

LOUISIANA CANCER RESEARCH CENTER

Collaboration. Commitment. Community.

2014 Annual Report



EXECUTIVE DIRECTOR'S MESSAGE

Collaboration, Commitment and Community

The Louisiana Cancer Research Center is more than a clinical collaboration within the New Orleans biomedical community: it is a place where hundreds of researchers with myriad specialties come to work every day with a common cause. There's no doubt about it. LCRC-supported researchers from LSU Health Sciences Center, Tulane University, Xavier University and Ochsner Health System are pioneers, working together, to develop innovative cancer treatments and prevention programs. Along the way, award-winning doctors and researchers are being trained to make their own cutting-edge discoveries.

As we made progress in cancer research, Tobacco Free Living, the LCRC-supported smoking cessation program, made great strides in 2014, with significant drops in smoking among youth and adult populations. These achievements are a result of the many programs we manage throughout the state and through the partnerships we have with many community organizations. Public awareness campaigns, clinical programs, and open seminars helped to reduce smoking levels and create legislation that protects our communities from the ill effects of second-hand smoke. For instance, LCRC and Xavier University helped rally anti-tobacco youth leaders and community advocates early last year to mark the 50th anniversary of the Surgeon General's Report.

Funding support for cancer research among our partners remains strong with almost \$16 million in grants raised in 2014 for research in areas ranging from leukemia to lung cancer. In addition, the incredible results of public events such as Key to the Cure demonstrate just how personal cancer remains to our society. The LCRC has also witnessed the devotion to this effort from members of our community at all levels and all ages. From the hundreds that participate in our annual Key to the Cure to the teenagers selling armbands or lemonade on the street, it is clear that cancer has a profound impact on all of our lives.

It is this heartfelt spirit of collaboration, commitment and community that drives what we do at LCRC. It is only with the support of the State of Louisiana, our public officials, and our many donors and volunteers that LCRC will one day reach its goal of creating a cancer-free society.

Aaron Miscenich
Executive Director
Louisiana Cancer Research Center

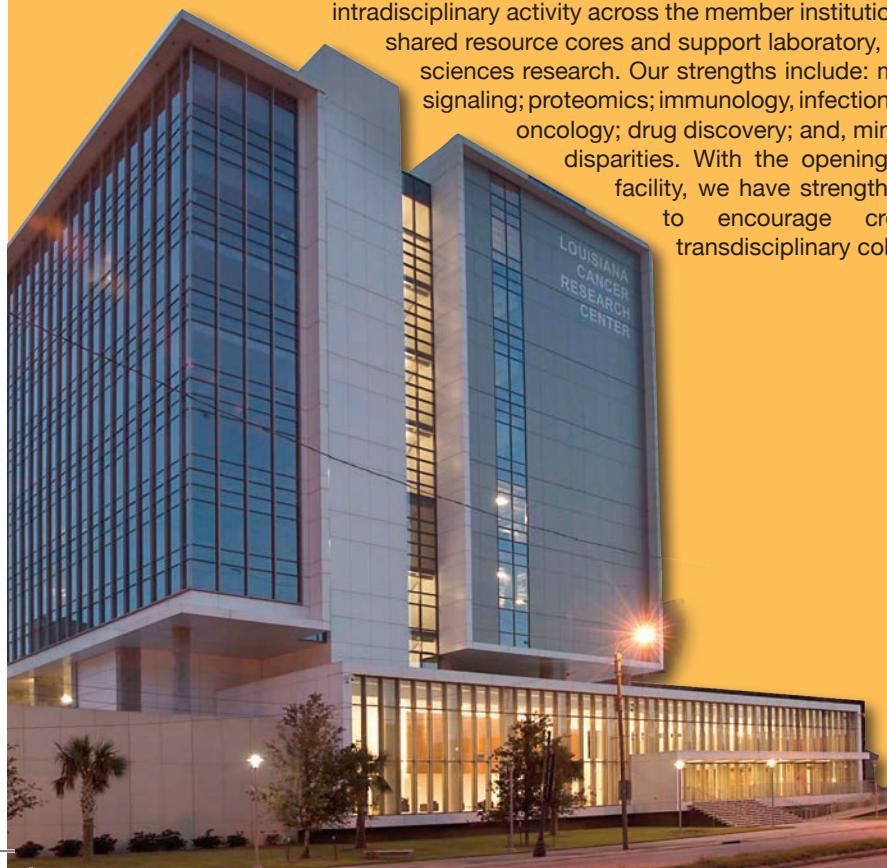


ABOUT LCRC

The Louisiana Cancer Research Center (LCRC) was founded in 2002 under the direction of the Louisiana State Legislature. Our mission is to promote education and conduct research in the diagnosis, detection and treatment of cancer, while pursuing a National Cancer Institute (NCI) designation.

To carry out our mission, LCRC brought together the four research and medical powerhouses in the state to form a partnership called the LCRC Consortium. Each consortium partner contributes unique strengths to the LCRC. Originating partners, Louisiana State University Health Sciences Center in New Orleans and Tulane University Health Sciences Center bring an extensive research and education base, with a strong depth of scientific knowledge. Xavier University of Louisiana brings expertise in pharmacology, health disparities and minority health; and, Ochsner Health System adds depth to the clinical trials and medical framework needed to touch patients' lives. We also have a strong statewide community outreach and prevention education effort through our The Louisiana Campaign for Tobacco-Free Louisiana program. Our vision is to address the needs of the people we serve and win the fight against cancer. We are synergized by the diverse scientific breadth of the LCRC-member teams and the statewide response to our outreach initiatives and are poised to advance a research agenda and reach our goal.

LCRC membership includes more than 200 researchers representing a strong inter-and-intradisciplinary activity across the member institutions. We maintain seven shared resource cores and support laboratory, clinical and population sciences research. Our strengths include: molecular genetics and signaling; proteomics; immunology, infection and inflammation; viral oncology; drug discovery; and, minority health and health disparities. With the opening of our new 10-story facility, we have strengthened our environment to encourage cross-institutional and transdisciplinary collaboration.



All Tulane photos are the property of Tulane University.

LCRC BOARD OF DIRECTORS

Dr. Lee Hamm, Chairman of the Board
Senior Vice President and Dean, Tulane University, School of Medicine

Dr. Larry Hollier, Vice-Chairman of the Board
Chancellor, LSU Health Sciences Center – New Orleans

Ms. Barbara Goodson, Secretary/Treasurer
Associate Commissioner for Finance & Administration,
Louisiana Board of Regents

Dr. Steve Nelson, Dean, LSU Health Sciences Center,
School of Medicine

Dr. Norman Francis, President, Xavier University of Louisiana

Mr. Ashton Ryan, Jr., President & CEO, First NBC Bank

Dr. William Pinsky, Chief Administrative Officer, Ochsner Health System

Mr. Cleland Powell, Executive Vice-President, IBERIA BANK

Dr. Oliver Sartor, Medical Director, Tulane Cancer Center

Ms. Carroll Suggs

Ms. Pamela Ryan

Mr. Paige Sensenbrenner, LCRC Board Counsel, Adams and Reese, LLP

LCRC SCIENTIFIC LEADERSHIP

Dr. Augusto Ochoa, Co-Director, LCRC
Director, Stanley S. Scott Cancer Center, LSU Health Sciences Center

Dr. Prescott Deininger, Co-Director, LCRC
Director, Tulane Cancer Center, Tulane University Health Sciences Center

Dr. Thomas Wiese, Associate Director, LCRC
Associate Professor, Xavier University of Louisiana

Dr. John Cole, Associate Director, LCRC
Chairman, Hematology Oncology, Ochsner Health System

LCRC ADMINISTRATION

Mr. Aaron Mischenich, Executive Director

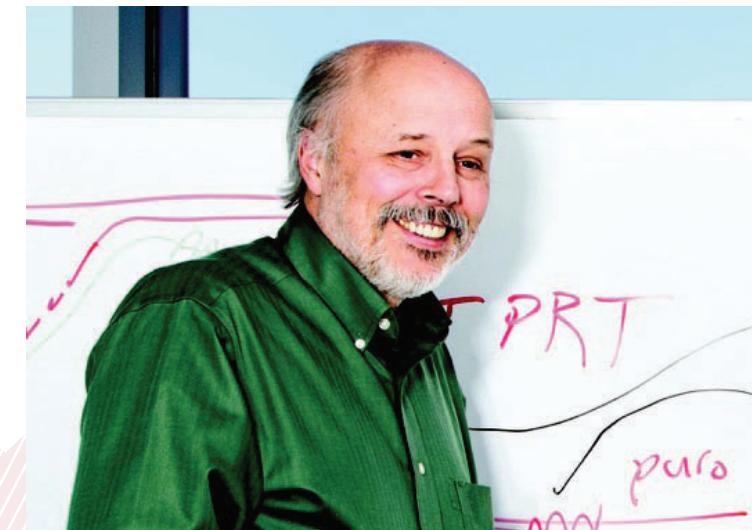
Ms. Deborah Reeder, Chief Financial Officer/Chief Operating Officer

Tulane Cancer Center's Prostate Cancer Research Program Has Global Impact

"The driving force shaping Tulane Cancer Center's development has been the urgency to address the deplorable problem of cancer mortality in this region," said Prescott Deininger, Ph.D., Tulane Cancer Center director. "Since its founding, Tulane Cancer Center has invested and leveraged its assets into growing and enhancing our research programs and has developed several to levels of national and international prominence. Our Prostate Cancer Research Program is a prime example."

