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African-Americans suffer disproportionately higher cancer incidence and mortality rates than Caucasians. At present, little is known about how environmental exposure, lifestyle, and molecular/genetic predisposition contribute to these disparities.

It has been proposed that one way to address this "mortality gap" is to involve more African-Americans in cancer research and education. To that end, Xavier and Tulane universities, through an NIH P20 planning grant awarded in September 2005, have developed collaborative programs in cancer research, education, and training focusing on racial disparities in cancer incidence and outcomes.

"We have established a proud track record in the implementation of this planning grant," said Roy S. Weiner, M.D., associate dean for clinical research and training at Tulane and co-director of the program being developed under the grant with Xavier’s Kathleen Kennedy, PharmD, associate dean of the School of Pharmacy. "We’ve done what we said we would do, and perhaps most significantly, we have increased awareness and understanding of the need for opportunities in the study of cancer outcome disparity."

Let’s review the team’s accomplishments…

**Flemington Named Zimmerman Professor of Cancer Research**

Erik Flemington, Ph.D., professor of pathology and Tulane Cancer Center program member since 2000, was recently named the Zimmerman Professor of Cancer Research.

"Erik has been a valued and productive member of the Cancer Center for many years," said Prescott Deininger, Ph.D., interim director of the Tulane Cancer Center. "He deserves this honor not only in recognition of his scientific and academic achievements, but also because of his mentorship and steady leadership."

Scientists estimate that 30-40% of cancers are caused by viruses, and as research continues, this percentage will likely climb. For the past several years, Dr. Flemington and his team have explored the Epstein-Barr virus (EBV) and the mechanisms by which it promotes tumor growth.

"More than 90% of us live our lives day to day playing host to a latent form of EBV without even knowing it. In most of us, this virus is inactive and unnoticeable; however, in some others, it has been linked to the development of a number of diseases, including several cancers," said Flemington. EBV is a member of the herpes virus family and is most frequently associated with infectious mononucleosis. It is spread chiefly through the transfer of saliva, giving rise to the nickname "the kissing disease." Most of us become infected with EBV initially as young children, but do not become noticeably ill. Those who become exposed during or after adolescence, however, have a greater than 50% chance of contracting mononucleosis.

**Xavier/Tulane Planning Grant in Cancer Disparities Accomplishes Goals**

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Let’s review the team’s accomplishments…

**Pilot Research Projects Go On To Achieve Independent Funding**

Two joint pilot studies funded by the planning grant and matched with funds from the Louisiana Cancer Research Consortium have led
Following a recent site visit, its first since Hurricane Katrina, the American College of Surgeons’ (ACoS) Commission on Cancer issued a “Three-Year Approval With Commendation” rating for Tulane Medical Center’s Cancer Program in the Teaching Hospital category.

“The surveyor praised us for our outstanding program, our enthusiastic physician participation and our tremendous administrative support,” said Tim Pearman, Ph.D., administrative director of the Tulane Cancer Center Comprehensive Clinic (TCCCC). Commendations were issued in three areas—professional education, community outreach/prevention, and clinical trials accruals.

“ACOS accreditation is a traditional indicator that a clinical cancer program is meeting or exceeding standard levels of care and expectations with regard to coordination of important programmatic activity,” said Cindy Leissinger, M.D., interim medical director of the TCCCC. “Cancer programs undergo a thorough on-site evaluation process initially in order to meet the standards for commission approval,” said Stephen Baldwin, vice president of operations for Tulane Medical Center. The process is repeated every three years in order to maintain approval. Tulane’s cancer program has maintained its ACoS approval since shortly after its founding in 1994.

“This site visit was supposed to take place in 2006, but we were given more time to prepare because of the hurricane,” said Baldwin.

Pearman said the surveyor described Tulane’s as a “very strong program within an excellent, high-quality institution,” and he commended the entire team for overcoming tremendous odds post-Hurricane Katrina.

“Many Cancer Center personnel worked very hard to make this happen, and we are once again rewarded with accreditation,” said Leissinger.

“I would like to especially thank Paul Friedlander, M.D., our ACoS liaison, and the members of our Cancer Registry Office—Linda Harris, Gail Trepagnier and Delaney Colombo—for their hard work and dedication,” said Baldwin.

