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### STRONGER TOGETHER

Fifty years ago, the federal government passed the National Cancer Act, significantly expanding our country's efforts to find a cure for cancer.

The Act paved the way for programs like the National Cancer Institute and other research entities to foster the development of discoveries through the sharing of knowledge and resources. It also significantly appared.

also significantly enhanced Louisiana's efforts to study and treat cancer through funding and collaboration.

Louisiana Cancer Research Center scientists have been awarded \$177 million in federal research dollars since its inception. Such funding has played an important role in advancing research and developing treatments that improve cancer outcomes for Louisianans and all those touched by the disease.

Research collaborations in our state as well as those around the country are credited with an impressive 31 percent decline in cancer deaths in the United States since 1991.

In addition to federal research dollars, LCRC member institutions leverage collaborations with cancer researchers across the country and amongst each other. It is why Tulane and Xavier researchers team up to examine new ways to present prostate cancer screenings to African American men; why LSU Health New Orleans scientists and Ochsner Health work together to offer cancer clinical trials throughout Louisiana and the Gulf Coast. Examples like these are evidence that we are stronger together in solving cancer.

Sincerely,

**SVEN DAVISSON** 

Chief Administrative Officer & Interim Chief Executive Officer

**2021 BY THE NUMBERS** 

335

**PUBLICATIONS RELEASED** 

\$23

MILLION DOLLARS IN CANCER-RELATED NIH FUNDING

2,347

NEW CLINICAL TRIALS PATIENTS



# NEW FACULTY MEMBERS BROADEN FRUIT FLY RESEARCH PROGRAM

The Department of Biochemistry and Molecular Biology at Tulane recently welcomed Professor Jun-yuan Ji, PhD, to the faculty.

Dr. Ji is a developmental geneticist with research interests in cancer biology. He and his laboratory team have made several important contributions to understanding the regulation of lipid metabolism and cell cycle progression using the fruit fly - Drosophila melanogaster - and cultured cancer cells as experimental systems.

Dr. Ji will be teaming up with Dr. Wu-Min Deng, the Gerald and Flora Jo Mansfield Piltz Endowed Professor of Cancer Research at Tulane, who also utilizes the fruit fly model in his cancer investigations.

Drosophila melanogaster has been used in laboratories around the world for over a century to study the fundamentals of genetics and development. Sharing approximately 75% of its genome with humans and having an overlap of approximately 90% in disease-causing genes, Drosophila has been influential not only in the discovery of many genes and fundamental regulatory mechanisms, but also in the study of cancer, cardiovascular and metabolic diseases, neurodegenerative diseases and neurological disorders.

Dr. Ji's lab investigates the function of an enzyme - CDK8 - involved in regulating gene expression within cells. This enzyme is mutated or amplified in a variety of human cancers. His team also studies the role of Wnt signaling - a pathway through which proteins pass signals into cells through cell surface receptors - in regulating lipid metabolism. Abnormal Wnt signaling and lipid metabolism can cause different types of human cancers, as well as obesity, diabetes, and cardiovascular diseases.

Dr. Deng's lab has identified several fruit fly larval tissues containing "tumor hotspots," where conditions are favorable for primary tumor growth. Tumors can be "seeded" in these larval tissues using simplistic genetic manipulations and then transplanted into the abdomens of adult fruit fly hosts, where researchers can then track tumor progression. Current research in the Deng lab studies the various mechanisms used by these tumors to grow and metastasize into the host body.

"Dr. Ji's arrival helps us to further broaden our Drosophila research program, enhancing the expertise in diverse animal models within the Tulane Cancer Center. We are very excited at the promise of their collaborations - with each other and with other researchers at Tulane and beyond."

PRESCOTT DEININGER, PHD
TULANE CANCER CENTER DIRECTOR

Drs. Ji (left) and Deng (right) have initiated joint journal clubs and lab meetings with other Drosophila investigators across the state.





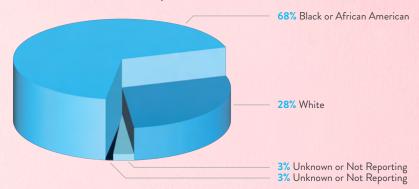
# SEEKING ANSWERS BREAST CANCER **SCREENINGS**



### Racial Distribution of TMIST Participants - Gulf South NCORP

The Gulf South National Cancer Institute (NCI) Community Oncology Research Program (NCORP), led by LSU Health New Orleans with its partner institutions Mary Bird Perkins Cancer Center, LSU Health Shreveport and Ochsner, has enrolled nearly 2,000 women in a breast cancer screening trial that will help determine the best ways to find breast cancer in women who have no symptoms.

Under the direction of the principal investigator Augusto Ochoa, MD, at the Stanley S. Scott Cancer Center, LSU Health New Orleans has enrolled more than 900 participants at University Medical Center, with more than 200 at Mary Bird Perkins Cancer Center and more than 600 at LSU Health Shreveport.



The Tomosynthesis Mammographic Imaging Screening Trial, or TMIST, compares 2-D and 3-D mammograms. 2-D mammograms are the standard. 3-D mammograms feature an image of the breast made from several low-dose X-rays from different angles around the breast.

"This study will determine if 3-D mammography is better than 2-D at finding aggressive breast cancers early in women in different age groups and with different risk factors," notes Dr. Ochoa.

The main goal of TMIST is to measure and compare the rates of newly diagnosed breast cancer that meet certain criteria, including tumor size, spread, and characteristics such as HER2 positivity and triple-negativity.

Once enrolled in the trial, women will be randomly assigned to receive either 3-D or 2-D screening mammograms for 5 years. The frequency of mammograms will depend on several factors, including age, breast density, family history, use of hormones, and menopausal status. During the study, the results of every mammogram from every woman will be collected, whether the mammograms are normal or not. Information about any medical follow-up, such as more imaging or a biopsy, will also be recorded. All women will be followed until the end of the study for breast cancer status, treatment, and results from treatment.

Researchers are also looking at whether 3-D mammography might help certain groups of women. Questions they are trying to answer include: Whether there will be fewer harder-to-treat cancers among the women who receive 3-D mammography, in those with dense breasts, African Americans, premenopausal women, and women on hormone replacement therapy? Will there be fewer false-positive test results in the entire study group or among certain groups? Is there a link between certain findings from the mammograms and the most aggressive breast cancers?

Women ages 45 to 74 who plan to get a routine screening mammogram are eligible for this trial. Women who are interested in enrolling may call 866-559-2476.





### OCHSNER PRECISION CANCER THERAPIES PROGRAM EXPANDS, BREAKS GROUND ON EARLY PHASE CLINICAL TRIALS

The Ochsner Precision Cancer Therapies Program (PCTP), a multidisciplinary partnership between Ochsner Cancer Institute and the Translational Genomics Research Institute (TGen) of Phoenix, AZ, offers the Gulf South access to the latest early-phase cancer therapeutics, clinical trials, and advanced genomic-based diagnostics. Since 2017, the program has filled a void as the only cancer phase 1 clinical trials center between Houston and Birmingham, AL. The program consists of a team of six physicians, two nurse practitioners, and 13 research professionals, including dedicated research nurses, a navigator, laboratory personnel, and others.