Tulane's Prostate Cancer Research Program includes a world-class team of cancer professionals performing cutting-edge basic and clinical research and running the largest treatment center for prostate cancer patients in Louisiana. Thousands of prostate cancer patients are treated in Tulane's clinics each year. Tulane Urology is the ONLY institution within 100 miles of New Orleans with a five-star rating for prostate surgery for 2014 from Healthgrades. In addition to patients from Louisiana, Tulane has cancer patient referrals from 26 additional states and five countries outside the United States.

Tulane is also at the cutting edge of groundbreaking basic and clinical research into prostate cancer. Between 2010-2013, the U.S. Food and Drug Administration approved six new drugs for the treatment of advanced prostate cancer. Oliver Sartor, M.D., Tulane Cancer Center's medical director and the Prostate Cancer Research Program leader, played a lead role in the development of two of these drugs and served in an advisory role for two others. This is unprecedented progress, as these are the first new treatment options offering hope for men with advanced disease since 2004, and Tulane's prostate program contributed to their development.



"The driving force shaping Tulane Cancer Center's development has been the urgency to address the deplorable problem of cancer mortality in this region."

Prescott Deininger, Ph.D., Tulane Cancer Center director



"This helps patients feel more confident about opting for a kidney-sparing procedure."

— Dr. Jonathan Silberstein

Jonathan Silberstein, M.D., Developing 3D Models of Cancer

Most patients rely on their doctors to decipher the black, white and gray images on their CT scans. But what if a patient could instead hold a 3D model made from the CT image in his hands? Suddenly, the picture becomes clearer.

Several patients receiving care from the Tulane University Department of Urology have viewed 3D replicas of their kidney cancers prior to surgery.

Ultraviolet lasers are used to print the models in layers using a resin material, similar to plastic. Normal kidney tissue is printed in a clear translucent resin with the tumors in red.

"We can show patients where their tumor is located, how deeply it extends into the kidney tissue, and how we plan to remove it," says Dr. Jonathan Silberstein, chief of the section of urologic oncology.

Until the early 1990s, the standard of care for kidney cancer patients was to remove the entire kidney. Today, many patients have the option of kidney-sparing surgery, through which the tumor is removed, but the healthy portion of the kidney is preserved.

Such organ-sparing surgery may prevent the potential need for dialysis in the future, as well as other issues that could accompany kidney loss.

In addition to the immediate improvement of patient comprehension and assistance in medical trainee education, the models will improve patient outcomes, Silberstein believes.

He says the technology also may be useful for treating other solid-organ cancers, such as liver, lung and prostate cancer. He is applying for a grant to purchase a 3D printer so that the next generation of models can be manufactured in-house.

Launching the First Statewide Cancer Clinical Trials Network

Led by LCRC Co-Director Dr. Augusto Ochoa, LSU Health Sciences Center New Orleans has been awarded a grant in the amount of \$5,604,440 over five years to build a regional cancer clinical trials network. While open to all cancer patients, the focus of the Gulf South Minority/Underserved NCI Community Oncology Research Program (Gulf South NCORP) is minority and underserved patients who die at higher rates from cancer than others. This comprehensive cancer management program creates a network of physicians, nurses and researchers from major teaching and private medical institutions in Louisiana and Mississippi to deliver the latest promising investigational treatments for cancer.

"The Gulf South Minority/Underserved National Cancer Institute Community Oncology Research Program will allow minority and underserved cancer patients in Louisiana and the Gulf South access to state-of-the-art clinical trials, vastly improving their chances of recovery," F. King Alexander, LSU president and chancellor, said at an August 7 news conference.

LSUHSC-New Orleans partnered with LSUHSC-Shreveport and Mary Bird Perkins Cancer Center to successfully compete for the grant, one of only 12 of its kind funded by the National Cancer Institute in the country. The Gulf South NCORP currently includes 25 clinical sites across Louisiana and Mississippi covering 80% of the population of Louisiana and portions of the Mississippi Gulf Coast. More clinical sites will be added as the program develops to provide access to advanced cancer care to all of our citizens.

"The program allows oncologists in many community hospitals to provide treatment to patients closer to home, helping reduce expenses and keeping patients and families closer together," notes Dr. Larry Hollier, Chancellor of LSUHSC New Orleans.

In addition to the potentially life-saving health benefits, this initiative will boost economic health through expanded clinic trials, which will create jobs for physicians, nurses, health care personnel and researchers in Louisiana, according to Dr. Steve Nelson, Dean of the LSUHSC New Orleans School of Medicine.

Additionally, pharmaceutical companies will have more opportunities to participate in the new biomedical and clinical research programs, and the new health care facilities developing in Louisiana. It has been estimated that this kind of activity could bring in many millions of additional dollars over the grant period as well.

Dr. Ochoa explained that the Gulf South NCORP is a result of a concerted effort by clinical and research leaders at LSUHSC-New Orleans, Shreveport and the Mary Bird Perkins Cancer Center. Augusto Ochoa, MD, Glenn Mills, MD FACP, Director of the Feist-Weiller Cancer Center on the campus of LSUHSC-Shreveport and Renea Duffin, vice president of cancer support and outreach for Mary Bird Perkins represent the NCORP's Executive Committee. Both Dr. Mills and Ms. Duffin are Co-Principal Investigators on the grant.



New Orleans Mayor Mitch Landrieu speaks at the LSUHSC press conference on Aug. 7. Seated, L to R: F. King Alexander, LSU President and Chancellor; LaToya Cantrell, New Orleans City Councilmember District "B"; Gary V. Burton, M.D., LSU Health Shreveport; Renea Duffin, Mary Bird Perkins Cancer Center; Linette Granen, Director, Membership & Marketing, Association of Public Health Laboratories.

Alton Ochsner Conference on Tobacco

Health care professionals from across the United States traveled to New Orleans on Friday, November 14, 2014 to attend the first Alton Ochsner Conference on Tobacco, which was hosted by Ochsner Health System and the Louisiana Campaign for Tobacco-Free Living with the generous support of the LCRC. The conference commemorated the 75th anniversary of the late Dr. Alton Ochsner and his groundbreaking article, co-written with Dr. Michael DeBakey, distinguishing one of the first links to lung cancer associated with tobacco use.

Notable conference speakers included the 2014 winners of the Alton Ochsner Award Relating Smoking and Disease, Dr. Charles Hennekens and Dr. Laura Bierut; the FDA Center for Tobacco Products Director of the Office of Science, Dr. David Ashley; Former Phillip Morris Tobacco Research Center scientist Dr. Victor DeNoble; the 18th U.S. Surgeon General Dr. Regina Benjamin, Louisiana State Senator and Chairman of the Senate Health and Welfare Committee David Heitmeier, New Orleans Councilmember LaToya Cantrell, Louisiana Cessation Trust Board Member Dominic Gianna, and Associate Director of the Louisiana Campaign for Tobacco-Free Living, Tonia Moore.

The conference focused on both tobacco-related scientific research and public policy, with sessions showcasing new research on the genetic risk of nicotine addiction as well as the clinical characteristics of tobacco users and predictors of treatment outcome. Dr. Ashley with the FDA gave a presentation on how science informs FDA regulatory authority of tobacco products, and whistleblower Dr. Victor DeNoble discussed the research he conducted as an employee of Phillip Morris, which paved the way for the Tobacco Master Settlement decades later. Dominic Gianna gave a lunch presentation of "Big Tobacco on Trial", which explained the basis for the lawsuit resulting in the Louisiana Smoking Cessation Trust. The final panel of the day discussed the challenges of passing anti-smoking policy, particularly at the state and local level. The panel was moderated by Dr. Patrick Quinlan with Ochsner and included Senator David Heitmeier, Councilmember LaToya Cantrell, Dr. Regina Benjamin, and Tonia Moore.

The conference was well-received and was a key event in "Smoke-Free Week", which was also sponsored by Tobacco-Free Living.



Popular Prostate Cancer Therapy Potentially Harmful to Some Patients

A widely used treatment for prostate cancer may cause more harm than good for some patients, according to Oliver Sartor, MD, Tulane Cancer Center Medical Director and Leader of Tulane's prostate cancer research program. For decades, many men diagnosed with prostate cancer were treated with androgen deprivation therapy (ADT), injections that suppressed testosterone production. Dr. Sartor's research has revealed (*Onco Targets Ther.*, 6:725, 2013) and a new study corroborates (*JAMA*, 174: 1460, 2014) this is the wrong approach for selected men with localized disease, as it provides no added survival benefit and may be associated with other serious health issues.

