MESSAGE FROM THE DIRECTOR

The Center has been bustling with activity since the summer, as we prepared for the renewal of the LA CaTS Center grant from the National Institutes of Health (NIH), which was submitted in late September. In 2011, the LA CaTS Center was one of the first awards (along with West Virginia) under the new IDeA Program Infrastructure for Clinical and Translational Research (IDeA-CTR) led by the National Institute of General Medical Sciences (NIGMS). Since then, there have been seven additional IDeA-CTRs funded in other IDeA states around the country. This past June, I was invited by the NIH to present our IDeA-CTR at the 6th Biennial National IDeA Symposium of Biomedical Research Excellence (NISBRE). In addition, two LA CaTS Center investigators, Dr. Amanda Staiano, PhD (Pennington Biomedical) and Dr. Matthew Lammi (LSU Health Sciences Center-New Orleans) were also selected to present their projects at this conference. I was very pleased with the quality of work from these two young investigators, as well as our other pilot investigators and scholars, and happy our LA CaTS Center was able to support their efforts.

As part of our renewal application, we were pleased to report the incredible accomplishments and impact the support of the LA CaTS Center has had on research infrastructure across Louisiana. Some of the key elements and progress made since the Center was funded include:

1. A highly effective, seamless administrative and collaborative research structure
2. A uniform systematic approach to clinical and translational research
3. Progress towards a system-wide facilitated IRB review (see also “Senator Cassidy Calls on LA CaTS” article below)
4. Enhanced subject recruitment (see REACHnet article below)
5. Implemented system-wide bioinformatics resource
6. Implemented system-wide Biostatistical Resource Network
7. Implemented a highly successful system-wide Pilot Projects Program
8. Implemented a state-wide Health Literacy Resource with national reach
9. Implemented Community Based Participatory Research
10. Provided new technology to support CT research
11. A unified Clinical Research Education Program
12. Acquired new translational medicine facilities
13. Progress towards initiating a biorepository

Central to the progress of the LA CaTS Center in conducting clinical and translational (CT) research is evident in our successful Pilot Grants and Education Scholar Programs. The LA CaTS Pilot Grants Program has funded 43 projects including 28 junior faculty, with a return on investment of 77 peer reviewed publications and $15.2M in new external grants. Through the Education and Career Development Core’s Scholar Program, we have awarded 14 scholars, who to date have published 45 publications and obtained 34 extramural grants ($12M dollars). We are also tracking investigators and are seeing an increase in the number of investigators conducting CT research and resource

Acknowledgment:
The LA CaTS Center is supported through the National Institutes of Health (NIH) and the Institutional Development Award program - www.nigms.nih.gov/research/crcb/IDeA/ Pages/default.aspx - grant 1 U54 GM104940. The IDeA-CTR is led by the NIH’s National Institute of General Medical Sciences (NIGMS). The content of this information is solely the responsibility of the LA CaTS Center and does not necessarily represent the official views of the NIH.

Continued page 2
utilization. Collectively, the Center has supported over 325 investigators since 2012. Overall, LA CaTS Center investigators have produced 307 peer reviewed (and cited) publications and have secured approximately $44.2M in SPOTLIGHT: REACHnet, OPEN FOR BUSINESS

The Research Action for Health Network (REACHnet) became a formal partner of LA CaTS Center in 2016. Since 2013, REACHnet has been a PCORI-funded clinical data research network (CDRN) that is designed to help Louisiana clinicians and researchers conduct robust comparative effectiveness research with integrated recruitment and data solutions. REACHnet is managed by the Louisiana Public Health Institute (LPHI) and includes the following partner systems:

1. Ochsner Health System
2. Baylor Scott & White Health
3. Tulane University Schools of Medicine and Public Health/Tulane Medical Center (HCA)
4. University Medical Center New Orleans
5. LSU Health Care Services Division – Lallie Kemp Regional Medical Center
6. Partnership for Achieving Total Health (PATH), an organization that administers the Greater New Orleans Health Information Exchange among a network of community-based clinics and hospitals
7. LSU’s Pennington Biomedical Research Center

REACHnet seeks to advance the capacity to conduct efficient clinical research utilizing clinical records for more than 1.7 million active patients and 4 million total patients in Louisiana and Texas by establishing an innovative, health informatics-driven trial management infrastructure for a representative patient population.