In 2020, the PCTP opened the J. Wayne and Jackie Leonard Precision Medicine Clinic within the Gayle and Tom Benson Cancer Center at Ochsner Medical Center. The

Precision Cancer Therapies Program (PCTP) photo: L-R: Deputy Director Dr. Daniel Johnson, Carlie Stott, Director Dr. Marc Matrana, Manager Erin Pierce, and Dr. Jon Mizrahi in the J. Wayne and Jackie Leonard Precision Cancer Therapies Clinic.

Leonard Clinic consists of a suite of professional offices, eight examination rooms, two nurses' stations, a conference room, an intra-tumoral injection/procedure room, and a newly renovated pharmacokinetics room all designed around the unique needs of early phase cancer trial patients.

As the only early phase cancer clinical trial program in the state of Louisiana, the PCTP continues expanding and gaining national recognition, including winning the coveted ACCC Innovator Award in 2018. The program receives hundreds of referrals from cancer providers around the region and treats patients from around the country. To date, over 500 patients have enrolled in early phase trials and the PCTP has provided free or greatly-reduced-cost next-generation somatic sequencing to over 2,500 patients and opened over 150 early phase oncology clinical trials.

In 2020 alone, PCTP researchers presented 11 podium presentations, published 17 original articles in peer-reviewed journals, presented three posters at national conferences, and authored 36 abstracts.

Currently, the PCTP offers a weekly clinical trials research tumor board where referrals are discussed. It also hosts a regularly scheduled virtual state-wide molecular tumor board. As of 2020, it has expanded capacity to perform virtual intake screening visits, which has allowed patients to be screened for trials without having to leave the comfort of their home or travel long distances. Additionally, the program emails out updated monthly clinical trial lists and pathways to keep providers updated on available trials.

# THE AL COPELAND FOUNDATION

The Al Copeland Foundation Cancer Network (ACF-Cancer Network) has as its major goal expanding access to clinical trials for patients with cancer. This will ensure that patients who are diagnosed with cancer have the option of receiving the best treatment, be it standard of care or cutting-edge research therapies.

The ACF-Cancer Network aims to improve access to cutting-edge clinical trials for patients and their doctors. To achieve this goal LSU Health New Orleans has designed an approach that will further strengthen the existing NCORP, increase pharmaceutical trials, promote the development of new investigator-initiated trials, and expand the Virtual Research Nurse (VRN) program, formally referred to the Tele-CRA. Currently, The Stanley S. Scott Cancer Center (SSSCC) runs the NCORP, pharmaceutical trials, and pieces of virtual research. However, there are no investigator-initiated trials at LSU at this time.

The NCORP is a well-established program throughout the state of Louisiana. However, the majority of accruals continue to happen

in the 4 principal sites, LSU-New Orleans, Ochsner Cancer Institute (New Orleans), Mary Bird Perkins Cancer Center (Baton Rouge), and LSU-Shreveport. Therefore there is a need to need to develop initiatives that allow additional sites throughout the state to participate in these studies. Data shows that patients and doctors in these locations are eager to participate in trials, but do not have the regulatory or nursing capabilities needed. To address this shortfall LSU will continue to expand its Virtual Research efforts. This program includes the OB/GYN Steel Magnolias Program and the Virtual Research Nurse (VRN) program using the Hale App, formally referred to as Tele-CRA.

Steel Magnolias is an extension of a program created by the LSU GYN-Oncology physicians. Steel Magnolias connects general OB/GYN practitioners throughout Louisiana with highly trained GYN-Oncologists to offer specialized care to their patients that would otherwise be unattainable for most women in Louisiana. Women who live far from a gynecologic oncologist experience additional inconvenience, cost, and difficulty obtaining gynecologic expertise and this translates directly to poorer patient outcomes, such as lower rates of guideline adherent care and reduced probability of surviving their cancer.



A new Clinical Trials Coordinator (CTC) will recruit, enroll, administer care, and provide patient follow-up visits in-person and virtually on all NCI and pharmaceutical sponsored studies associated with the LSUHSC Cancer Center, the Genitourinary Oncology team and its partner institutions.

Screening, prevention, and outreach allows us to cast a wider net within our catchment area and provide important cancer control services for the community. Expansion of educational programming and continuing focus on trials in prevention and cancer care delivery research (CCDR). This program furthers LSU's ability to fulfill Community Outreach and Engagement requirements of the NCI while also creating a more robust clinical trials portfolio through prevention and CCDR trials.

# ASSESSING OBESITY AND CANCER RISK

Chronic inflammation suppresses the body's ability to fight disease, including cancer. Researchers at LSU Health New Orleans found a link between chronic inflammation, obesity, and an increased risk of cancer.

A review study team led by Maria D. Sanchez-Pino, PhD, Assistant Research Professor, Departments of Interdisciplinary Oncology and Genetics, LSU Health New Orleans' School of Medicine, Louisiana State University, examined inflammatory cells in patients before and after bariatric weight loss surgery at Ochsner Health in New Orleans. They found that weight loss in morbidly obese patients triggered a dramatic reduction in these myeloid cells which are significantly increased in people with morbid obesity compared to individuals with normal weight.

"Deciphering the molecular mechanisms by which obesity-associated metabolic factors activate or enhance the function of Myeloid-derived Suppressor Cells, as well as immunosuppressive macrophages, will allow us to identify biomarkers for prognosis and

therapeutic responses. It will also lead to the discovery of potential targets for pharmacological therapies that may disrupt the pathophysiologic inflammatory link between obesity and cancer," Dr. Sanchez-Pino said.

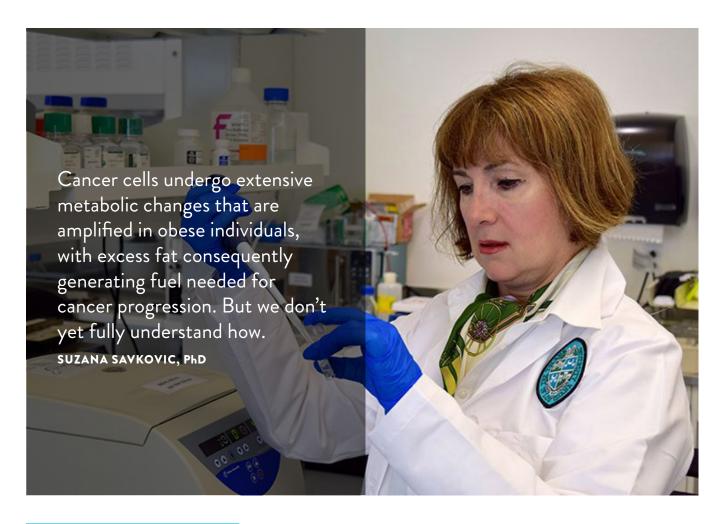
According to the researchers, there is a tremendous overlap between inflammation and metabolic/endocrine disturbances that promote tumor growth in obesity but the biological and molecular mechanisms are not completely understood. Altered metabolic factors such as lipids, insulin, and leptin in obesity could play a major role in the activation of

myeloid cells with immunosuppressive and cancer developing capabilities.

The paper is published in the June 2021 issue of Obesity.



Augusto Ochoa, MD, and Dr. Maria D. Sanchez-Pino are LCRC faculty members. Dr. Ochoa is a scientific co-director of the LCRC.



# RESEARCHER INVESTIGATES POSSIBLE LINK BETWEEN OBESITY AND COLON CANCER

Obesity is associated with an increased risk for a broad spectrum of tumors, including colon cancer. Overweight or obese cancer patients are at higher risk for cancer recurrence and resistance to therapy, and have a decreased chance of survival. The underlying mechanisms remain unclear.