"Men with advanced disease, or certain men with aggressive disease confined to the prostate gland are potential ADT candidates," said Sartor. "Testosterone suppression can increase radiation cure rates for certain aggressive cancers, and it is standard of care for metastatic disease."

For years, though, many doctors used ADT for men with low-grade, prostate-confined cancers. "We now have good evidence this treatment may cause more harm than good for these individuals," said Sartor, "especially patients with slow-growing tumors who are not likely to die of their disease."

The reason? ADT can potentially lead to health issues, including hot flashes, loss of libido, fracture risk, muscle loss, fatigue, depression, diabetic risk, erectile dysfunction, and weight gain.

Of the 240,000 new cases of prostate cancer diagnosed in the U.S. each year, over half are early stage and low risk. So what's the bottom line? "Many men diagnosed with prostate cancer may not need to be treated," said Sartor. He suggests instead "active surveillance" for many men with low-grade, localized disease.

Active surveillance for selected patients is now endorsed by multiple urologic and oncologic national guideline committees, but has been slow to be accepted in many community settings. Dr. Sartor has been offering active surveillance in his practice for over a decade.



Oliver Sartor, M.D., Tulane Cancer Center medical director and leader of Tulane's Prostate Cancer Research Program, talks with patient.

Dong Receives NCI Grant to Examine Prostate Cancer Resistance to Androgen Deprivation Therapy

Yan Dong, Ph.D., associate professor of structural and cellular biology at Tulane, was recently informed that her application for a National Cancer Institute R01 grant to study why prostate cancer cells become resistant to androgen deprivation therapy was approved for funding.

The long-term goal of her project is to understand the molecular mechanisms of resistance and to develop effective strategies to overcome them. The funding, which includes Drs. Oliver Sartor, Haitao Zhang, Erik Flemington and Sudesh Srivastav as co-investigators, began in September 2014.



Developing Personalized Medicine: Lung Cancer Clinical Trial

LCRC member LSU Health Sciences Center New Orleans' Stanley S. Scott Cancer Center is one of the six initial sites to enroll patients in the Lung Cancer Master Protocol, or Lung-MAP, clinical trial. Sponsored by the National Cancer Institute, Lung-MAP is a collaboration between six major cancer programs and five pharmaceutical companies. For the first time, the trial offers patients with advanced lung cancer a personalized medicine approach to investigational treatments based upon the genetic makeup of their cancers. Lung-MAP uses genomic profiling to match patients to medications targeting the genetic changes fueling the growth of their tumors. Participants will be tested just once using a "master protocol" before being assigned to one of five different clinical trial arms.

LSU Health Sciences Center New Orleans, in partnership with Mary Bird Perkins Cancer Center, will enroll patients at four clinical sites in Louisiana – the Interim LSU Hospital in New Orleans, as well as Mary Bird Perkins Cancer Center locations in Houma, St. Tammany and Baton Rouge. The overall goal of the Lung-MAP trial is to enroll a total of 10,000 patients among all sites.

The genomic profile screening uses a comprehensive and sophisticated platform to check more than 200 cancer-related genes for abnormalities. The results of this screening will determine which one of the five arms testing investigational medications will best suit each participant's individual needs. Lung-MAP is characterized as an innovative approach that will improve a patient's likelihood of receiving a drug that will work for them while allowing for new therapies in development to be added as the trial progresses.

Serving Louisiana's Patients: HIV Cancer Care Program a Joint Venture among LCRC Partners

New Orleans and Baton Rouge rank among the top five major metropolitan areas nationwide for HIV incident case rates and cancers caused by viruses disproportionately impacting HIV-infected individuals in New Orleans and throughout the Gulf South. The goal of the LCRC HIV Cancer Care Program (HCCP) is to develop new approaches for therapy and prevention of the most highly morbid and mortal virus-associated cancers affecting this population.

Two of the most common forms of cancer disproportionately impacting HIV-infected patients are Kaposi sarcoma and non-Hodgkin lymphoma. The HCCP, through a cooperative effort with the LSUHSC Clinical and Translational Research Center, was recently awarded funding as the only single-site therapeutic trials in the United States enrolling these patients. The program has received referrals from throughout the greater New Orleans area, Baton Rouge, Lafayette, and Lake Charles.

The HCCP is led by Christopher Parsons, M.D., Associate Professor in the Department of Medicine; Section of Infectious Diseases; Director of the HIV Malignancies Program at LSUHSC in collaboration with Dr. Thomas Reske, Assistant Professor in the Department of Medicine; Section of Oncology and Hematology. Both Drs. Parsons and Reske are members of the LSUHSC Stanley S. Scott Cancer Center.

In its two years of existence, the HCCP has generated over \$3.4M in NIH- and pharmaceutical industry-based funding by leveraging interdisciplinary research and clinical programs in the areas of infectious diseases, oncology, and molecular biology performed through cooperation between LSUHSC and Tulane investigators.

The HCCP Navigation and Outreach Program has provided over 1,100 services to over 100 individual patients referred to the program. The services were provided with assistance from an active Community Advisory Board connected with the New Orleans Regional Planning Council and NO AIDS Task Force clinic. These services also include referrals for subspecialty medical services to nine individual clinicians receiving support from the program who specialize in medical oncology and geriatrics, HIV care, otolaryngology, general and gastrointestinal surgery, and radiology.

HCCP laboratory-based research has resulted in the publication of over 25 original articles in peer-reviewed journals, and translational studies focused on cancer prevention.

Christopher Parsons, M.D., Director of the HIV Malignancies Program at LSUHSC.



Tumor Registry at LSUHSC Earns Top NCI Honor

The April issue of the Healthcare Journal of New Orleans reported that the Louisiana Tumor Registry (LTR) at the LSU Health Sciences Center New Orleans School of Public Health was awarded a First Place award for its Data Quality Profile by the Surveillance Epidemiology and End Results (SEER) Program of the National Institutes of Health's National Cancer Institute.

LTR is a statewide population-based registry which compiles information to help guide policies for cancer prevention, early detection, diagnosis, treatment, prognosis, and survivorship. LTR data can help reduce the state's cancer burden and disparities and can improve the survival and quality of life for all cancer patients. Users of LTR data include cancer prevention programs, physicians and other medical practitioners, planning offices for healthcare facilities, the public health community, and researchers. These groups rely on timely, complete, and high-quality data from the Registry.

This is the fifth time LTR has earned this SEER award and the fourth consecutive year. The SEER Program is the most authoritative source of information on cancer incidence and survival in the United States. The award is determined by several measures of data quality: completeness and timeliness of cases, the percentage of unknown for key demographic and tumor variables, and patient follow-up rates. LTR's data exceeded the goals in all of the measures.



Christopher Parsons, M.D., Director of the HIV Malignancies Program at LSUHSC.

"My client and his mother are thrilled with the care he received there, so I wanted to say thank you all for everything"

- HIV case manager, Acadiana Cares
community-based organization, Lafayette, Louisiana



Tulane Cancer Center Hosts International Preceptorship Program on Castration-Resistant Prostate Cancer

Oliver Sartor, M.D., recently welcomed a group of 19 Latin American physicians—from Argentina, Brazil, Colombia and Mexico—to the Latin America Preceptorship Program on Multidisciplinary Approaches to Castration-Resistant Prostate Cancer, held at Tulane. The program was sponsored by Bayer Global Medical Affairs Oncology, makers of Xofigo®, a bone-targeted radiopharmaceutical that was recently approved by the U.S. Food & Drug Administration for the treatment of men with symptomatic, bone-metastatic, castration-resistant prostate cancer (mCRPC) that has spread to the bones but not other organs. Dr. Sartor was the North American principal investigator on the Phase III clinical trial that led to early FDA approval of the drug. The goal of the program was to provide the attending physicians with the tools necessary to develop expertise with Xofigo® in their home countries.

Tulane Urology Leaders in Minimally Invasive Surgical Procedures for Prostate Cancer

Tulane Urology has a long history of being the regional and national leaders in providing minimally invasive surgical procedures for various urologic maladies. From nephroscopy to ureteroscopy to laparoscopy to laser surgery, and more - Tulane Urology strives to be the first and the most experienced in minimally invasive procedures in the entire Gulf South. This same spirit of innovation and experience brought the da Vinci™ robot to Tulane University Hospital in November of 2002, as Tulane Urology became the first center in the entire Gulf South to provide this cutting-edge technology, primarily for management of prostate cancer. Over 10 years later, the Tulane Urology team brings its vast experience in robotic and laparoscopic urologic surgery to manage your prostate cancer.



Pictured above are prostate surgeons Benjamin Lee, MD, (left) and Raju Thomas, MD, Chair of Tulane Urology (right).



