

# IN TRANSLATION

Summer 2014

CONNECTICUT INSTITUTE FOR CLINICAL AND TRANSLATIONAL SCIENCE (CICATS) AT THE UNIVERSITY OF CONNECTICUT



## Message from the Director

The summer has been an exciting time at the Connecticut Institute for Clinical and Translational Science (CICATS) at UConn. We introduced the CICATS at UConn Science Café, published the second issue of our historic journal dedicated to issues in health disparities, and watched as investments in investigative research projects begin to yield results. In this issue of *In Translation*, I'm excited to share with you a feature on our innovative Pre-K Program, an overview of our successful pilot grant program and the important work that it supports, and a look into our brand new CICATS Science Cafés.

- **Cato T. Laurencin, M.D., Ph.D.**

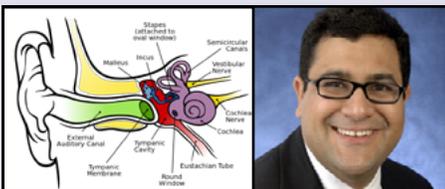


## Featured In This Issue



### CICATS Pre-K Program

A new and exciting interactive learning program designed to equip junior faculty with the knowledge and competencies to effectively apply for an NIH K Award and advance their research career. - **Page 2**



### Pilot Grant Program Spotlight

The CICATS Pilot Grant Award program serves to fund innovative and collaborative translational research projects. Today, we feature Dr. Tulio Valdez's funded research. - **Page 4**



### CICATS Science Cafés

A lively and informal event that engages both the community and scientists in discussions surrounding a scientific topic. - **Page 5**



Also Included:

CICATS at UConn Membership & Kudos - **Page 6**

# CICATS PRE-K PROGRAM

---

CICATS continues to support the career development and mentorship of faculty. Our efforts in training junior faculty to become independent scientists and building the next cohort of leaders in translational science has been our strong focus. Through our Education, Training and Career Development core, we have created a new initiative called the Pre-K program. The Pre-K program is a rigorous two year interactive learning and mentored program that provides 30% of protected research time and a curriculum focused on competencies in developing, writing and submitting an NIH Career Development (K) Award. At the conclusion of the program, scholars will be prepared to submit an NIH K award grant or a Research Project Grant (R01). Through a competitive process, CICATS awarded six Pre-K Scholar awards to faculty that represent UConn Health, UConn-Storrs and Connecticut Children's Medical Center. We congratulate our scholars and wish them much success in their research and career endeavors.

CICATS would like to give a special thank you to our program directors, Drs. [Lori Bastian](#), [Susan Reisine](#), [Anne Kenny](#) and [Julie Robison](#) for their dedication and hard work on creating a groundbreaking program. ■

## MEET OUR SIX 2014 PRE-K SCHOLARS:



### [Alicia G. Dugan, Ph.D.](#)

Assistant Professor, UConn Health, Department of Occupational Medicine

#### *Surviving at Work: Cancer Survivors' Work Experiences and Workplace-based Supports*

Statistically, cancer is more likely to affect older people, and given that the work force is aging, increasingly more employees will face cancer diagnosis and treatment during their working years. Survivors are at increased risk of job loss, unemployment, early retirement, and a variety of unfavorable work-related, psychosocial, and financial outcomes due to their cancer. Dr. Dugan's research will focus on workplace interventions and improving quality of life for cancer survivors.



### [Damion J. Grasso, Ph.D.](#)

Assistant Professor, UConn Health, Department of Psychiatry

#### *Autonomic and Genetic Risk of Trauma-Related Psychopathology in Young Children*

Dr. Grasso's research focuses on early childhood development, stress-related genetic risk, and the nervous system in the context of stress. He will study potential pre-trauma predictors of trauma-related psychopathology in young children with a focus on psychophysiological measures of involuntary nervous system functioning and the genetic risks presented by genes associated with the stress response system.



### [William L. Baker Jr, Pharm.D., FCCP, BCPS](#)

Assistant Clinical Professor, University of Connecticut – Storrs, School of Pharmacy

#### *Magnesium and Arrhythmias*

Dr. Baker's research focuses on the safe and effective use of magnesium with patients with arrhythmias (abnormal heart rhythms). He aims to identify the specific population that will most benefit from magnesium supplement treatments as well as the amount and process that is the easiest and safest to use.

# CICATS PRE-K PROGRAM

---

## MEET OUR SIX 2014 PRE-K SCHOLARS:



### Miranda Lynch, Ph.D.

Assistant Professor, UConn Health, Department of Community Medicine and Health Care Biostatistics Center

*Methods for Using Publicly Available Gene Expression Patient Data to Examine Role of Iron Metabolism in Ovarian Cancer Survival*

Dr. Lynch's research provides a link between the genetic and molecular information available on an individual, and that patient's health and survival outcomes. In particular, her focus is on ovarian cancer, and providing ways to determine and validate how genetic information can be useful in predicting patient outcomes and helping guide their treatment. Thus, her work provides a way of linking information found in experimental and genetic studies of cancer, often stored in large public data repositories, with subsequent patient outcomes.