One of the emerging possibilities with regards to obesity-facilitated colon cancer is that excess fat accumulates in both the fat-storing and non-fat-storing tissues in the form of intracellular lipid droplets (LDs). As these LDs are seen at higher volumes in colonic tumors relative to normal tissues, it has been theorized that they may drive colonic tumor progression.

"Cancer cells need fuel to grow and persist," said Suzana Savkovic, PhD, associate professor of pathology and laboratory medicine at Tulane. "Cancer cells undergo extensive metabolic changes that are

Suzana Savkovic, PhD, associate professor of pathology and laboratory medicine at Tulane, investigates the relationship between obesity and enhanced risk for colon cancer.

amplified in obese individuals, with excess fat consequently generating fuel needed for cancer progression. But we don't yet fully understand how." Savkovic and her team were recently awarded a five-year, \$1.6 million National Cancer Institute grant to investigate the connection.

But lipid accumulation is not the only culprit. Increased LDs PLUS the loss of the FOXO3 tumor suppressor seem to represent a codependent signaling network according to Savkovic, one of the leaders in discovering these mechanisms.

"When FOXO3 loses function, there is an increase in LD accumulation" said Savkovic. "And increased LDs are metabolically changing these cells. Even if they were normal before, now they can become malignant. Also increased LDs further provide the building blocks and fuel for tumor growth."

There is also a third player in this process -enzymatic molecules called DGATs. Savkovic's preliminary data show that DGATs levels are elevated in human and mouse colonic tumors relative to normal tissues, with even higher levels in obese individuals and mice. Elevated DGATs are linked to poor patient survival.

"In the laboratory, inhibition of DGATs in human colonic-transformed cells blocked the pathway responsible for the loss of FOXO3, lowered LDs and prevented tumor cell growth," said Savkovic. "The whole process is a big loop. We hypothesize that elevated levels of DGATs help to drive the LD/FOXO3 signaling network, and if we block DGATs, we can not only preserve FOXO3 tumor suppressor function, but also lower LD accumulation and in turn suppress tumor formation and growth."

Savkovic and her team used the tissues of local colon cancer patients in generating the preliminary data for this grant. The tissues were acquired by and stored in the LCRC's Biospecimen Laboratory.

# FDA APPROVES PLUVICTO™ FOR ELIGIBLE PATIENTS WITH METASTATIC CASTRATIONRESISTANT PROSTATE CANCER

The U.S. Food and Drug Administration (FDA) has approved Pluvicto™ (PSMA-617 Lutetium-177) for the treatment of adult patients with prostate-specific membrane antigen-positive metastatic castration-resistant prostate cancer (PSMA-positive mCRPC) who have previously been treated with other anticancer therapies (androgen receptor pathway inhibition and taxane-based chemotherapy).

"The approval of Pluvicto™ is an important clinical advancement for people with progressing mCRPC, as it can significantly improve survival rates for those who have limited treatment options," said Oliver Sartor, MD, medical director at Tulane Cancer Center and co-principal investigator on the international clinical trial (VISION) that led to FDA approval. "Pluvicto™ is a step forward in the evolution of precision medicine for prostate cancer."

Tulane Cancer Center was one of the leading sites in the U.S. in terms of patient accrual to VISION, thanks to a team of prostate-focused oncologists including Drs. Sartor, Pedro Barata, Jodi Layton and Brian Lewis. Dr. Kendra Harris, chief of Radiation Oncology, was an essential part of the team handling isotope delivery, expert care and more.

Pluvicto™ is a radioligand therapy that combines a targeting compound that binds to a cell surface protein expressed by tumors and a radioactive isotope, thereby causing DNA damage that inhibits tumor growth. This approach enables targeted delivery of radiation to the tumor, while limiting damage to the surrounding normal tissue.



Dr. Oliver Sartor, C.E. and Bernadine Laborde Professor of Cancer Research at Tulane University School of Medicine, was co-principal investigator of the clinical trial that led to FDA approval of Pluvicto™.

FDA approval of Pluvicto™ is based on the results of the Phase III VISION trial, which demonstrated that PSMA-positive mCRPC patients previously treated with androgen receptor pathway inhibition (such as abiraterone or enzalutamide) and taxane-based chemotherapy who received Pluvicto™ plus standard of care (SOC) had improved overall survival compared to SOC alone.

Participants treated with Pluvicto™ plus SOC had a 38% reduction in risk of death and a statistically significant reduction in the risk of radiographic disease progression or death compared to SOC alone. The most common adverse events in the Pluvicto™ arm of the study were fatigue (43%), dry mouth (39%), nausea (35%), anemia (low red blood cell counts) (32%), decreased appetite (21%), and constipation (20%).

PSMA is highly expressed in more than 90 percent of patients with prostate cancer, making it an important phenotypic biomarker for assessing disease status. To be eligible for Pluvicto<sup>TM</sup> treatment, patients should have PSMA PET scan positive disease as assessed by a PSMA-11

Galium-68 scan (with certain limitations and caveats).

Two late-stage studies evaluating Pluvicto™ in earlier lines of treatment for metastatic prostate cancer are currently underway. ≜



In recognition of the 50th anniversary of the National Cancer Act, LSU Health New Orleans is pleased to present the Cancer Research Landmarks series.

The National Cancer Act launched a national commitment to advancing our understanding of cancer biology to make prog-

ress in treating and preventing this devastating collection of diseases. The groundlegislation breaking galvanized the cancer research community to make discoveries that have culminated in tangibly improved outcomes for many cancer patients.

The Landmarks series highlights pivotal

NCI-funded basic, translational, and clinical studies published in Cancer Research over the last fifty years with commentaries reflecting on how these discoveries impacted the trajectory of the field.

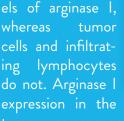
The following research was published by a team including both current and former LSUHSC faculty, Paolo Rodriguez, David Quiceno, Jovanny Zabaleta, Blair Ortiz, Arnold Zea, Maria Piazuelo, Alberto Delgado, Pelayo Correa, Jason Brayer, Eduarto Sotomayor, Scott Antonia, Juan Ochoa, Augusto Ochoa.

T cells infiltrating tumors have a decreased expression of signal ished ability to proliferate, and a decreased production of cytokines. The mechanisms causing these changes have remained

Arginase I Production in the Tumor Microenvironment by Mature Myeloid Cells Inhibits T-Cell Receptor Expression and Antigen-Specific T-Cell Responses

> unclear. It was demonstrated recently that peritoneal macrophages stimulated with interleuarginase I, which decreases the expression of the T-cell receptor CD3ζ chain and impairs T-cell responses. Using a 3LL murine lung carcinoma model we tested whether arginase I was produced in the tumor microenvironment and could decrease CD3ζ expression and impair T-cell function. The results show that a subpopulation of mature tumor-associated myeloid cells

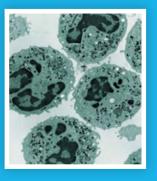
express high levels of arginase I, whereas cells and infiltrating lymphocytes do not. Arginase I expression in the



tumor was seen on day 7 after tumor injection. Tumor-associated myeloid cells also expressed

> high levels of cationic amino acid transporter 2B, which allowed them to rapidly incorporate I-Arginine (I-Arg) and deplete extracellular I-Arg in vitro. I-Arg depletion myeloid cells blocked the re-expression of CD3ζ in stimulated T cells and inhibited antigen-specific proliferation of OT-1 and

OT-2 cells. The injection of the arginase inhibitor N-hydroxynor-I-Arg blocked growth of s.c. 3LL lung carcinoma in mice. High levels of arginase I were also found in tumor samples of patients with non-small cell carcinoma. Therefore, arginase I production by mature myeloid cells in the tumor microenand may represent a target for new therapies.