Asim Abdel-Mageed Receives Grant to Study Repositioning of Drugs to Treat Advanced Prostate Cancer

Asim Abdel-Mageed, Ph.D., M.S., D.V.M., professor of urology and Zimmerman Professor of Cancer Research at Tulane, was recently awarded a five-year, \$4.2 million National Institutes of Health/National Center for Advancing Translational Sciences grant to determine the mechanism by which stem cells are transformed by a small molecule called a tumor-derived exosome to assist in tumor growth and metastasis. The ultimate goal of the project is to identify and test current human-approved drugs that can be “repositioned” to treat advanced prostate cancer.

Dr. Abdel-Mageed and his team have demonstrated that stem cells from prostate cancer patients have a tendency to go where the tumor cells are and interact with them, causing the stem cells to undergo a transformation that makes them tumor-like. “But does this tumor mimicry play a role in growth and metastasis,” asks Dr. Abdel-Mageed. “No one had ever tested this theory before.”

To find out, he and his lab team exposed stem cells from prostate cancer patients to the secretions of tumor cells from those same patients in culture for 72 hours and then inserted the stem cells into immunocompromised mice. The mice developed prostate-like tumors. “Even our pathologist could not distinguish the difference,” said Abdel-Mageed.

But how does this happen? The mechanism, he believes, are small molecules called exosomes that play a role in cellular communication in healthy individuals. Tumors exploit these messengers to their advantage. “In the tumor microenvironment, exosomes can harbor oncogenic factors, and instead of communicating with neighboring cells in a healthy way, they deliver harmful effects. In this case, the neighboring cell is a stem cell. Once they are taken up by the stem cells, the exosomes work to change them from normal stem cells to tumor-like.”

The goal of Dr. Abdel-Mageed’s grant is to identify drugs that can target the biogenesis and/or secretion of exosomes by the tumor or their uptake by stem cells.

\$1.5 Million NCI Grant Supports Research Into Inflammation and Prostate Cancer

Zongbing You, M.D., Ph.D., associate professor in the Tulane University Department of Structural and Cellular Biology, received a five-year, \$1.5 million grant from the National Cancer Institute to study the small protein molecule Interleukin-17 and its role in inflammation and the formation and progression of prostate cancer.

Ultimately, they hope their research leads to the development of inhibitors for IL-17 that could be used to block or neutralize its function. "We're hoping to drive our research closer to a clinical trial so that we can potentially develop new drugs that could be used for the treatment or prevention of prostate cancer."

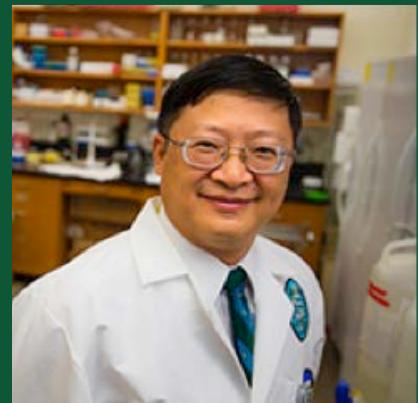
Such drugs may be useful for other types of cancer displaying over-expression of IL-17 — colon, skin and breast — or for other inflammatory diseases, such as rheumatoid arthritis or ulcerative colitis.

"Chronic inflammation has been associated with several cancers," You says. "All biopsied prostate cancer tissue and all surgically removed prostate cancer specimens contain evidence of inflammatory cells in and around the tumor, but the causal relationship between inflammation and prostate cancer has not been well established."

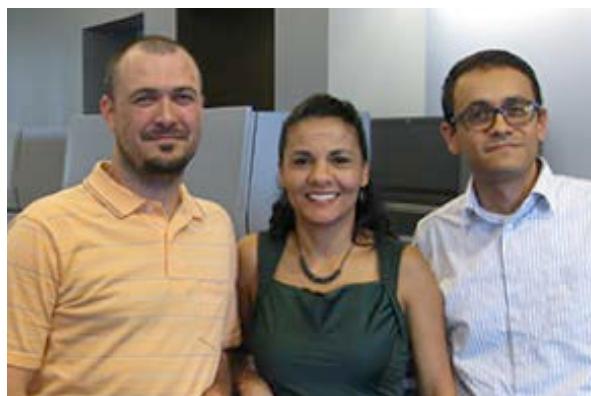
IL-17 is produced by immune cells to act as a messenger, guiding other cells through the immune system's normal inflammatory process. Researchers have demonstrated that both IL-17 molecules and their receptors are overly expressed in prostate tumors. But does its presence signal an attack on invading prostate cancer cells by the immune system or an association with prostate cancer formation and progression?

In preliminary experiments, You's team removed the gene coding for the IL-17 receptor in a mouse model of prostate cancer, essentially cutting off the signaling pathway from the small molecule to the cell.

"We found that if you cut off the IL-17 pathway, the animals formed smaller and fewer invasive cancers in this model. That's how we determined that IL-17 may be promoting prostate cancer formation."



Zongbing You, MD, PhD



Three members of the "Chop" research team:
Paul Thevenot, Ph.D.; Rosa Sierra, B.S.; Paulo Rodriguez, Ph.D.

Discovering Means to Free Immune System to Destroy Cancer

Research led by Paulo Rodriguez, Ph.D., an assistant research professor of Microbiology, Immunology & Parasitology at LSU Health New Orleans' Stanley S. Scott Cancer Center, has identified the crucial role an inflammatory protein known as Chop plays in the body's ability to fight cancer. Results demonstrate, for the first time, that Chop regulates the activity and accumulation of cells that suppress the body's immune response against tumors. The LCRC/LSU Health New Orleans research team showed that when they removed Chop, the T-cells of the immune system mounted an effective attack on the cancer cells. These findings reveal Chop as a target for the development of new immunotherapies to treat cancer. The research is described in a paper published online September 18, 2014, in *Immunity*, a Cell Press journal.

Myeloid-derived suppressor cells (MDSCs) are involved in cancer, inflammation and infection. MDSCs not only inhibit the immune response that destroys cancer cells, but they also promote the growth of new blood vessels that feed tumors, as well as the spread of cancer. Dr. Rodriguez explains that limited knowledge about what regulates the function of MDSCs has limited the development of strategies to block their harmful activity.

The research team discovered that the stress sensor C/EBP-homologous protein (Chop) regulates the function of MDSCs. They learned how Chop is distributed in different types of cancer and how Chop controls tumor growth. They found that the absence of Chop not only reduced the harmful activity of MDSCs, but also boosted the effectiveness of treatment.

The research team includes Drs. Paul Thevenot, Patrick Raber, Amir Al-Khami, Jimena Trillo-Tinoco, Augusto Ochoa, Yan Cui, Luis Del Valle, as well as Rosa Sierra and Parisa Zarreii from its Stanley S. Scott Cancer Center and departments of Microbiology, Immunology & Parasitology and Pediatrics. The researchers are also part of the Copeland-LSUHSC Partnership in Viruses, Cancer & Immunotherapy. The research was supported in part by National Institutes of Health (NIH).

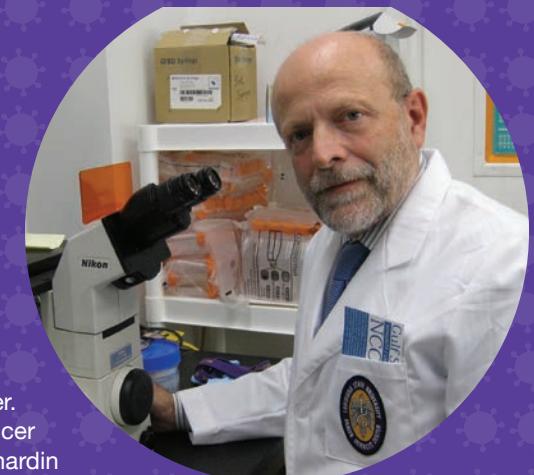
Recruiting World Class Researchers

The LCRC and LSUHSC/Stanley S. Scott Cancer Center welcomed the arrival of Dr. Lucio Miele, M.D., Ph.D in 2014. Dr. Miele will serve as Professor of Medicine and Director for Inter-Institutional Programs at the SSSCC, building trans-institutional collaborations and research programs.

He completed his medical training (internal medicine) in Italy, his graduate training at the Max-Planck Institute for Molecular Genetics in Berlin, Germany and a fellowship in Human Genetics at the NIH. After eight years at NIH, Dr. Miele moved to FDA/CBER as a senior investigator in the Division of Monoclonal Antibodies, and subsequently Acting Chief, Laboratory of Cell Biology. He was also a member of the Division of Clinical Trials Design and Analysis. In 1994, he began working on the Notch genes in breast cancer and the immune system. In 1998, Dr. Miele moved to Loyola University Medical Center in Chicago, in the Cardinal Bernardin Cancer Center. In 2001, Dr. Miele moved to the University of Illinois at Chicago, as Director, Program on Molecular Oncology and Signaling in the Cancer Center and Tenured Associate Professor of Biopharmaceutical Sciences. In 2005, he was recruited back to Loyola's Cardinal Bernardin Cancer Center, as a Tenured Full Professor, Breast Cancer Program Director and eventually, Associate Cancer Center Director for Translational Sciences. In 2009, Dr. Miele was named Egon Professor of Medicine and Director of the University of Mississippi Cancer Institute. He held that post until his recent move to LSU.