Congratulations to the team!

The Tulane Cancer Center Comprehensive Clinic is located at 150 S. Liberty St., in downtown New Orleans, adjacent to Tulane Medical Center.

The Tulane Cancer Center researchers are encouraged to explore new National Institutes of Health/American Recovery and Reinvestment Act (ARRA) funding opportunities by visiting Tulane's Office of Research Administration website at:
http://www.som.tulane.edu/researchadmin/index.html
Thyroid and Parathyroid Cancers Focus of April CME Seminar

A continuing medical education seminar entitled *Thyroid and Parathyroid Diseases: Current Trends and Controversies* will be held April 17-18, 2009, at Tulane University School of Medicine’s Murphy Conference Center in New Orleans.

Presented by the Departments of Surgery and Medicine and the Center for Continuing Education of Tulane University Health Sciences Center, the seminar is designed to increase knowledge, competence and performance in the diagnosis and treatment of thyroid and parathyroid cancers in order to improve patient diagnosis and management of care. The program will cover:

- Hands-On Surgery Lab and Workshops
- Minimally Invasive Video-Assisted Thyroidectomy and Parathyroidectomy
- Fine Needle Aspiration Biopsy Techniques
- Ultrasound Diagnosis of the Head and Neck

“Thyroid cancers are on the rise in the United States, especially among women,” said Emad Kandil, M.D., assistant professor of surgery in the Section of Endocrine and Oncological Surgery. “At the same time, mortality rates from early and effective treatment have been decreasing since the 1950s. Today’s patient with thyroid cancer or parathyroid cancer is offered multiple options. The option of minimally invasive surgery holds great appeal because of its improved cosmetic result, less pain and decreased postoperative recovery time.”

Those wishing to attend the conference can review the fee schedule and register online at [www.cme.tulane.edu](http://www.cme.tulane.edu). An additional $25 fee will be required from all those who register after Wednesday, April 15. Please note, a letter from the registrant’s department is needed to verify resident/fellow status.

For more information, please contact the Tulane Center for Continuing Education at 504-988-5466 or email [cme@tulane.edu](mailto:cme@tulane.edu).

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**Thyroid and Parathyroid Diseases: Current Trends and Controversies**

A Sampling of Presentations...

| Clinical, Histopathological and Molecular Prognostication to Optimize Thyroid Cancer Management & Postoperative Treatment and Monitoring of Patients With Differentiated Epithelial Thyroid Cancer |
| Paul W. Ladenson, M.D.—Johns Hopkins University |

| To Dissect or Not to Dissect Cervical Lymph Nodes for Thyroid Cancer & Beyond FNA Diagnosis of Suspicious Thyroid Nodules |
| Martha Zeiger, M.D.—Johns Hopkins University |

| ATA Management Guidelines for Patients with Thyroid Nodules and Differentiated Thyroid Cancer |
| Jennifer John-Kalarickal, M.D.—Tulane School of Medicine |

| Reoperation for Recurrent Thyroid Disease |
| Ralph Tufano, M.D.—Johns Hopkins University |

| Medullary Thyroid Cancer |
| Bernard Jaffe, M.D.—Tulane School of Medicine |

| Role of External Beam Radiation in Thyroid Cancer |
| Mini Elnaggar, M.D.—Tulane School of Medicine |

| Anaplastic Thyroid Cancer |
| Paul L. Friedlander, M.D.—Tulane School of Medicine |

| Current Surgical Management for Primary Hyperparathyroidism |
| Emad Kandil, M.D.—Tulane School of Medicine and Activity Director |

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*Emad Kandil, M.D., Activity Director*
Friends of Louisiana Public Broadcasting will honor Tulane Cancer Center Community Advisory Board member Joy Hodges at their 19th Annual Louisiana Legends Awards Gala, to be held at the Old State Capitol in Baton Rouge on Thursday, April 30.

This award honors the “best and brightest of Louisiana’s sons and daughters who have distinguished themselves in a variety of disciplines and have brought honor to the state.” Joy is being honored for her contributions as one of the state’s premiere business leaders and for her volunteerism and philanthropy.