# LIQUID BIOPSY ANALYSIS REVEALS GENETIC DIFFERENCES IN ADVANCED PROSTATE TUMORS

African American men with prostate cancer have been diagnosed with more aggressive disease, at younger ages, and generally their prognosis is poorer than for non-Black patients according to Pedro Barata, MD, assistant professor medicine at Tulane. "But, when we start looking at how these patients respond to treatments, the emerging data suggest quite the opposite – that African American men respond similarly if not better than non-Black patients to different systemic therapies," he said.

Barata and colleagues hypothesized that the reasons for this may be found in the underlying genetics of the tumors themselves. And so, they undertook a retrospective study – the largest reported to date, according to Barata – to find racial differences in the molecular characterization of advanced prostate tumors using liquid biopsies.

A liquid biopsy is a blood test that looks for tumor DNA circulating in the blood stream of cancer patients. "It's basically cancer in circulation," said Barata. This study analyzed the genomic profiles of circulating or cell-free DNA from advanced prostate cancer tumors



Pedro Barata, MD

and compared the data by race. "More specifically, we were looking for signatures or gene expressions in the samples from African American patients that could have therapeutic implications," said Barata.

Identification of molecular drivers of tumor progression in African American patients may allow the development of tailored systemic therapies for these men and decrease disparities in diseaserelated outcomes.

#### PEDRO BARATA, MD

Knowing about the presence of genomic alterations may allow patients to be treated in a way that wouldn't be possible if you didn't know you had a target present. "It opens the door to precision oncology, allowing us to more precisely tailor our treatments to the biology of our patients."

The study retrospectively analyzed the genomic profiling data from the liquid biopsies of 552 advanced prostate cancer patients (125 African American, 427 Caucasian) from six participating institutions – University of Utah School of Medicine, Emory University School of Medicine, Karmanos Cancer Institute, the University of Alabama at Birmingham, the Medical University of South Carolina, and Tulane Cancer Center – the top users of liquid biopsies for genitourinary tumors in the country.

"The data show multiple genomic differences – including in DNA repair genes – in the tumor profiles between African American and Caucasian patients with advanced prostate cancer," said Barata. Of particular interest was the CDK12 mutation, found more prominently in a subset of African American patients. This gene alteration has therapeutic implications. "Meaning we should treat these patients differently," said Barata. "Identification of molecular drivers of tumor progression in African American patients may allow the development of tailored systemic therapies for these men and decrease disparities in disease-related outcomes."

# SHARED DECISIONMAKING ON PROSTATE CANCER SCREENING AMONG CLINICIANS AND AFRICAN AMERICAN MEN

Researchers are taking a closer look at the decision-making process for prostate cancer screenings. Some current studies suggest that the usefulness of routine prostate cancer screening is not as straightforward as previously thought. Although prostate cancer is life-threatening for many men, others may not experience symptoms and it will not play a clinically significant role in their lives. Screening, further testing, and treatment for prostate cancer should be conducted after considering a balanced perspective of benefits and risks. Some national organizations have adopted new clinical guidelines for prostate cancer screenings. Some guidelines no longer recommend routine PSA screenings, some recommend against them, and others support a process called shared decision-making.

In this process, men are educated about prostate cancer risks and screening, discuss the benefits and limitations of PSA testing with their healthcare providers, and then make an informed personal choice about whether to be screened. Patients and their providers will consider their age, family and personal medical history, the patient's values, and the available science to determine an appropriate screening plan for each individual.

Barriers of time restrictions during clinical encounters, patientprovider communication, and prostate cancer knowledge gaps will impact the ability to carry out shared decision-making.



Dr. Margarita Echeverri

Studies on the applicability of shared decision-making during medical visits are critically needed to measure the effects of the updated prostate cancer screening standards. In addition, it will be crucial for men with the highest risks, those who have a family history of prostate cancer and African American men, to be educated about their personal risks to become informed enough to participate effectively in shared decisions with their clinicians.

Researchers at Xavier University of Louisiana are conducting a 4-year-randomized clinical trial to address these considerations.

Prostate cancer is the second most common cancer and the second leading cause of cancer death for American men, with African American men having higher incidence rates and significantly worse outcomes. Research led by Xavier University of Louisiana focuses on patients and clinicians working together to make informed decisions about PSA screenings.

The primary goal of this project is to provide evidence regarding the applicability of shared decision-making during the clinical encounters of African American men. Secondly, it will assess the efficacy of a decision aid (training) about PSA screening and its potential impacts on the shared decision-making process between patients and their providers. A multimedia tool will guide participants through basic information about prostate cancer, understanding their risks and values, and lastly, communicating their medical history, beliefs, and understanding to make decisions about prostate cancer screening with their doctors.

The study's participants will consist of 200 African American men, ages 40-69 years old, with no history of prostate cancer, who receive primary care services at different clinical sites in the Greater New Orleans area. This study's Principal Investigator, Dr. Margarita Echeverri (Xavier), and Co-Investigators, Dr. Clarissa Hoff (Tulane) and Dr. Princess Dennar (Tulane), expect that the study's results can be scaled to the practice of shared decision-making in primary care settings for other cancers where shared decision-making is a guideline. In addition, this project should better inform the PSA screening practices of African American men, resulting in increased effectiveness and decreased cancer disparities.

To know more about the study, contact Dr. Margarita Echeverri at mechever@xula.edu. 🔔

# MAKING AN IMPACT ON SMOKING CESSATION EFFORTS IN LOUISIANA: THE TOBACCO CONTROL INITIATIVE

The Tobacco Control Initiative (TCI), established in 2002, has worked for 20 years with safety-net healthcare delivery systems and clinics throughout Louisiana to help patients quit smoking. Since 2004, the TCI has trained > 10,000 healthcare providers on evidence-based practices to treat tobacco use and counseled > 9,000 smokers on strategies to quit smoking.

During an interview with Dr. Michael Celestin, Assistant Professor of Behavioral and Community Health Sciences in the LSU Health School of Public Health and Director of the TCI, we asked how 2021 shaped the initiative's activities and where he sees the future of the program heading.

### WHAT MAKES THE TCI SUCH AN INTE-GRAL PART OF THE LCRC AND ITS CAN-CER CONTROL EFFORTS?

In the U.S., smoking is the number one preventable cause of disability, disease, and death and is causally linked to 16 types of cancer. The TCI promotes a multi-level population health approach to smoking cessation services and research. Our vision is to position the initiative and the LCRC as a national leader in creating and applying knowledge through health systems services and research benefiting smokers in Louisiana, especially those disproportionately affected by tobacco use.

### 2. 2021 WAS A VERY EVENTFUL YEAR, FULL OF UNCERTAINTY. HOW DID THE TCI CONTINUE TO ADAPT TO YEAR 2 OF COVID?

COVID and Hurricane Ida challenged our activities. The TCI lost a long-time tobacco treatment specialist, JoAnn Brooks, to COVID. These challenges impacted patient access to care and utilization of cessation services. The TCI adapted by transitioning to telecounseling, remotely accessing health information to continue services, and emphasizing the harmfulness of tobacco use among people suffering from or at risk of COVID infection. Our staff worked diligently to continue services.