Dr. Miele's work focuses on Notch inhibition in breast cancer stem cells and immune cells in tumor microenvironment, as well as early phase clinical trials of Notch inhibitors. Another major emphasis of Dr. Miele's work is cancer genomics in the context of cancer health disparities.

Dr. Miele has authored over 190 peer-reviewed manuscripts. He has served as co-chair of the CTEP IDSC (NCI) task force on drugs targeting cancer stem cells. He routinely chairs or serves on NIH, NCI, NCATS and DOD as well as international grant review panels. He serves on the editorial boards of several cancer-focused journals and was recently named Editor-in-Chief of the Journal of Cancer Treatment and Metastasis. Dr. Miele has a long-standing commitment to the mentoring of junior faculties and the development of multidisciplinary translational and clinical cancer research programs.



Lucio Miele, MD, PhD.



Michael Hagensee, M.D., Ph.D.

Aiming to Be the Best: LCRC Researcher and Physician Hagensee Named among “New Orleans Best Doctors”

Dr. Michael Hagensee, Professor of Medicine in the departments of Medicine and Microbiology at LSUHSC, was included among the list of “New Orleans Best Doctors” in the category of Infectious Diseases, and was one of five area doctors profiled in the August 2014 publication of New Orleans Magazine.

Dr. Hagensee received his MD and PhD degrees from Baylor College of Medicine in Houston in 1988, and he completed his medicine residency in 1991 and Infectious Disease fellowship in 1994 from the University of Washington Affiliated Hospitals in Seattle. He is board certified in both internal medicine and infectious disease. He currently divides his professional time between his clinical duties and his laboratory research.

At the LSU HIV Outpatient Program (HOP), Dr. Hagensee serves as a primary care physician for hundreds of HIV positive patients in New Orleans. His specialties include the prevention of cervical and anal cancer, HIV treatment, genital tract immune responses and the delivery of HPV vaccine. The HOP clinic at Interim LSU Hospital in New Orleans provides care and treatment for HIV/AIDS-infected patients, support and coordination for the affected significant others, disease prevention, research and health promotion.

Dr. Hagensee’s research lab, located in the LSUHSC Stanley S. Scott Cancer Center, studies the interaction of EBV (Epstein-Barr Virus) and HPV in the development of cervical dysplasia (precancerous changes in the cervix) in HIV.

According to New Orleans Magazine, doctors on their “Best Doctors” list are selected through the magazine’s partnership with Best Doctors, Inc., a global health company headquartered in Boston, which examines over 45,000 nationwide doctors’ interviews and peer evaluations along with physicians’ credentials, disciplinary actions, and clinical activity. Research for the list was conducted from June through October of 2013. The list includes 611 doctors, 76 medical categories and 19 cities. Medical categories are based on AMA (American Medical Association) and ABMS (American Board of Medical Specialties) recognized specialties.

Community

At LCRC, it's not just about the research; it's about how the research impacts lives. For this reason, LCRC is grateful for the community support that will help us reach our goal of eradicating cancer and bringing educational resources to the culturally diverse people of Louisiana.

Saks Fifth Avenue New Orleans 2014 Key to the Cure Gala Benefits Louisiana Cancer Research Center

The Charity Shopping weekend for the 2014 Key to the Cure "kicked off" with a gala for 1000 attendees. Guests enjoyed "Supper-by-the-Bite" from more than 27 of New Orleans' finest eateries and libations sponsored by the Goldring Family Foundation & Republic National Distributing Company. Musical entertainment was featured on all three levels: The Cuban Buenos Vista Social Club Doppelgangers, X-Factor Drumline, Kermit Ruffins Band and Evan Christopher Trio. Atmospheric lighting in tones of pink, amber and turquoise highlighted the store's modern architecture. More than \$150,000 was raised this year – bringing the grand total in 12 years to \$1.7million for cancer research in New Orleans.

2014 Key to the Cure Honorary Chairs: Renee Gabriel and Sara B. Stone

2014 Key to the Cure Gala Co-Chairs: Saks VP General Manager Carolyn Elder, garbed in Lida Baday, Therese Badon wearing Dolce & Gabbana, Leslie Gottsegen in Roberto Cavalli and Amanda Herman (with Freddy) in Babette.

Fabulous Under Forty Co-Chairs: Meaghan Ryan Bonavita in Herve Leger with Joe, Laura Avery, Colette Iteld and Charlotte Jane Sawyer.

Entertainment Chair: Sandra Pulitzer with Arthur

Saks -LCRC Representatives: Steven Putt, director of Marketing & PR, Dr. Prescott Deininger with Celia, Dr. Augusto Ochoa

This year's top sponsors were the Goldring Family Foundation and Republic National Distributing Company represented by Diane Franco & Fred Holly and Sheila and H. Britton Sanderford, Jr., with daughter Shelby, sponsoring the CHANEL Ready to Wear Department.



Fifteen-Year-Old Cares Deeply about Finding a Cure for Cancer

Since her grandmother died of lung cancer in 2011, Isabel Caballero has been working to raise awareness and raise funds to find a cure "for cancer as a whole." And at only 15 years-old, the Mount Carmel Academy sophomore has already committed to donating \$1,000 to the Louisiana Cancer Research Center (LCRC) through her newly established Care & Cure Foundation.

To raise money for research, Isabel sells colorful silicone bracelets and drawstring backpacks online. The foundation also offers jars to businesses to collect donations, and the public participate in events to raise funds. She has many other ideas, including a banner to memorialize deaths from cancer and a series of special events throughout the year.

Isabel's charitable and entrepreneurial efforts have gained accolades and awards, including the Prudential Spirit District Award, and she participated in the Junior Idea competition sponsored by Junior Achievement and the Idea Village. She plans to grow her foundation and continue to raise money for LCRC to further her mission to cure cancer. Visit www.choosecolorful.weebly.com for details and to donate.



Training Award Winning Post-Docs at LCRC

Four post-doctoral candidates at the Stanley S. Scott Cancer Center won prestigious awards during 2014.



Amir Al-Khami, Ph.D., a post-doctoral scientist in the laboratory of Dr. Augusto Ochoa, was awarded the Meritorious Scholar distinction by The Louisiana Clinical and Translational Science (LA CaTS) Center in June 2014. LA CaTS is a statewide initiative funded by the National Institute of General Medical Sciences (NIGMS) of the National Institutes of Health (NIH). The program offers the recipient, along with their mentor, a chance to design an individualized career development plan with the aim of competing successfully for an NIH Career Transition award or its equivalent.



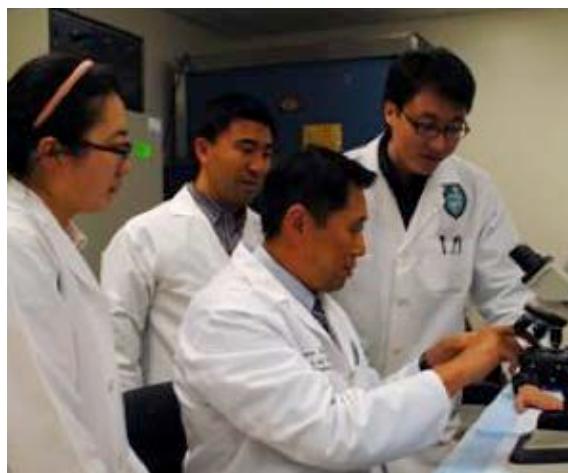
Dorota Wyczechowska, Ph.D., a post-doc researcher in Dr. Krzysztof Reiss's lab, was lead author of a paper published in the October issue of Molecular Cell Biology, and she co-authored several papers in other peer-reviewed research publications such as Cancer Discovery, Journal of Biological Chemistry, Cancer Research, Neoplasia, and International Journal of Cancer. Also, Dr. Wyczechowska presented a scientific poster representing the LSUHSC Immunology Core Facility in the LCRC Annual Scientific Retreat, and she contributed to multiple additional posters presented at that same event. During 2014, she also attended multiple training sessions and seminars.



Paul Thevenot Ph.D., a post-doctoral candidate in Dr. Paulo Rodriguez's laboratory, won the Presidential Award for the most outstanding oral abstract presentation at the Annual Meeting of the International Society for Immunotherapy (SITC) held November 6-9, 2014 in National Harbor, MD. He competed with investigators from the University of Chicago, Memorial Sloan Kettering Cancer Center and other prestigious institutions. This is the second year in a row that an investigator from the Stanley S. Scott Cancer Center has won that prestigious award.