REACHnet supports all forms of clinical research, with a specific focus on pragmatic research, which integrates research activities into clinical workflow with minimal disruption to patients, providers, and health systems. REACHnet services include data requests, data linkage, research consulting, recruitment support, regulatory support, and stakeholder engagement.

For more information on how to get involved with REACHnet, please contact a REACHnet Research Coordinator Elizabeth Crull at ecrull@lphi.org.

For more information on REACHnet can be found here: http://www.reachnet.org

THE 411: WHAT’S COMING UP ON THE CALENDAR

1. LA CaTS 2017 Roadmap Scholar Applications-to be released mid-January 2017
2. LA CaTS Junior Investigator Training - February 2-3, 2017 at Tulane University: www.lacats.org/about/news/?ArticleID=353
4. LA CaTS Health Literacy Workshop - March 2, 2017 (1:00pm-3:30pm) at Pennington Biomedical: www.lacats.org/events/health-literacy/
5. LA CaTS Annual Planning Retreat - March 3, 2017 (8:30am-3:00pm) at Pennington Biomedical
6. LA CaTS Education, Mentoring & Career Development Core Annual Retreat & Talk by Dr. Mona Fouad - April 7, 2017
8. LA CaTS External Advisory Committee Site Visit & Meeting - May 15-16, 2017 at University Medical Center (New Orleans)

For more information on our Calendar of Events, please visit www.lacats.org/calendar/. To add an event, contact us at info@LACaTS.org.
ADVANCING THE POSSIBILITIES

A key outcome of the LA CaTS Center is to significantly enhance clinical and translational (CT) research and accelerate research from the bench to bedside to the population. A successful example of a clinical (“bedside”) to population translation of research resulting from interaction with the LA CaTS Center is illustrated in the figure below. Example provided by Dr. Peter Katzmarzyk (Pennington Biomedical), Principal Investigator for LA CaTS pilot project “Community-Wide Health Assessment for West Carroll Parish”.

LA CaTS CENTER ANNOUNCES NEW PILOT PROJECTS

The LA CaTS Center Pilot Grants Program has awarded the 5th round of pilot projects to investigators at New Orleans, Shreveport and Baton Rouge member institutions. *Congratulations to the following awardees:

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Institution</th>
<th>Project Title</th>
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<tbody>
<tr>
<td>Bruce Bunnell, PhD</td>
<td>Tulane University</td>
<td>Adipose stromal cells from obese donors promote tumorigenesis and metastasis of breast cancer</td>
</tr>
<tr>
<td>Tekeda Ferguson, PhD</td>
<td>LSUHSC-New Orleans</td>
<td>A Pilot Study to Improve Patient Outcomes Among Breast Cancer Patients by Increasing Early Detection and Intervention of Cardiotoxicity</td>
</tr>
<tr>
<td>Stephanie Broyles, PhD</td>
<td>Pennington Biomedical</td>
<td>Using a Community-Favored Alternative Research Design to Study How Neighborhoods May Be Promoting Health Disparities</td>
</tr>
<tr>
<td>Randall Mynatt, PhD</td>
<td>Pennington Biomedical</td>
<td>Can carnitine supplementation suppress fructose-induced de novo lipogenesis (DNL)?</td>
</tr>
<tr>
<td>Emily Harville, PhD</td>
<td>Tulane University</td>
<td>Cross-generational cardiovascular risk factors: Bogalusa Daughters</td>
</tr>
<tr>
<td>Lydia Bazzano, MD, PhD</td>
<td>Tulane University</td>
<td>Lifespan cardiovascular exposures and risk of brain injury in the Bogalusa Heart Study</td>
</tr>
<tr>
<td>David Krzywanski, PhD</td>
<td>LSUHSC-Shreveport</td>
<td>Clinical Impact of Ethnic Variation in Mitochondrial Function on Hypertension</td>
</tr>
<tr>
<td>Zhiqiang Qin, MD, PhD</td>
<td>LSUHSC-New Orleans</td>
<td>Developing new ceramide analogs as therapeutic agents against AIDS-related lymphomas</td>
</tr>
<tr>
<td>Daniel Hsia, MD</td>
<td>Pennington Biomedical</td>
<td>Assessment of Unmethylated Insulin DNA with Droplet Digital PCR in Adolescents with Type 2 Diabetes Compared to Adolescents with Type 1 Diabetes and without Diabetes</td>
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THE HEALTH LITERACY CORNER

Low health numeracy is an overlooked problem in clinical research and health care. According to the only national health literacy and numeracy survey to date, 37% of American adults have basic or below health literacy however over half (55%) have limited numeracy skills. In a recent worldwide study by OECH (Convention on the Organization for Economic Cooperation and Development), US adults scored below adults in 23 industrialized countries in numeracy and problems solving skills.

