancer Surgical Research Fund – including the research on the protein HuF and how it plays a role in making many pancreatic tumors resistant to current chemotherapy agents like gemcitabine.
Jeffrey Kane, MD, is the recipient of the ACGME Parker J. Palmer Undergraduate Education, Dept. of Surgery, JMC. Gerald Isenberg, MD, Associate Professor of Surgery, was appointed an Associate Regent at Jefferson. Gregory Kane, MD, PhD, FACS, is the recipient of the American Institute for Cancer Research to support his research project entitled “The Therapeutic Synergy between Dietary Calcium and Bacterial Enterotoxins for the Prevention and Treatment of Colon Cancer.” The award provides research funding directed toward discovering innovative therapeutic modalities for cancer prevention and cure. Dr. Pitari is Associate Professor in the Departments of Pharmacology and Experimental Therapeutics and Director of the Laboratory of Investigative Medicine at TJU.

The TJU Faculty Senate, created in June 2010, has elected two officers who will each serve a two-year term. Kathleen Squires, MD, Professor of Medicine and Director of the Division of Infectious Diseases and Environmental Medicine (JMC), will serve as President. Richard Weening, PhD, MIPP, RT(R) (CT), MR, Associate Professor and Program Director/Clinical Coordinator, CT/MRI Programs, Department of Radiologic Sciences (JSHP), has been elected Secretary.

American Association for the Advancement of Science has recognized Eric Wickstrom, PhD, by electing him a Fellow. He is Professor of Biochemistry & Molecular Biology at JMC, and a member of the Kimmel Cancer Center. Dr. Wickstrom and his coworkers create new methods to see cancer gene activity from outside the body, and to capture cancer cells flowing through the blood.

The V Foundation for Cancer Research has awarded Hushan Yang, PhD, a $200,000 grant for his research entitled “Predisposition to Hepatocellular Carcinoma in HBV patients – A Multigenic Approach to MicroRNA.” Dr. Yang is a member of Jefferson’s Kimmel Cancer Center and Assistant Professor of Medical Oncology at TJU.

Jefferson scientists have been awarded a one-year grant of $100,000 to support innovative cancer research. Their work will address why African Americans respond poorly to common chemotherapeutic agents used to treat pancreatic cancer and what genes in cancer cells are regulated under stress conditions such as chemotherapeutic treatments.

A research team from the Jefferson Sleep Disorders Center at TJU has utilized a simple pre-operative questionnaire about obstructive sleep apnea syndrome that could help identify patients at risk for complications following surgery. Individuals prone to the obstructive sleep apnea syndrome as determined by the questionnaire appear to have an increased risk of heart, lung and other complications following elective surgery.

The Centers for Medicare & Medicaid Services has recognized Jefferson for delivering high-quality care in six clinical areas. Out of 232 participating facilities taking part in the CMS value-based purchasing project, TJU received the highest award in the Surgical Care Improvement Project, the fourth highest in Heart Failure, and is one of an elite group of hospitals to win 10 or more overall awards.

Scientists from the Jefferson Institute of Molecular Medicine at TJU are now world leaders in understanding the mechanism behind a novel systemic fibrotic disorder (nephrogenic systemic fibrosis) that affects patients with renal insufficiency who receive imaging contrast agents for MRI.

Researchers in the Departments of Psychiatry and Neurology at JMC have been awarded a $2.6 million grant from the National Institutes of Health to study whether increasing participation in cognitive, physical and/or social activities prevents cognitive decline in older African Americans with mild cognitive impairment. The single site, 24-month study will focus on 200 community-residing older persons.

A Jefferson study revealed that use of aspirin before cardiac surgery reduced postoperative cardiovascular complications, including stroke, myocardial ischemia, heart block and cardiac arrest by more than 33 percent when compared to patients who did not use aspirin. The research also showed that preoperative aspirin use reduced postoperative kidney failure by 55 percent, the requirement of dialysis by 74 percent, and it did not cause an obvious increase in postoperative bleeding, which is a common reason for readmission to the hospital after certain cardiac surgeries.

The U.S. government awarded Jefferson a $1.25 million grant to create a program that addresses a growing national priority: to redesign the nation’s primary care system in order to meet the mandates of the Institute of Medicine to provide care that is safe, effective, efficient and timely and is delivered by patient-centered inter-disciplinary teams of health professionals.

**Achievements**

**Bone marrow stromal stem cells may aid in stroke recovery, reported researchers from Jefferson’s Farber Institute for Neurosciences and Department of Neuroscience.** The study results were published in Cell Transplantation – The Regenerative Medicine Journal, issue 19(9).

Elevated fat and cholesterol levels found in a typical American-style diet play an important role in the growth and spread of prostate cancer, say researchers at Jefferson’s Kimmel Cancer Center.