Other honorees this year include Terry Bradshaw, retired NFL quarterback and Super Bowl champion; Bill Gray, congressman and retired president of the United Negro College Fund; Jimmy D. Long, dean of the legislature and “father” of the Louisiana School; and Ken Wells, acclaimed author and editor/writer for both the Wall Street Journal and Conde’ Nast Portfolio.

Congratulations, Joy!

More than 23,000 of Louisiana’s residents will be diagnosed with cancer this year, and for many of them, getting to and from their treatment appointments may be the toughest part of their fight.

The American Cancer Society’s (ACS) “Road to Recovery” program utilizes volunteer drivers who donate their time and the use of their personal vehicles to provide transportation to treatment or physician appointments to patients who have no means or who are too ill to drive themselves.

“Lack of transportation has become a major problem for thousands of cancer patients,” said Cheryl Fourcade, health initiatives representative for the Greater New Orleans Office of the ACS. “Family and friends may not have the time or means to assume the burden of frequent trips to treatment centers or they may be geographically dispersed and not able to help with daily needs.” That’s where the Road to Recovery program can assist.

Created by a group of Massachusetts volunteers in the mid-1970s, the Road to Recovery program was adopted by the American Cancer Society nationwide in 1983. There are currently 18 Road to Recovery programs in three states within the Mid-South Division of the ACS, and they provided approximately 2,742 rides in 2007.

Although there are currently 473 trained Road to Recovery volunteers throughout the Mid-South Division, Fourcade is hoping to recruit more local drivers. “A Road to Recovery driver must have a valid driver’s license, access to a vehicle and personal automobile insurance,” said Fourcade. Volunteers are required to complete the Road to Recovery training program and then may drive as frequently as their schedules permit.

For more information about Road to Recovery or to volunteer, please contact Cheryl Fourcade at 504-219-2291 or visit www.cancer.org.
Note cards featuring widely acclaimed paintings by award-winning local artist Carol R. Rosenberg benefit Tulane Cancer Center’s research programs.

These beautiful and meaningful cards come five to a set and are blank inside. They feature three of Rosenberg’s most interesting and appealing works and are perfect for any occasion or message. Use them to say “thank you,” “get well,” or “happy birthday.” They can even be used to make a donation or send a memorial. And note cards make wonderful birthday, Mother’s Day or graduation gifts.

In appreciation of your $10 donation, we are happy to provide these gift card sets in your design choice, and 100% of the proceeds will benefit the cancer research programs of the Tulane Cancer Center, in memory of Carol R. Rosenberg.

The Carol R. Rosenberg Note Card Gift Sets...

Our gift for a $10 memorial donation to the Tulane Cancer Center.

To Order Yours.... please send check payable to Tulane Cancer Center to:
Melanie Cross
Tulane Cancer Center
1430 Tulane Ave.,
Box SL-68
New Orleans, LA 70112

Or, place your order by phone, fax or e-mail:
Phone: 504-988-6592
Fax: 504-988-6684
E-mail: mcross@tulane.edu

Please don’t forget to mention which design you wish to order.
Once infected, the virus remains in the body, usually in a latent, inactive form. “In fact, most individuals walk around without even knowing they’ve ever been exposed,” said Flemington.

But, when the virus is present in conjunction with genetic alterations, it can cause cancer, especially in those with compromised immune systems. EBV has been associated with Hodgkin’s disease, Burkitt’s lymphoma, nasopharyngeal carcinoma, and a certain percentage of gastric carcinomas.

“EBV basically produces a number of proteins and RNA molecules that cause tumor cells to proliferate while at the same time preventing the immune system from attacking and killing the infected tumor cells,” said Flemington. His lab recently discovered that these proteins induce the infected cells to express small functional RNA molecules called micro-RNA’s. “Micro-RNA’s were only recently discovered in mammals but seem to have tremendous importance in cell signaling pathways and are known to play a number of roles in cancer development,” said Flemington.

His laboratory is looking specifically at two micro-RNAs that are highly expressed in EBV-infected tumors – MIR-155 and MIR-146A. “Scientists have developed ways to block the function of micro-RNA’s in tissue culture,” said Flemington. “We’re hoping in the next few years to develop ways to apply this knowledge in vivo, or in the human body.”