Anna Wilk, Ph.D., a post-doctoral researcher in the laboratory of Dr. Krzysztof Reiss, submitted research grant proposals in 2014 to multiple organizations: the 2014 Pilot & Feasibility Grant Award from the Pennington Nutrition Obesity Research Center at Pennington Biomedical Research Center in Baton Rouge, the LA CaTS Meritorious Scholar Program and the LA CaTS Pilot Grants Program. Dr. Wilk was lead or co-author of articles published in multiple professional journals such as International Journal of Cancer, The Journal of Biological Chemistry, and Journal of Physiology and Pharmacology, and she served as an ad-hoc reviewer for BioMed Research International, Journal of Food Science, Molecular Carcinogenesis, and for The Leverhulme Trust. Additionally, Dr. Wilk was lead or contributor of scientific posters presented to the American Society of Nephrology's Kidney Week 2014 and to the LCRC's Annual Scientific Retreat, and she was an invited speaker at the Mitchell Cancer Institute, University of South Alabama, with a presentation of "Fenofibrate – Induced Metabolic Catastrophe and Cell Death in Glioblastoma."



Haitao Zhang, Ph.D., leads research on prostate cancer resistance to chemotherapy.

Zhang Lab Awarded Two Grants to Study Plant Compound, the Cause of Prostate Cancer Resistance to Chemotherapy

Two key molecular pathways play roles in the growth and survival of prostate cancer cells. Normally, cancer cells will utilize one predominant pathway for survival, while putting the other into "reserve" mode.

Current clinical treatments target one pathway or the other, depending on which is active. But when one pathway is targeted for treatment, the cancer cells simply shift to the reserve pathway for growth and survival, says Haitao Zhang, Ph.D., associate professor of pathology and laboratory medicine at Tulane.

Therefore, researchers are investigating ways to target both pathways simultaneously in an effort to overcome this survival mechanism. Through a \$791,000 research grant from the American Cancer Society, Dr. Zhang's lab works with the molecule berberine, a natural compound found in some plants, which has been shown in laboratory studies to inhibit both pathways simultaneously, suggesting its possible use in the treatment or prevention of prostate cancer.

Dr. Zhang's lab also recently received a Department of Defense grant to better understand why some prostate cancer patients become resistant to chemotherapy. It is expected that this study will lead to better treatment decisions for patients with advanced prostate cancer.



Grace Ledet, Dr. Levon Bostanian,
Richard Graves, Dr. Tarun Mandal



Dr. Tien Huang, Dr. Maryam Foroozesh,
Dr. Guangdi Wang

Drug Design and Delivery Projects Funded

A number of drug design and delivery projects focusing on cancer have been developed by faculty at Xavier University.

Dr. Maryam Foroozesh has been funded by National Institutes for Health to develop novel inhibitors of P450 enzymes to prevent the activation of carcinogens and prevent cancer. Dr. Foroozesh is PI of a DoD program grant that includes Dr. Jayalakshmi Sridhar and Thomas Wiese titled "A Drug Discovery Partnership for Personalized Breast Cancer Therapy" that includes LCRC collaborators Drs. Barbara Beckman, Mathew Burow and Frank Jones (Tulane) in the identification and development of novel ceramides, kinase inhibitors and antiestrogens.

Dr. Guangdi Wang (Chemistry) has developed a novel boronic anti-estrogen prodrug for

patients with metastatic or recurrent breast cancer that is currently in pre-clinical studies funded by LACATs. He is also developing novel inhibitors of cancer cell migration, metastases and vascularization. Dr. Wang is also PI of Xavier's NIH funded Research Center in Minority Institutions program "Xavier RCMI Center for Cancer Research" that provides infrastructure support for cancer researchers at Xavier such as startup, pilot and seed grants as well as a Major Instrument, Cell; Molecular and Bioinformatics and Drug Discovery and Delivery Core facilities. These Xavier RCMI cores support many LCRC researchers including the drug design and delivery projects centered at Xavier.

The Drug Discovery and Delivery Core, directed by Dr. Tien Huang, has helped

Dr. Cecily DeFreece identify inhibitors of the enzymes responsible for DNA mobile elements in cancer, designed peptide inhibitors of tumor vascularization for Dr. Partha Bhattacharjee and identified potential inhibitors of viral induced cancer development for Dr. Harris McFerrin. The drug delivery component of this core is developing novel formulations of oral fenretinide for cancer therapy under the direction of Drs. Tarun Mandal and Levon Bostanian. The Cell, Molecular and Bioinformatics Core has used cell-based bioassays to test the antineoplastic activity of isoquinolines developed by Dr. Florastina Payton-Stewart and kinase inhibitors developed by Dr. Jayalakshmi Sridhar.

Tulane Doctors Screening “Smarter” for Prostate Cancer

PSA has been used as a prostate cancer screening tool for more than two decades. Unfortunately, it is neither sensitive nor specific. An elevated PSA doesn't always mean cancer is present – it can also be elevated in men with infection, inflammation, or enlargement of their prostate - and “normal” PSA doesn't mean there is no cancer.

Approximately 1.2 million prostate biopsies are performed in the U.S. annually, often because of elevated PSA. While it's a safe procedure, risk for infection or other problems requiring hospitalization remains. Even a 1% hospitalization rate equates to 12,000 men per year.

Many prostate cancers do not grow or spread rapidly enough to cause harm. However, most of these men receive surgery or radiation therapy that may cause harm and offers little benefit. Clearly, there is a need for additional diagnostic tools that can distinguish aggressive from indolent prostate cancers. This knowledge could help doctors reduce the burden of overtreatment.

Tulane's Active Surveillance program (AS) - the largest in the Gulf South - aims to minimize overtreatment by actively monitoring men with early-stage disease. Candidates for AS include men with low-risk prostate cancer (Gleason Score 6, PSA \leq 10, normal exam) with a 10-year life expectancy. Preliminary data show this strategy's value in a racially diverse group of men.

Tulane researchers are also developing novel, molecular-based urinary assays that may help determine if a man has prostate cancer, as well as predict the course of his disease. Tulane's multidisciplinary Urologic Oncology team, led by Drs. Jonathan Silberstein and Oliver Sartor, have an ongoing clinical trial evaluating prostate cancer gene 3 and TMPRSS2:ERG gene fusion in men with or at risk for prostate cancer. This trial - the largest of its kind - has thus far accrued more than 500 racially diverse participants. Preliminary data demonstrate that these biomarkers have utility in prostate cancer diagnosis and may help predict important prognostic features of the disease.



Dr. Jonathan Silberstein

Researching New Drug for Cancers Caused by Deadly Viruses

LCRC national and international researchers lead by Christopher Parsons, M.D., Director of the HIV Malignancies Program at LSUHSC and a member of the Stanley S. Scott Cancer Center, authored a paper that is the first to report that specialized fat (lipid) molecules, called sphingolipids, play a key role in the survival of aggressive lymphomas caused by viruses. The paper also reveals a new therapy for preventing production of sphingolipids by lymphoma cells, thereby killing these cells, which are often resistant to standard therapies. The study is published in the January 2014 issue of *Molecular Cancer Therapeutics*, a journal of the American Association for Cancer Research.

The research team focuses on primary effusion lymphoma (PEL), an aggressive and deadly variant of diffuse large B-cell lymphoma that frequently occurs in people infected with HIV. PEL tumors progress rapidly with an average survival of around 6 months. Combination chemotherapy represents the current standard of care for PEL, but side effects and drug resistance limit the effectiveness of standard therapy.

After documenting the role of an enzyme called sphingosine kinase (SK), in the generation of biologically active sphingolipids in PEL tumors that keep the tumor cells alive, the researchers tested a novel clinical-grade small molecule that selectively targets SK. The molecule, called ABC294640, was developed by Apogee Biotechnology Corporation. Previous studies found antitumor effects for ABC294640 with kidney, prostate, and breast cancer cell lines. In the current study, ABC294640 not only inhibited SK function and induced PEL cell death, it worked selectively for virus-infected cells while sparing uninfected cells.

The LSUHSC research team also included Drs. Zhiqiang Qin, Lu Dai, Thomas Reske, Karlie Bonstaff, Luis Del Valle, and Paulo Rodriguez, who are all members of the Copeland-LSUHSC Partnership in Viruses, Cancer, and Immunotherapy. Researchers from the Medical University of South Carolina and Tongji University School of Medicine also participated. Charles D. Smith, President and CEO of Apogee Biotechnology Corporation, is a co-author.

The research was supported by grants from the National Institutes of Health, the LSUHSC New Orleans School of Medicine, and China's National Natural Science Foundation.



Luis Del Valle, M.D.

Amanda Parker Struckhoff, Ph.D.

Jimena Trillo-Tinoco, M.D.