# 3. HOW DOES THE TCI MEASURE ITS IMPACT ON SMOKING CESSATION EFFORTS IN LOUISIANA?

The TCI measures its impact on system and clinical practice and in aiding patients to quit smoking. This year, at partner facilities, the TCI trained > 1,800 healthcare providers to screen, treat, and refer tobacco users for behavioral counseling. As a result, we received > 3,600 referrals from providers. Of those, 1,031 indicated they were ready to quit. The TCI Treatment Specialists scheduled 592 of patients ready to quit for counseling, counseled 569, and referred 465 to the state Quitline for additional treatment.

# 4. DID THE TCI PUBLISH ANY RESEARCH FINDINGS RELATED TO SMOKING CESSATION IN 2021?

The TCI shared its research findings by publishing 3 peer-reviewed manuscripts examining 1) the use of social media for smoking cessation, 2) the association between readiness to quit among African Americans eligible for low-dose computed tomography screening, and 3) the use of Geographic Information System technology to evaluate health disparities in smoking cessation class accessibility for hospital patients.

### 5. DOES INCREASED TRAINING IMPROVE INTERVENTION IMPLEMENTATION?

As one of 60 nationally selected fellows for the 2021 National Institutes of Health's Summer Institute on Randomized Behavioral Clinical Trials, I received advanced training in planning, designing, and conducting high-impact randomized controlled trials of health-related behavioral interventions. I will use this training to improve implementation of clinical and behavioral interventions.

#### 6. HOW WILL THE TCI CONTINUE TO GROW?

The TCI will grow by expanding the number of partner sites that implement health systems changes, embracing telehealth for cessation counseling, and increasing the use of health information technology to monitor and evaluate activities. Additionally, we will increase research on smokers' motivation to quit. These activities will help decrease smoking rates for disparate groups and improve tobacco-related health outcomes.



Michael David Celestin Jr., Ph.D., is an Assistant Professor of Behavioral and Community Health Sciences in the LSU Health New Orleans School of Public Health. He is also the Director of the Louisiana Tobacco Control Initiative.



PROVIDERS TRAINED
TO SCREEN AND TREAT
TOBACCO USE



SMOKERS COUNSELED TO QUIT



SMOKERS REFERRED TO THE STATE QUITLINE

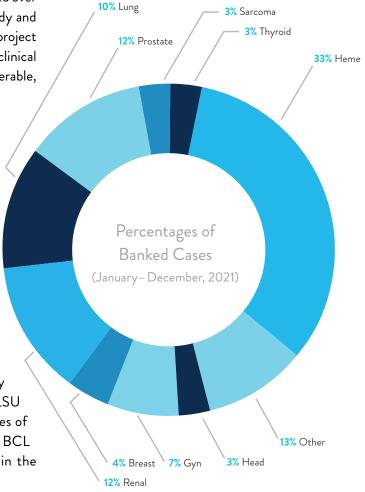
# BIOSPECIMEN COLLECTIONS INCREASE IN 2021

LCRC's Biospecimen Core Laboratory (BCL) saw a substantial increase in the collection of high-quality cancer specimens in 2021, enrolling 299 new patients compared to 176 the previous year, a 1.7-fold increase.

	TOTAL (%)	AFRICAN AMERICAN (%)	CAUCASIAN (%)	AVERAGE AGE
Male	52	40	55	62.6
Female	48	46	51	62.0

The BCL worked with clinicians and researchers from Tulane University to enroll and collect serial blood samples from cancer patients with hematological malignancies who had either recovered from infection or had been vaccinated against the SARS-CoV-2 virus (or both). To date, the BCL has enrolled over 100 patients in Tulane University's Convalescent Antibody and Immunity Network (TUCAIN) project. Data from this project will add significant contributions to the scientific and clinical literature and inform the treatment strategy of a vulnerable, immune-compromised patient population.

A second project the BCL has undertaken involves collection of diagnostic biopsy samples from patients who meet certain screening criteria. Because neoadjuvant (pre-surgery) chemotherapy regimens are widely utilized across many cancer types, the current workflow of collecting cancer samples only when a patient goes to the operating room often results in tissue that has seen toxic treatments and is no longer viable for research. From a patient's perspective, a partial or complete response to neoadjuvant chemotherapy is good news, but from a researcher's view, it can be frustrating. The BCL developed a strategy to collect small, diagnostic biopsies by working closely with an interdisciplinary team of clinical faculty at LSU New Orleans Health Sciences Center to collect samples of breast cancer tissue in the pre-treatment setting. The BCL may expand biopsy collections to other tumor types in the future such as pancreatic and colorectal.





# VFW DONATION TO LCRC

The Louisiana Cancer Research Center is grateful to the 5,600 auxiliaries of the Veterans of Foreign Wars, Department of Louisiana, which presented a donation of more than \$6,500. The organization raised the funds among its 5,000 members throughout the state.

There is not one person that has not been touched by cancer in some way, shape, or form.

**KOLLEEN HERNDON** 

VFW Auxiliary -Louisiana

LCRC Scientific Co-Director Prescott Deininger, PhD, VFW Auxiliary -Louisiana Past President Kolleen Herndon, LCRC Scientific Co-Director Augusto Ochoa, MD

Past Auxiliary President Kolleen Herndon was joined by auxiliary officers Mary Johnson and Margaret Nixon to present the check to LCRC Scientific Codirectors Prescott Deininger, PhD and Augusto Ochoa, MD.

In accepting the donation, Dr. Ochoa mentioned that donations demonstrate Louisianan's interest in having the best and the latest cancer research and cancer treatments. Dr. Deininger added that the auxiliary's donation was unrestricted and therefore available to fund necessary research right now.

Instead of our state's major research institutions fighting cancer independently, the LA legislature recognized the value of their working together. So, it funded a cancer research center so they could better compete for millions upon millions in federal research dollars.

A donation to the LCRC is a simple way to support the cancer research of LCRC research institutions LSU Health New Orleans, Tulane School of Medicine, Xavier University of Louisiana and Ochsner Health.



LCRC CFO Deborah Reeder, LCRC Scientific Co-Director Prescott Deininger, PhD, VFW Auxiliary Past President Kolleen Herndon, LCRC Scientific Co-Director Augusto Ochoa, MD, LCRC Chief Operating Officer Sven Davisson



GOES SMOKE-FREE (AGAIN)



Thanks in part to the efforts of the Louisiana Campaign for Tobacco-Free Living (TFL), a prevention program of the LCRC, the Shreveport Smoke-free Air Act finally went into effect for bars and gaming facilities on Sunday, August 1, 2021. Shreveport is the 30th municipality in Louisiana to implement such an ordinance, bringing the percentage of Louisiana's population protected from secondhand smoke to thirty.

The ordinance was originally passed in July 2020 to be implemented in August 2020, but implementation was delayed until August 2021. In July 2021, an amendment was introduced to exclude gaming facilities from the ordinance. The

amendment was ultimately tabled, and the Shreveport Smoke-free Air Act went into effect.

TFL partnered with other state, local, and national organizations to create a grassroots campaign, utilizing virtual elements, social media, and print publications to convince elected officials in the state's third largest city to go smoke-free.