Numeracy is not only an ability to do basic math skills but to understand time, currency, measurement, graphic representation, logic, hierarchies and probability. Patients with diabetes for example, need a variety of numeracy skills for adequate self-management and control of their chronic disease.

Studies by Russell Rothman and Mary Margaret Huizinga with diabetic patients in general medicine and diabetes clinics at Vanderbilt, the University of North Carolina and the VA found health numeracy was linked to worse diabetes knowledge and control. Over 90% of patients in their studies struggled to understand food labels, two thirds had poor estimation of portion sizes, 40% could not calculate carbohydrate intake, over 30% could not dose insulin correctly and 25% could not interpret glucose meter. The investigators found diabetes numeracy skills were associated with self-management, self-efficacy, and A1C.

Americans also struggle with risk communication. Percentages and probability are challenging for many. Approximately half of U.S. adults are unable to calculate a tip. Numeracy in this country is worse than literacy. In a study that was done even among college-educated adults, 20% of them did not know which was worse when you told them that your chance of getting cancer was 1% vs 5% vs 10%.

To contact the Health Literacy core, email literacy@LACaTS.org or request a consultation on SPARC: https://sparc.lacats.org

FEATURED INVESTIGATOR

Matthew D. Woolard, PhD
Assistant Professor
LSU Health Sciences Center-Shreveport
LA CaTS Round 3 Pilot Grant Awardee

Dr. Woolard is an Assistant Professor at Louisiana State University Health Sciences Center-Shreveport in the department of Microbiology and Immunology. He received a Bachelor of Arts degree in the field of Biology from Austin College in Sherman Texas in 1999. He then went to Graduate School at the University of North Texas in Fort Worth and received his Ph.D. in the field of Biomedical Sciences with an emphasis in Immunology in 2004. Dr. Woolard did his Post-Doctoral Fellowship in the laboratory of Jeffrey Frelinger, Ph.D. at the University of North Carolina in Chapel Hill and joined the faculty at LSUHSC-Shreveport in 2009. Dr. Woolard’s laboratory is interested in understanding the influence of lipid synthesis on macrophage function during disease.

Read more about Dr. Woolard & his research: www.lacats.org/news-and-publications/featured-investigators/matthew-woolard/

SENATOR CASSIDY CALLS ON LA CaTS: NEW STATE-WIDE REGULATORY INITIATIVE

At the request of U.S. Senator William Cassidy, the LA CaTS Center Ethics and Regulatory Knowledge Core (ERKC) under the direction of Dr. Cefalu (as PI), was asked to lead a taskforce to undertake IRB facilitation for all Louisiana higher education and research institutions. This was resulting from discussions at a statewide research summit in February 2016 held in New Orleans and attended by Dr. Francis Collins, Director of the NIH, and Dr. France Cordova, Director of the NSF, and Dr. Janet Woodcock, Director of the Center for Drug Evaluation and Research at the FDA. The taskforce’s first workshop occurred on August 12, 2016 and representatives from all the higher education institution IRBs of the state were invited to attend. Overall, 32 individuals representing 23 Louisiana institutions were represented. Representatives from IRBChoice were in attendance to explain the facilitated review and ceded review process through IRBChoice. The ERKC will continue efforts to create a directory of all academic IRB offices in the state of Louisiana. We received letters of support on this initiative from Dr. Cassidy (U.S. Senate) and Dr. Woolley of Research America. As the LA CaTS Center continues, the ERKC will continue to develop the statewide IRB network so that all institutions will be able to communicate on the possibility of expansion of IRBChoice and other reliance mechanisms to all higher education IRBs within the state.
IF YOU ARE USING A LA CATS CENTER RESOURCE, YOU CAN:

- Manage your project information and requests in one central location!
- Request or obtain pricing for research services across LA CaTS Center Institutions!
- Build your budget with budget development tools!
- Create patient visit schedules and indicate source of funding!
- Communicate directly with your service providers!

VISIT OUR WEBSITE: SPARC.LACATS.ORG