Identifying Pathways to Develop Novel Therapies against Cancer

The LCRC's newest Core Facility, directed by board certified pathologist Dr. Luis Del Valle of the LSUHSC Cancer Center, is the Molecular Histopathology & Analytical Microscopy Core (MHAM), which is becoming a powerful tool in the fight against cancer. This Core Facility provides researchers with advanced detection, imaging and analysis of gene and protein dynamics in cellular models of normal and cancer tissues from research animals and from patients. It also provides investigators with high-quality, consistent reproducibility, and technical expertise for microscopy and histopathological studies.

With its advanced equipment and state-of-the-art histochemical and immune-histochemical methodologies, the MHAM staff seeks the identification of altered pathways thereby leading to the development of novel therapies against cancer. The Analytical Microscopy section of the Core is run by Amanda Parker Struckhoff, Ph.D., and Jimena Trillo-Tinoco, M.D. is in charge of the Molecular Histopathology section of the Core.

In the MHAM, immune-histochemical methodologies are performed to provide information on protein expression, localization and interactions between viral and cellular proteins. Molecular histopathology, including *in situ* hybridization is performed to provide investigators with information regarding cellular and viral DNA and/or RNA. Another crucial objective of the Core is to provide support to the investigators of the region in successfully obtaining extramural funding. In addition the Core will provide access to clinical samples to ensure the translational aspect of the research program, which is crucial to understanding how molecular and cellular pathways found *in vitro* or in experimental animals correlate with human disease.

For this purpose, the Molecular Histopathology section is equipped with a complete tissue processing center while the Analytical Microscopy section is equipped with upright bright field and epifluorescence microscopes with digital cameras, an inverted fluorescence microscope for Comet assay, a fluorescence microscope with deconvolution software, and a new state of the art confocal microscope. In addition, the Core has a Laser Micro-dissecting microscope for single cell dissection. Various histological techniques are offered, and pathology expertise for the interpretation of results and generation of data is provided.

Tobacco-Free Living Campaign Creates Positive Outcomes for State of Louisiana

The Louisiana Campaign for Tobacco-Free Living (TFL) program mission is to implement and evaluate comprehensive tobacco control initiatives that prevent and reduce tobacco use and exposure to secondhand smoke. The TFL program is structured to cultivate regional tobacco prevention and control initiatives throughout the state and improve the ability of local communities to promote tobacco control from within. This is coordinated primarily through the nine TFL regional managers, the statewide Healthy Communities Coalitions, the Louisiana Tobacco Cessation Consortium, community advocacy grantees and statewide program partnerships. Ultimately, the program is designed to change social norms around tobacco use and implement initiatives to reduce tobacco use.

GOALS

In 2014, TFL continued efforts in each of its five goal areas:

- I. To prevent initiation among youth and young adults
- II. To promote quitting among adults and youth
- III. To eliminate exposure to secondhand smoke
- IV. To eliminate tobacco-related disparities
- V. To facilitate statewide coordination

Goal 1: Prevent Initiation of Tobacco Use among Young People

Youth Prevalence

- Overall youth tobacco use prevalence declined by 29% from 2009 to 2013 (Youth Tobacco Survey)

Tobacco-Free Schools

- 32 out of 83 colleges and universities have adopted a tobacco-free policy
- 59 out of 70 K-12 school districts have adopted a tobacco-free policy

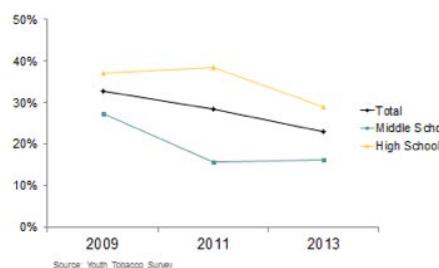
Defy Youth Teams and Kick Butts Day

- 300 youth (ages 11-17) from across Louisiana convened at the Louisiana State Capitol for the 1st statewide Kick Butts Day sponsored by TFL. This Kick Butts Day event was the largest on record in the nation.
- Kick Butts Day is a national day of activism when youth advocates and leaders, public health advocates, and other community leaders organize events designed to get youth to "Stand Out, Speak Up and Seize Control" against Big Tobacco.
- The youth in attendance were able to meet their state legislators and educate them on the importance on point of sales targeting youth, engage in media interviews and participate in a demonstration rally on the steps of the capitol.

TOBACCO USE PREVALENCE & INITIATION

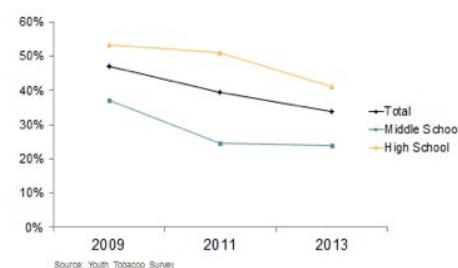
The following tables present metrics on tobacco use over time based on recently collected state surveillance data from the Youth Tobacco Survey and CORE Alcohol and Drug Survey.

Youth Tobacco Use Prevalence



The total youth tobacco use prevalence in Louisiana has declined from 32.7% in 2009 to 23.1% in 2013. Tobacco use focuses on tobacco products such as cigarettes, smokeless, cigar, Black & Mild, pipe, and bidis.

Youth Ever Tried Cigarettes



There is a declining trend among youth in Louisiana that have ever tried a cigarette from 47% in 2009 to 33.8% in 2013.



**I am a Target...
of Big Tobacco!**

Goal 2: Eliminate Non-Smokers' Exposure to Secondhand Smoke

Smoke-Free Environments & Exposure

- TFL launched a statewide “On the Move” Campaign and a newly branded “Healthier Air For All” website. The goal of the campaign was to normalize the growing movement towards a smoke-free Louisiana and identify opportunities to support and expand smoke-free environments across the state for an eventual greater increase of smoke-free policies at a local and statewide level.
- 45 of 377 municipalities (12%) across the state currently have comprehensive policies for tobacco-free workplaces & public places. During this fiscal year, four (4) local municipalities smoke-free ordinances went into effect
 - which prohibits smoking in bars and gaming facilities:
 - City of Monroe – January 2014
 - City of West Monroe – January 2014
 - Parish Ouachita – January 2014
 - Town of Cheyneville – June 2014
- 277 bars across Louisiana have voluntary smoke-free policies



Goal 3: Promote Quitting Among Adults and Young People

Cessation Services

- TFL and its partner, the Tobacco Control Initiative (TCI) use media and outreach to promote both the Quitline & Smoking Cessation Trust (SCT), both are cessation services available to Louisiana residents:
 - 3,701 Louisiana residents utilized the Louisiana Tobacco Quitline – 1-800-QUIT-NOW
 - 1,467 Louisiana residents met the criteria in place by the SCT & enrolled to receive free cessation services by calling the Quitline
 - TCI submitted 734 quit-line referrals via fax and e-referral (via the TelASK Interactive Voice Response [IVR] system, operational at one facility).
 - TCI submitted a total of 1,382 SCT applications for patients who consented to enroll in the Smoking Cessation Trust (811, submitted electronically using the TelASK IVR system, operational at one facility; and, 571 generated by TCI staff at all public/private partnering hospitals).

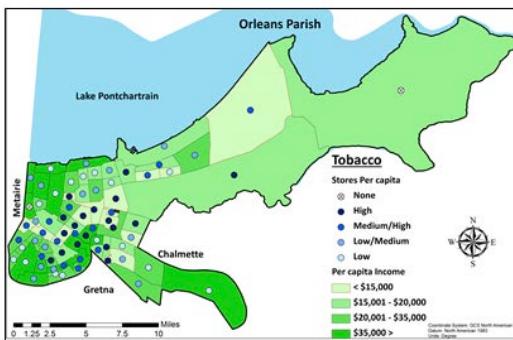


Goal 4: Eliminate Disparities Related to Youth

New Orleans Point of Sale Project

- The 2013 New Orleans Point of Sale study aimed to improve the understanding of the retail environment or the “point of sale” in Orleans Parish as it relates to tobacco, alcohol and food by analyzing the relationship between the 4Ps (product, placement, pricing and promotion) of tobacco, alcohol and food in Orleans Parish.
- The number of tobacco ($F=9.17$; $p=0.02$) outlets per capita was inversely associated with neighborhood-level socioeconomic status, meaning that lower income neighborhoods had higher numbers of tobacco outlets per capita.

New Orleans Point of Sale Study



Goal 5: Statewide Coordination

Partnerships

- Tobacco control coordination continues to increase with partnerships between the Louisiana Cancer Prevention and Control Programs (LCP), the Louisiana Department of Health and Hospitals Tobacco Control Program (LTCP), and The Louisiana Campaign for Tobacco-Free Living (TFL), and the Coalition for a Tobacco-Free Louisiana (CTFLA) to promote social and behavioral changes and support healthy lifestyles at the regional and state level.
- Regional and statewide coalition efforts include:
- Reducing and preventing youth tobacco use
 - Increasing the number of smoke-free environments throughout Louisiana, and
 - Treating tobacco addiction
- *Include graphics representing coalition efforts/interaction in Louisiana

TOBAC NO!