"The amount of support this ordinance received from community members shows that protecting bar and gaming service industry professionals, our community, and visitors from the dangers of secondhand smoke is the right step

for Shreveport," said Feamula Bradley, regional manager for the Louisiana Campaign for Tobacco-Free Living. "Putting our community's health first, especially as we continue to navigate the COVID-19 pandemic, means a safer and more welcoming environment for everyone that will ultimately save lives.

"We applaud the City of Shreveport on this smoke-free effort, as it sets a worthy precedent for all communities to recognize and follow," said Earl Benjamin-Robinson, director of TFL.

The Shreveport ban is believed to be one of first in the country to be enacted during the COVID pandemic.



### THE GOAL: A TOBACCO-FREE LOUISIANA

The Louisiana Campaign for Tobacco-Free Living works to implement and evaluate tobacco control initiatives that can reduce and prevent the use of tobacco, guided by best practices in tobacco control as outlined by the Centers for Disease Control and Prevention (CDC), as well as successful tobacco control programs in effect nationwide.

### TFL GOAL 1 PREVENT INITIATION AMONG YOUTH AND YOUNG ADULTS

Next Era, a statewide youth movement of The Louisiana Campaign for Tobacco-Free Living, has been instrumental and effective in educating communities on tobacco control. In 2021, 11 chapters and 48 students participated throughout 9 regions. COVID-19 caused lower numbers with limited in-person activities. Although the COVID-19 pandemic had a dramatic impact on the program, Next Era kept moving forward by transitioning to virtual youth engagement, campaign, and program objectives.



### **2021 NEXT ERA HIGHLIGHTS**



### 2021 PARTICIPATING SCHOOLS AND ORGANIZATIONS

Teche Action Clinic

Girlie Girls

Jena High School United Hands Youth Center



Westgate High School

Pathways Educational Center Central Louisiana Area Health Education Center





East Carroll 4-H Club

Robinson-Williams Restoration of Hope Community Center

Retooling Individuals to Pursue Excellence



### TFL GOAL 2 ELIMINATE EXPOSURE TO SECONDHAND SMOKE

In addition to welcoming Shreveport as a smoke-free community, in 2021, TFL's Healthier Air for All supported efforts to have bars and gaming venues to reopen smoke-free, celebrated local smoke-free anniversaries, educated municipal leaders, created more culturally and SES inclusive content, and worked with LDH's Well-Ahead program to promote cessation in Shreveport, following the ordinance implementation.

"I am all for smoke-free. As a performer and singer, it's a very tough environment. A lot of the clubs we play in are so packed with people with poor air circulation. I feel it the next morning in my chest and in my throat. I think to be safe; this is the way to go (smoke free)... period! I am all for it. And it will definitely help artists have more longevity in their careers. I support Healthier Air for All."

NATHAN "LIL NATE" WILLIAMS

Zydeco Musician and Singer

"I am so excited to be partnering with Healthier Air For All and Musicians for Smoke-free Louisiana. As a mother of two children, it's amazing that I can go to a show and come back home and not have to worry about whether I can hug my children as soon as I walk in the door. Smoke-free environments are the best way to protect me, my family and my career."

**LAUREN DUHON** 



HealthierAirForAll.org

After smoke-free implementation, cessation billboards were placed in Alexandria while the state fair was in town and were promoted by the Smoke-free Louisiana Coalition.



LBGTQ+ content posted to HAFA's social media.



Recognizing smoke-free anniversaries across the state.

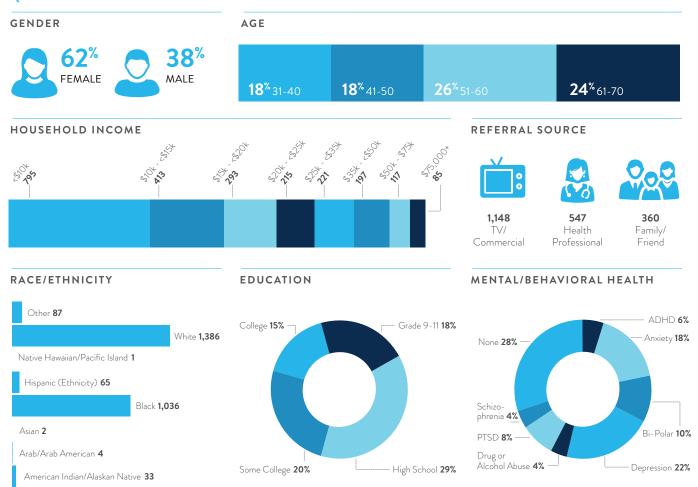


### **TFL GOAL 3**

### **PROMOTE CESSATION**

A total of **2,714** registered tobacco users received services from the Louisiana Tobacco Quitline (1-800-Quit-Now). Quitline services offer approved pharmacotherapies along with phone counseling, web-based coaching, or an integration of both conducted by a certified Tobacco Treatment specialist. Of the total participants serviced, **1,401** (51.6%) were eligible and enrolled into the Smoking Cessation Trust services and **1,565** (58%) utilized the Text2Quit® coaching support service in their quit attempt.

### **QUITLINE DEMOGRAPHICS**



## TFL GOAL 4 DISPARITIES & HEALTH EQUITY

TFL's African American Male Cessation initiative (AAMCI) was established to increase awareness and utilization of cessation resources and services by African American males throughout Louisiana. Throughout 2021, AAMCI was utilized among a variety of media outlets to reinforce the benefits of quitting tobacco. These media include paid radio advertisements, billboard placements, and social media promotion, which saw significant engagement metrics in New Orleans, Baton Rouge, Alexandria, Monroe, and Opelousas.

In an effort to further address health disparities and health equity, TFL's partnership with the Communities of Color Network (CoC) has been expanded to address priority populations to all people of color (Hispanic, Asian, etc.), LGBTQ+ individuals, and young adults, specifically on college campuses. CoC has collaborated with LDH's Well-Ahead program for their HBCU Outreach Cessation Initiative to all the HBCUs in Louisiana. CoC plans to expand their 100% Tobacco Free Church Initiatives to all priority populations. In 2021, CoC was instrumental at the grassroots level, hosting in-person events pre-COVID-19 and using Facebook Live to host "Conversations with CoC," discussing tobacco, vaping, and cessation.

# LCRC NEW FACULTY



THANGAVEL CHELLAPPAGOUNDER, PHD

RESEARCH ASSISTANT PROFESSOR, LSU HEALTH

Thangavel Chellappagounder, PhD, is a research assistant professor in the Department of Interdisciplinary Oncology at the LSU Health Cancer Center. Dr. Chellappagounder received his MSc in Botany and his PhD in Microbiology from Madurai Kamaraj University in Madurai, India in 1999. He comes to LSU from Thomas Jefferson University.