He is currently collaborating with Janarthanan Jayawickramarajah, Ph.D., assistant professor of chemistry and Tulane Cancer Center contributing member, who has been independently developing molecules that will theoretically bind to specific microRNAs proving toxic to the cell. “We are excited to explore how our independent research efforts can synergize in the search for possible treatments for MIR-155-expressing tumors,” said Flemington.

He is also hoping to develop a broader interest in microRNAs at Tulane and perhaps establish a Core facility offering microRNA reagents and resources for other investigators here.

to independent grant funding for two Tulane faculty members.

Asim Abdel-Mageed, D.V.M., Ph.D., whose pilot project with Xavier’s Shuba Ireland, Ph.D., was entitled Molecular Determinants of Prostate Cancer Progression in African-American Men, received a $556,000 Department of Defense IDEA Development Award and a $953,000 American Cancer Society Grant.

And Srikanta Dash’s collaboration with Xavier’s Tarun Mandal, Ph.D., on a pilot project entitled Multifunctional Engineered Nanoparticles as a Drug Delivery System for Breast Cancer, led to his recent $1.4 million NCI grant to study Hepatocarcinogenesis Secondary to Hepatitis C.

Xavier Students Participate in Cancer Research Mentoring Program—One of the P20 grant’s objectives is to establish a cancer research mentoring and training program with a focus on disparities for undergraduate students at Xavier. The P20’s NCI Fellows Program grew out of this objective and matched students with faculty mentors at both Tulane and Xavier universities. Eight students were selected to participate, and all reported very positive experiences. In fact, some have re-oriented their career goals from medicine to basic research as a result of their participation. It is notable that some participants found out about the program through the cross-institutional Cancer Biology course described in the next section.

Cancer Biology & Health Disparities Course Implemented—The Spring 2009 semester marked the third offering of the first ever combined Tulane/Xavier Cancer Biology & Health Disparities course. The course, which consists of 26 lectures by faculty at both universities, is offered to the biology and pharmacy students at Xavier and to the School of Public Health and Biomedical Sciences graduate students at Tulane. The goal of the course is to increase awareness of cancer research as a possible career choice and of its importance in addressing cancer outcome disparities.

Cultural Competency Curriculum Being Developed—Research has proven that cultural incompetence impacts health disparities. In an effort to provide the skills and abilities necessary to overcome cultural barriers of misunderstanding that may impact patient care, the Xavier/Tulane P20 is integrating cultural competence into the four-year curricula at Tulane medical school and Xavier School of Pharmacy. This is the first effort nationwide to comprehensively introduce cultural competence education across the curricula at schools of medicine and pharmacy. The proposed curriculum will be supported by a set of core competencies that will serve as a national blueprint, and innovative strategies are being developed to objectively measure changes in cultural competence from year 1 to year 4. The goal is to produce generations of clinicians whose effectiveness is enhanced through new knowledge, new attitudes and new behavior with respect to culturally diverse patients.

Each institution in the partnership takes pride in the recent appointment of Chris Williams, Ph.D., as assistant professor of basic pharmaceutical sciences at Xavier University. Chris distinguished himself as a postdoctoral fellow in the laboratory of Brian Rowan, Ph.D., associate professor of structural & cellular biology at Tulane, prior to his recruitment by Xavier. The partnership continues to support Chris in his collaboration with Dr. Rowan in disparity research involving triple negative breast cancer.

The P20’s funding began as Katrina hit our city. The grant’s work really began a year later. Drs. Kennedy and Weiner have been encouraged by NCI leadership to petition for an additional year or two of funding beyond the scheduled termination in September of 2009 in order to continue the progress fueled by the grant.

Dr. Weiner says he and Dr. Kennedy plan to apply for two additional years of funding to support a new Pilot Project examining triple negative breast cancer and its prevalence in the African-American female population. In addition, they plan to use the opportunities presented by the “stimulus package” to seek additional funds to expand the scope of the training to behavioral research and to develop a core to support studies of breast and prostate cancer among African-American patients.