TOBACCO-FREE GENERATION

Summit
50th Anniversary
Surgeon General's
Tobacco Report

#TobaccoFreeSummit



The 18th U.S. Surgeon General Dr. Regina Benjamin brought the 50th anniversary of the Surgeon General's Report to Xavier University in February 2014.

Surgeon General's Anti-Tobacco Summit Creates Awareness and Action

Former U.S. Surgeons General, anti-tobacco youth leaders, and community advocates gathered on February 11, 2014 to push for greater awareness and action in achieving a tobacco-free generation at the Summit on the 50th Anniversary of the Surgeon General's Tobacco Report. The one-day summit was hosted by Xavier University of Louisiana and the Louisiana Cancer Research Center. Organized by Dr. Regina Benjamin, the 18th U.S. Surgeon General and NOLA.com/Times Picayune-Endowed Chair of Public Health Sciences, the summit commemorated the unprecedented 1964 report, "Smoking and Health," released by then-Surgeon General Dr. Luther L. Terry—the first to conclude that smoking causes cancer.

The summit was open to the public and had more than 300 attendees as well as heavy online attendance through live streaming. The day was broken into several panel discussions: the efforts of the Surgeons General since the 1964 report the work of youth leaders, the impact of litigation, legislation, and regulations, as well as the influence of media on young people and successful awareness and prevention efforts.

Highlights from the summit included a flash mob that closed the morning's sessions. The song "Happy" by Pharrell Williams filled the room as local students and University of Queensland, Australia medical students, came out dancing. The afternoon began with an interview of Dr. John Ochsner by Dr. Mona Khanna, an Emmy award-winning medical journalist, during which Ochsner reflected on the life and legacy of his father, Dr. Alton Ochsner, who was a pioneer against the hazards of smoking. Later, there was a special video message from the Honorable Louis Sullivan, MD, former Secretary of the U.S. Department of Health and Human Services and former president of Morehouse School of Medicine. Finally, there was a presentation about how tobacco is marketed to youth from the student-led DEFY team, Louisiana's youth empowerment movement against the tobacco industry.

National media coverage included two MSNBC shows, NPR, a HuffingtonPost.com article and 26 radio interviews. The analytical results included reaching 2,496 radio outlets, 4,339,900 listeners, 5 million social media impressions, and 1.5 million traditional media impressions from 11 national media placements and appearances.

REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

FRANCIS J. CASCIO, CPA
STEVEN A. SCHMIDT, CPA

CASCIO & SCHMIDT, LLC CERTIFIED PUBLIC ACCOUNTANTS

MEMBERS
AMERICAN INSTITUTE OF CERTIFIED
PUBLIC ACCOUNTANTS
SOCIETY OF LOUISIANA CERTIFIED
PUBLIC ACCOUNTANTS

REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

To the Board of Directors
Louisiana Cancer Research Center of L.S.U. Health Sciences Center
in New Orleans/Tulane Health Sciences Center

Report on the Financial Statements

We have audited the accompanying financial statements of Louisiana Cancer Research Center of L.S.U. Health Sciences Center in New Orleans/Tulane Health Sciences Center (a nonprofit corporation), which comprise the statement of financial position as of June 30, 2014, and the related statements of activities and cash flows for the year then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal controls relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant

1
3000 Kingman Street • Suite 104 • Metairie, Louisiana 70006 • 504.455.3182 • Fax 504.455.3076

to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Louisiana Cancer Research Center of L.S.U. Health Sciences Center in New Orleans/Tulane Health Sciences Center as of June 30, 2014, and the changes in its net assets and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Report on summarized Comparative Information

We have previously audited Louisiana Cancer Research Center of L.S.U. Health Sciences Center in New Orleans/Tulane Health Sciences Center's 2013 financial statements, and our report dated August 21, 2013, expressed an unmodified opinion on those audited financial statements. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2013, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Matters Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements as a whole. The supplemental statement of revenues and expenses by program on page 21 and the accompanying supplementary information required by the State of Louisiana on pages 26 through 74, for the year ended June 30, 2014, is presented for the purpose of additional analysis and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements taken as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated August 22, 2014, on our consideration of Louisiana Cancer Research Center of L.S.U. Health Sciences Center in New Orleans/Tulane Health Sciences Center's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Louisiana Cancer Research Center of L.S.U. Health Sciences Center in New Orleans/Tulane Health Sciences Center's internal control over financial reporting and compliance.

Cascio & Schmidt, LLC,
Metairie, Louisiana
August 22, 2014

LOUISIANA CANCER RESEARCH CENTER OF L.S.U.
HEALTH SCIENCES CENTER IN NEW ORLEANS/
TULANE HEALTH SCIENCES CENTER

STATEMENT OF FINANCIAL POSITION

June 30, 2014

	<u>ASSETS</u>		<u>Summarized Comparative Information June 30, 2013</u>
CURRENT ASSETS			
Cash (Note B)	\$ 19,217,950	\$ 17,555,720	
Investments (Notes A7, C and I)	7,902,774	8,978,279	
Receivable, grants (Note D)	3,601,965	3,703,166	
Receivables, other	292,533	806,638	
Prepaid expenses	<u>224,766</u>	<u>216,780</u>	
Total current assets	31,239,988	31,260,583	
PROPERTY AND EQUIPMENT (Notes A-9 and E)	<u>85,037,134</u>	<u>87,224,324</u>	
OTHER ASSETS			
Maintenance Reserve Account (Notes C and J)	3,277,845	2,185,230	
Deposits	<u>52,400</u>	<u>52,400</u>	
Total assets	<u>\$ 119,607,367</u>	<u>\$ 120,722,537</u>	
LIABILITIES AND NET ASSETS			
CURRENT LIABILITIES			
Accounts payable, trade	\$ 6,920,682	\$ 2,717,135	
Installment note payable, insurance	-	158,829	
Accrued liabilities	<u>79,924</u>	<u>76,719</u>	
Total liabilities	7,000,606	2,952,683	
COMMITMENTS (Note J)	-	-	
NET ASSETS (Note A-2)			
Unrestricted	3,545,291	2,461,371	
Temporarily restricted	<u>109,061,470</u>	<u>115,308,483</u>	
Total Net Assets	<u>112,606,761</u>	<u>117,769,854</u>	
Total liabilities and net assets	<u>\$ 119,607,367</u>	<u>\$ 120,722,537</u>	

LOUISIANA CANCER RESEARCH CENTER OF L.S.U.
HEALTH SCIENCES CENTER IN NEW ORLEANS/
TULANE HEALTH SCIENCES CENTER

STATEMENT OF ACTIVITIES

Year Ended June 30, 2014

	<u>UNRESTRICTED</u>	<u>TEMPORARILY RESTRICTED</u>	<u>TOTAL</u>	<u>Summarized Comparative Information June 30, 2013</u>
REVENUES				
Grants (Note D)	\$ -	\$ 15,956,691	\$ 15,956,691	\$ 17,935,335
Lease income	1,414,784	-	1,414,784	804,128
Other	182,297	-	182,297	48,648
Fund-raising	202,147	-	202,147	212,346
Net assets released from restrictions	<u>22,203,704</u>	(<u>22,203,704</u>)	-	-
Total Revenues	<u>24,002,932</u>	(<u>6,247,013</u>)	<u>17,755,919</u>	<u>19,000,457</u>
EXPENSES				
Research expenses	7,148,979	-	7,148,979	5,275,067
Cessation expenses	7,536,666	-	7,536,666	5,953,073
Salaries and related benefits	1,100,262	-	1,100,262	1,127,305
Operating services	2,717,529	-	2,717,529	2,329,709
Supplies	61,327	-	61,327	143,085
Professional services	795,745	-	795,745	794,645
Travel & meeting expenses	5,534	-	5,534	1,161
Depreciation	2,908,872	-	2,908,872	2,809,735
Fund-raising	57,086	-	57,086	69,728
Fund-raising distributions	447,627	-	447,627	-
Other	<u>139,385</u>	-	<u>139,385</u>	<u>21,960</u>
Total Expenses	<u>22,919,012</u>	-	<u>22,919,012</u>	<u>18,525,468</u>
INCREASE IN NET ASSETS				
NET ASSETS, BEGINNING OF YEAR	1,083,920	(<u>6,247,013</u>)	(<u>5,163,093</u>)	474,989
NET ASSETS, END OF YEAR	<u>2,461,371</u>	<u>115,308,483</u>	<u>117,769,854</u>	<u>117,294,865</u>
NET ASSETS, END OF YEAR	\$ <u>3,545,291</u>	\$ <u>109,061,470</u>	\$ <u>112,606,761</u>	\$ <u>117,769,854</u>



XAVIER UNIVERSITY
of Louisiana



LOUISIANA CANCER RESEARCH CENTER

1700 Tulane Avenue, 10th Floor
New Orleans, LA 70112
Phone: 504.210.1030
www.louisianacancercenter.org