JUN-YUAN JI, PHD

PROFESSOR OF BIOCHEMISTRY AND MOLECULAR BIOLOGY, TULANE UNIVERSITY SCHOOL OF MEDICINE

Jun-yuan Ji, PhD, is originally from Xinjiang in northwest China. He received a B.Sc. in cell biology from Lanzhou University (1994) and a M.Sc. in developmental biology from the Institute of Genetics and Developmental Biology, the Chinese Academy of Sciences (1997). Under the tutelage of Dr. Gerold Schubiger, he obtained a PhD in zoology from the University of Washington (2003), studying the role of CDK1-Cyclin B in regulating the early embryonic cycles in Drosophila. From 2004 to 2009, Dr. Ji was a postdoctoral research fellow with Dr. Nicholas Dyson at the Massachusetts General Hospital Cancer Center, where he studied mechanisms that control the G1 to S-phase cell-cycle transition. From 2009 to 2021, Dr. Ji was a professor in the Department of Molecular and Cellular Medicine, Texas A&M University Health Science Center. Dr. Ji moved his laboratory to Tulane University in March 2021 and was appointed professor of Biochemistry and Molecular Biology in the School of Medicine. Current studies in Dr. Ji's lab focus on understanding the molecular and genetic regulatory circuits that control lipid homeostasis and transcription during development and tumorigenesis.



**XIANG JI, PHD** 

ASSISTANT PROFESSOR OF MATHEMATICS, TULANE UNIVERSITY

Dr. Xiang Ji received his M.S. in material science

and engineering and his PhD in bioinformatics and statistics from North Carolina State University. From 2018-2020 he was a postdoc at UCLA, after which he assumed his present position as assistant professor of mathematics at Tulane. Dr. Ji's research focuses on statistical phylogenetics, statistical computing and software development, bioinformatics, and viral and multigene family evolution.



MEGAN KNAPP, PHD

PROFESSOR, DEPARTMENT OF PUBLIC HEALTH SCIENCES, XAVIER UNIVERSITY OF LOUISIANA

Dr. Megan Knapp recently joined the faculty in the Department of Public Health Sciences at Xavier University of Louisiana. She earned her bachelor of arts degree in Biology and Communication Studies at Southwestern University in Georgetown, Texas and her master's degree in Behavioral Sciences and Health Education at Emory University Rollins School of Public Health. She completed her PhD at Tulane University School of Public Health and Tropical Medicine in Global Community Health and Behavioral Sciences. Prior to joining the faculty at Xavier, she served as assistant director of Tulane's Prevention Research Center, where she helped develop evidence-based models of healthy living that addressed dietary behavior and physical activity to reduce or prevent overweight and obesity. Her research focuses on social and environmental determinants of obesity, improving opportunities for physical activity and healthy dietary behaviors, and addressing inequities in healthy food access.



JEFFREY LACKEY, MD

ASSISTANT PROFESSOR
OF DERMATOLOGY, MOHS
SURGEON, TULANE UNIVERSITY
SCHOOL OF MEDICINE

Dr. Jeffrey Lackey is a graduate of the Uniformed Services University of the Health Sciences, Bethesda, MD, and completed his dermatology residency training at the National Capital Consortium (Walter Reed Army Medical Center), Washington, DC. He completed a Mohs micrographic surgery fellowship with Donald Grande, MD, at Mystic Valley Dermatology Associates, Stoneham, MA. Dr. Lackey served in the United States Army for 25 years, serving most recently as the dermatology consultant to the Office of the Surgeon General and as the chief of the Walter Reed Dermatology Service. His primary expertise is in the treatment of

cutaneous malignancies via both surgical and non-invasive therapies. He is interested in the multidisciplinary management of complex skin cancers, particularly in the setting of immunosuppression.



DAVID POINTER, MD

ASSISTANT PROFESSOR OF SURGERY, TULANE UNIVERSITY SCHOOL OF MEDICINE

Dr. David Pointer earned his medical degree and

completed general surgery residency at Tulane University School of Medicine, which included a research fellowship within the Department of Structural and Cellular Biology. Dr. Pointer received fellowship training in complex general surgical oncology at H. Lee Moffitt Cancer Center and Research Institute, which included additional focus on robotic approaches in complex surgical oncology. As a surgical oncologist specializing in the diagnosis and management of complex malignancies, he utilizes a variety of skills and strategies, including minimally invasive techniques and multidisciplinary care, to provide quality personalized treatment for both common and rare malignancies. His clinical interests include gastrointestinal, hepatopancreaticobiliary, skin and soft tissue malignancies, with a specific focus on minimally invasive techniques. His research interests include surgical education and outcomes in minimally invasive oncologic surgery. Other interests include mentorship and leadership in medicine which Dr. Pointer has cultivated over the course of his training and early career. Dr. Pointer is a member of the American College of Surgeons (ACS), the Society of Surgical Oncology (SSO), and the Americas Hepato-Pancreato-Biliary Association (AHPBA).



### MONIKA RAK, PHD

RESEARCH ASSISTANT PROFESSOR, LSU HEALTH

Monika Rak, PhD, is a research assistant professor in the Department of

Interdiscplinary Oncology at LSU Health Sciences Center New Orleans. She earned her MS in Cell Biology and her PhD in Biology from Jagiellonian University, Krakow, Poland in 2014. She was previously an assistant professor in the Department of Cell Biology at Jagiellonian University in Krakow, Poland.

# LCRC NEW FACULTY



MOHAMED SHAMA, MD

ASSISTANT PROFESSOR
OF SURGERY, DIVISION OF
ENDOCRINE & ONCOLOGICAL
SURGERY, TULANE UNIVERSITY
SCHOOL OF MEDICINE

Dr. Mohamed Shama, MD, MSc, MRCS, EBSQ, is an assistant professor of endocrine and oncological surgery at Tulane University Medical School. Dr. Shama completed a clinical fellowship in thyroid and parathyroid surgery at Harvard Medical School, followed by 2 years of accredited American Head and Neck Society (AHNS) fellowships in complex head and neck cancer surgery and microvascular reconstruction at the University of Florida and Henry Ford Hospitals in Detroit. He has been an independent surgical oncologist for more than 12 years. He has specialized in thyroid cancer surgery and microvascular reconstruction. Dr. Shama received his membership in the Royal College of Surgeons of England in 2008. He received his board certification in surgical oncology by the European Society of Surgical Oncology in 2014.



JOHN H. STEWART, IV, MD, MBA

FOUNDING DIRECTOR, LOUISIANA STATE UNIVERSITY-LOUISIANA CHILDREN'S MEDICAL CENTER CANCER CENTER.

John H. Stewart, IV, MD, MBA, is the founding director of the Louisiana State University-Louisiana Children's Medical Center Cancer Center. He also holds the rank of professor of surgery at the Louisiana State University New Orleans School of Medicine. Under his leadership, Dr. Stewart sets the overall mission, vision and direction for multidisciplinary cancer care and cancer clinical research programs for LSU Health New Orleans and LCMC Health.

Dr. Stewart received his medical degree from Howard University and completed his general surgery residency at the Vanderbilt University Medical Center. He completed fellowships in surgical oncology, tumor immunology, and molecular oncology at the National Cancer Institute. Dr. Stewart has established a national profile in education, scientific research, and cancer care delivery to underserved populations. His clinical interests

are in general surgical oncology, focusing on melanoma, tumor immunotherapy, and peritoneal surface malignancies.

Dr. Stewart serves as a director for the American Board of Surgery, the chair of the American College of Surgeons Advisory Council for General Surgery, and a member of the Halsted Society Board of Directors. He has published over 100 manuscripts in peer-reviewed journals.



FOR YUE TSO, PHD

RESEARCH ASSISTANT PROFESSOR, DEPARTMENT OF INTERDISCIPLINARY ONCOLOGY, LSU HEALTH

Dr. For Yue Tso is a research assistant professor in the

Department of Interdisciplinary Oncology. Dr. Tso received his PhD degree in Biological Sciences at the University of Nebraska-Lincoln and earned his BSc in Microbiology from the University of Washington. Dr. Tso was a graduate research assistant and post-doctoral research associate under Dr. Charles Wood at the University of Nebraska-Lincoln. He was promoted to a junior faculty position at the University of Nebraska-Lincoln in 2018.