Drs. Weiner and Kennedy feel that the significant accomplishments made possible by the Xavier/Tulane P20 funding will form the basis of a competitive NCI partnership grant as their progress continues toward eliminating the cancer outcome disparity in our region.
Despite a series of major challenges—funding and regulatory issues, construction contract negotiations, and arguably the worst natural disaster in our nation’s history—construction of the Louisiana Cancer Research Center has begun, and a “Construction Launch” Ceremony is planned for Wednesday, April 15, 2009.

“The vision and the great expectations that everyone involved in the LCRC has had for so many years are finally coming to fruition,” said Steve Moye, president and CEO. “This building will not only be a focal point for cancer research discovery and excellence in our area and beyond, but it will also serve as a structural symbol of the rebirth and rebuilding of New Orleans following Hurricane Katrina and of the promise and vitality of the biomedical industry here.”

The ten-story, state-of-the-art, 172,000-sq.-ft. cancer research facility is designed to allow LCRC researchers to collaborate together easily as they seek a deeper understanding of the biology of cancer and work together to develop the most up-to-date technologies for cancer prevention, diagnosis and treatment.

In early March, the team from Brice Building Co. began clearing the site and assembling the 150-foot crane that started driving support pilings April 1. The pile driving process is expected to take three months, after which work on the foundation will begin. Construction should be complete in approximately 30 months, which means researchers will begin moving into their new laboratories in September 2011.

The Construction Launch Ceremony will begin at 10:30 a.m. on Wednesday, April 15, at the construction site—the corner of Tulane and S. Claiborne avenues in downtown New Orleans.

Continued on p. 8

### Louisiana Cancer Research Center At-A-Glance

- **Location:** Corner of Tulane and S. Claiborne Avenues in Downtown New Orleans
- **Size:** 172,000 sq. ft and 10 floors as follows…
  - 3 floors for research (Immunology, Molecular Signaling, and Molecular Genetics Research Programs)
  - 1 floor for administrative offices / vivarial facilities
  - 4 floors for parking
  - 2 floors shelled for future growth

### Special Features:
- State-of-the-art research equipment and laboratories allowing for maximum collaboration
- Advanced information technology systems, including wireless networking, video-conferencing capabilities, card readers or biometric reader access control, and digital video surveillance
- Theater-style meeting facility on the first floor will seat 250 and can be used for scientific assemblies and retreats, as well as community events and fundraisers

### Expected Completion Date:
- September 2011
Three of the building’s ten floors will be dedicated to cancer research laboratories for the LCRC’s immunology, molecular signaling and molecular genetics researchers. One floor will house the LCRC’s executive offices and vivarial facility, and four will be dedicated to parking. The two remaining floors will be shelled out for future growth when additional laboratory space is needed. “The funding for the completion of the shelled floors will remain in an escrow account so that it is available when we’re ready,” said Moye.

One addition to the design that was added post-Katrina is a large theater-style meeting facility to be located on the first floor of the building. This facility will seat 250 people and can be used not only for scientific meetings and retreats, but also for community events and fundraisers.

The LCRC’s major goal is to become a National Cancer Institute-designated cancer center. The NCI’s Cancer Centers program provides support grants to the highest caliber academic and research institutions in the country. NCI designation also provides
• enhanced ability to recruit top scientists
• economic growth
• enhanced educational opportunities
• access to innovative clinical trials
• increased public focus on cancer prevention, and
• increased prestige and recognition as a center of excellence

It is the gold standard in cancer research and patient care. There are currently 63 NCI-Designated Cancer Centers in the U.S., but none are located in Louisiana, Mississippi or Arkansas.

The LCRC has experienced major progress in several areas since Hurricane Katrina despite the series of setbacks in the construction timeline. “We have been very successful in our recruiting efforts, and have attracted several talented, funded researchers to join us in recent months,” said Prescott Deininger, Ph.D., co-director of the LCRC. “We are also at pre-Katrina levels in terms of our cancer research funding.”

**LCRC Construction Launch Ceremony**

**Date:** Wednesday, April 15, 2009  
**Time:** 10:30 a.m.  
**Location:** Construction Site (corner of Tulane and S. Claiborne avenues in downtown New Orleans)

*For more information, please call 504-398-1557.*