The promise of outpatient brain gene therapy is one step closer, according to TJU researchers. In animal studies, the researchers found that transferring genes into brain neurons intravenously, using a viral gene delivery vehicle (vector), caused no side effects. Using such a method, it may be possible to treat diseases thought to be due to excessive oxidative damage to neurons and neuron proteins, such as early Alzheimer’s disease or Parkinson’s disease, with extra genes that limit oxidative damage to brain neurons.

Jefferson scientists have been awarded a one-year grant of $100,000 to support innovative cancer research. Their work will address why African Americans respond poorly to common chemotherapeutic agents used to treat pancreatic cancer and what genes in cancer cells are regulated under stress conditions such as chemotherapeutic treatments.

A research team from the Jefferson Sleep Disorders Center at TJU has utilized a simple pre-operative questionnaire about obstructive sleep apnea syndrome that could help identify patients at risk for complications following surgery. Individuals prone to the obstructive sleep apnea syndrome as determined by the questionnaire appear to have an increased risk of heart, lung, and other complications following elective surgery.

The Centers for Medicare & Medicaid Services has recognized Jefferson for delivering high-quality care in six clinical areas. Out of 232 participating facilities taking part in the CMS value-based purchasing project, TJU received the highest award in the Surgical Care Improvement Project, the fourth highest in Heart Failure, and is one of an elite group of hospitals to win 10 or more overall awards.

Scientists from the Jefferson Institute of Molecular Medicine at TJU are now world leaders in understanding the mechanism behind a novel systemic fibrotic disorder (nephrogenic systemic fibrosis) that affects patients with renal insufficiency who receive imaging contrast agents for MRI.

Researchers in the Departments of Psychiatry and Neurology at JMC have been awarded a $2.6 million grant from the National Institutes of Health to study whether increasing participation in cognitive, physical and/or social activities prevents cognitive decline in older African Americans with mild cognitive impairment. The single site, 24-month study will focus on 200 community-residing older persons.

A Jefferson study revealed that use of aspirin before cardiac surgery reduced postoperative cardiovascular complications, including stroke, myocardial ischemia, heart block and cardiac arrest by more than 33 percent when compared to patients who did not use aspirin. The research also showed that preoperative aspirin use reduced postoperative kidney failure by 55 percent, the requirement of dialysis by 74 percent, and it did not cause an obvious increase in postoperative bleeding, which is a common reason for readmission to the hospital after certain cardiac surgeries.

The U.S. government awarded Jefferson a $1.25 million grant to create a program that addresses a growing national priority: to redesign the nation’s primary care system in order to meet the mandates of the Institute of Medicine to provide care that is safe, effective, efficient and timely and is delivered by patient-centered inter-disciplinary teams of health professionals.
Expert Imaging on Wheels

New Mobile Unit Offers Suburban Patients Convenience

The new mobile Jefferson Outpatient Imaging (JOI) unit offers patients in the suburbs convenient access to high-quality PET/CT services. With a high-resolution scanner, JOI staff can detect lesions as small as 5 mm and target precise tumor boundaries for radiation therapy planning. The unit travels to Mercy Fitzgerald Hospital in Darby two days a week and will soon be available in Exton. JOI continues to offer PET/CT seven days a week at 850 Walnut Street. More info: 1-800-JEFF-PET

Happy 50th Anniversary, Penny Wise!

Celebrate with our staff– so stay for specials throughout February. Proceeds from the shop fund TJUH Women’s Board initiatives that provide for care and comfort of Jefferson patients.

Penny Wise Thrift Shop
57 East Lancaster Avenue
Ardmore, PA 19003

Hours
Monday - Friday: 9:30 a.m. - 4:30 p.m.
Saturday: 9:30 a.m. - 3 p.m.
Phone: 610-642-7239

Consigned goods and donations are welcome.

Make a Difference in Healthcare – Become a Health Mentor at Jefferson

Please call 215-955-3757 or visit http://jeffline.tju.edu/jcicmp/himp

Jefferson Hospitals offers a wide range of support programs and counseling for their patients and their families. Visit our website to learn more: Cancer
www.jeffersonhospital.org/cancersupport
Anorexia & AVM
www.jeffersonhospital.org/anorexia-amssupport
Stroke
www.jeffersonhospital.org/strokesupport
Swallowing Disorders, Spasmic Dysphonia, Laryngectomy
www.jeffersonhospital.org/entsupport

Big Sister/Big Brother class. Siblings to be (ages 3 to 7) participate in activities that help them learn about new babies and how to be a big sister or big brother. A tour of the maternity facilities is included: Time: 10 a.m. to noon, 1840 Gibbon. RSVP required. Call 1-800-JEFF-NOW.

Monday, March 30
• Call the Future Parent, “Getting Ready for Babies,” class. Everything you wanted to know about your newborn. Time: 7 to 9 p.m. Location: 1840 Gibbon. RSVP Required. Call 1-800-JEFF-NOW.

Wednesday, March 30
• Call the Future Parent, “Grandparents Night.” (Grandparenting and what’s new in the world of babies.) Time: 7 to 9 p.m. 1840 Gibbon. Free program. Please call 1-800-JEFF-NOW.