JOHN WEST, PHD

PROFESSOR, DEPARTMENT OF INTERDISCIPLINARY ONCOLOGY, LSU HEALTH

John West, PhD, is a professor in the Department

of Interdisciplinary Oncology in the Stanley S. Scott Cancer Center. He received his PhD in Microbiology and Immunology from the University of Alabama-Birmingham and recently relocated to the LSU Health Sciences Center New Orleans from the Department of Biochemistry and at the University of Nebraska-Lincoln. His research emphasis is on HIV-1 infection and pathogenesis and HIV-associated malignancies. He focuses on viral dysregulation of immune and metabolic pathways and signaling with an emphasis of immunoproteomics, metabolomics, genetics and biomarker and immunotherapeutic discovery and development. Dr. West has more than two decades of experience in highly collaborative basic and clinical research on infectious and neoplastic diseases, and he has spent extended time working in research capacity building at remote sites of pandemic infection, Zambia and Tanzania. He has published more than 60 peer-reviewed papers, several book chapters, a scientific comic book, and is active in NIH and editorial reviews. His research work is currently funded by NIH/NCI, NIH/NIDA, and the Fogarty International Program.



CHARLES WOOD, PHD

PROFESSOR, DEPARTMENT OF INTERDISCIPLINARY ONCOLOGY, CANCER CRUSADERS CHAIR AND ASSOCIATE DIRECTOR, BASIC SCIENCE, LSU HEALTH

Charles Wood, PhD, is a professor in the Department of Interdisciplinary Oncology, the Cancer Crusaders chair and associate director of Basic Science for the Stanley S. Scott Cancer Center. Dr. Wood received his PhD in Microbiology from Columbia University and has been on the faculty at the University of Kansas, University of Miami, as well as at the University of Nebraska. He is an internationally recognized researcher in molecular virology, HIV/AIDS epidemiology, Kaposi's sarcoma, Kaposi's sarcoma-associated herpes virus, and other HIV associated malignancies. He has more than two decades of experience collaborating on basic and clinical research on HIV and associated diseases and training initiatives in Africa. His significant administrative experience includes serving as the founding director of Nebraska Center for Virology as well as the principal investigator for several multi-center and multi-national projects. He has published more than 200 peer-reviewed papers and has written and edited numerous book chapters. He has served as editor-inchief for several international journals, is a reviewer for numerous major journals, and has served as member and chair of numerous NIH review and site visits panels.



JINQIANG ZHANG, PHD

ASSISTANT PROFESSOR OF PATHOLOGY & LABORATORY MEDICINE, TULANE UNIVERSITY SCHOOL OF MEDICINE

Dr. Zhang received his PhD in 2005 from the Institute of Basic Medical Sciences, Academy of Military Medical Sciences in China. From 2004-2006 he was a resident in the Department of Pathology, Beijing 466 Hospital, and from 2007-2009 he was a research fellow in the Cancer Institute at the Chinese Academy of Medical Sciences in Beijing. He also served as a research fellow in the Department of Pathology and Laboratory Medicine at Tulane University School of Medicine from 2010-2015 and has served as an instructor there since 2016.

### STATEMENT OF FINANCIAL POSITION

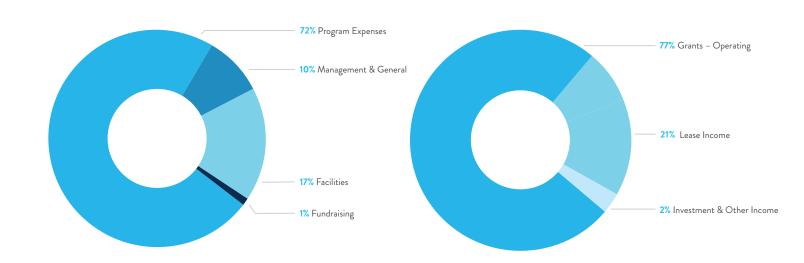
Year ended June 30, 2021 (with comparative financial information as of June 30, 2020 )

### ASSETS

	2021	2020
Cash & Cash Equivalents	35,180,537	23,517,025
Investments	13,560,086	13,388,907
Receivables - Grants	35,722	5,458,861
Receivables - Other	47,941	2,530,273
Property and Equipment	83,172,894	86,415,429
Prepaid Expenses	89,648	75,255
Deposits	52,400	52,400
TOTAL ASSETS	132,139,228	131,438,150

### LIABILITIES AND NET ASSETS

LIABILITIES	2021	2020
Accounts Payable	3,714,811	4,631,607
Accrued Liabilities	121,064	107,921
TOTAL LIABILITIES	3,835,875	4,739,528
NET ASSETS	2021	2020
Without Donor Restrictions	5,213,198	4,530,784
With Donor Restrictions	123,090,155	122,167,838
TOTAL NET ASSETS	128,303,353	126,698,622
TOTAL LIABILITIES AND NET ASSETS	132,139,228	131,438,150



### LOUISIANA CANCER RESEARCH CENTER

### STATEMENT OF ACTIVITIES

Year ended June 30, 2021 (with summarized financial information for the year ended June 30, 2020)

REVENUES			2021	2020
	WITHOUT DONOR RESTRICTIONS	WITH DONOR RESTRICTIONS	TOTAL	TOTAL
Grants		14,922,104	14,922,104	13,931,811
Lease Income	3,941,579		3,941,579	3,525,619
Investment Income	1,848	209,131	210,979	877,509
Other	165,978		165,978	65,709
Fundraising & Contributions	18,750		18,750	151,536
Net Assets Released from Restrictions	14,208,918	(14,208,918)	-	-
TOTAL REVENUES	18,337,073	922,317	19,259,390	18,552,184
EXPENSES				
Research Expenses	5,720,530		5,720,530	5,543,110
Cessation/TFL Expenses	3,725,010		3,725,010	4,675,190
Louisiana Cancer Strategy	-		-	25,570
Salaries and Related Benefits	1,121,552		1,121,552	1,053,252
Operating Services	3,338,737		3,338,737	3,389,876
Supplies	51,472		51,472	62,286
Professional Services	295,897		295,897	348,123
Travel & Meeting Expenses	(251)		(251)	1,763
Depreciation	3,385,665	•	3,385,665	3,360,757
Fundraising Expenses	14,883		14,883	61,982
Other	1,164		1,164	5,192
TOTAL EXPENSES	17,654,659		17,654,659	18,527,101
INCREASE (DECREASE) IN NET ASSETS	682,414	922,317	1,604,731	25,083
NET ASSETS, BEGINNING OF YEAR	4,530,784	122,167,838	126,698,622	126,673,539
NET ASSETS, END OF YEAR	5,213,198	123,090,155	128,303,353	126,698,622

# THE LOUISIANA CANCER RESEARCH CENTER EXISTS TO SERVE THE PEOPLE OF LOUISIANA.

OUR JOB IS SIMPLE: TO BUILD A HEALTHIER COMMUNITY BY CREATING MORE PERSONAL VICTORIES IN THE FIGHT AGAINST CANCERAND THE TACTICS THAT TREAT AND PREVENT IT.