### Melissa Santos, Ph.D.

Clinical Director, Connecticut Children's Medical Center, the Pediatric Obesity Center for Treatment, Research and Education

*Pain and Weight (PAW) Treatment for Those Inflicted with Chronic Pain and Obesity*

The overarching focus of Dr. Santos' research is to improve treatment outcomes for children and adolescents with obesity. Specifically, she is focused on youth with obesity who present to treatment with comorbid chronic pain. Chronic pain is highly prevalent in obese youth but it is often not assessed nor treated and those with both pain and obesity do not appear to benefit from weight management treatment. Dr. Santos is presently piloting an intervention, incorporating key components from weight management and pain treatments, to target this population.



### Angela Bermúdez-Millán, Ph.D., MPH

Instructor, Oral Health and Diagnostic Sciences, UConn Health, Division of Behavioral Sciences and Community Health

*Social Determinants of Health: Food Insecurity in Low Income Populations*

Dr. Bermúdez-Millán's research interests include the issues of Food insecurity, mental distress, sleep duration and cardio-metabolic risk markers. She has focused her work in the area of community nutrition with a strong interest on maternal and child health among low-income minority groups. Dr. Bermúdez-Millán's current research interests are on stress due to food insecurity and its impact on mental distress, sleep duration and cardio-metabolic risk markers among Latinas of child bearing age.

For more information about the Pre-K program, please visit our [web site](#) or contact Trisha Donaldson, CICATS Administrator, at [tdonaldson@uchc.edu](mailto:tdonaldson@uchc.edu). ■

# PILOT AWARDS *at* CICATS

The CICATS [Pilot Grant Program](#)—under the leadership of Drs. [Linda Barry](#), [Cheryl Oncken](#), [Sandra Weller](#) and [Victor Hesselbrock](#)—encourages, nurtures and provides investigators the initial funding for innovative and collaborative clinical and translational research projects that will improve human health.

Through a competitive process, CICATS awarded eight Pilot Grants to applicants in 2013. To view the list of pilot award recipients and learn more about the program, visit the [pilot program web page](#) or contact [Trisha Donaldson](#), CICATS Administrator. ■

## PILOT SPOTLIGHT: *Tulio Valdez*

[Tulio Valdez](#), M.D., Assistant Clinical Professor of Otolaryngology with the [University of Connecticut School of Medicine Residency Program](#) practices in the field of pediatric otolaryngology at the Connecticut Children's Medical Center (CCMC). Otolaryngology, commonly referred to as Ear, Nose and Throat, is a passion of Dr. Valdez. CICATS awarded Dr. Valdez pilot grant funding to investigate a revolutionary approach to one of the most commonly performed examinations of pediatric patients worldwide: the inner ear exam, or otoscopy.

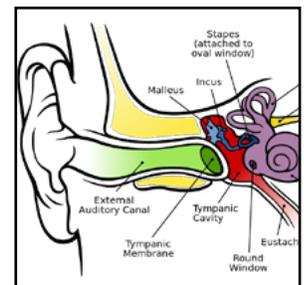
Dr. Valdez's pilot funded research aims to investigate the value of performing otoscopy with multiple wavelengths of light, using new detection methods to see within the tissue of the inner ear and utilizing infrared thermometers to map heat patterns. The imagery and data provided by the multi-wavelength otoscope will be used to develop computer aided identification of inner ear anatomy.

Traditionally, white light is emitted while using an otoscope and physicians are trained to look for a number of features. For instance, one indication of ear drum inflammation is the appearance of the Cone of Light, a reflection that indicates the shape of the tissue. By utilizing multiple wavelengths, auto-illumination and infrared capture, Dr. Valdez and his team are in the midst of transforming the otoscopy procedure. Their work has the potential to lead to more rapid and accurate diagnosis.

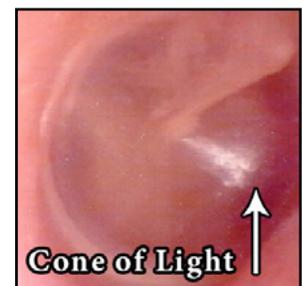
Dr. Valdez spoke of the importance of his pilot award, "I am thankful for the CICATS pilot grant program because it provided us with an opportunity to take a project from idea to a reality. With their help, we were able to develop a prototype and acquire pilot data. The CICATS pilot award is a great resource for young investigators to help initiate their investigative careers. It also encourages collaborations between the different campuses of UConn. I believe further collaboration between the two campuses will make us a stronger research University and CICATS is leading the way in developing these collaborations." ■



**Tulio Valdez, M.D.**,  
Assistant Clinical Professor,  
Pediatric Otolaryngology  
UConn School of Medical  
Residency Program



*Anatomy of the inner ear.*



*The light reflex or "cone of light" appearing during examination of the ear drum.*



## CICATS at UConn Science Cafés

CICATS has introduced a new feature event called the Science Café. These events address different research topics in a fun and informal way, creating a comfortable atmosphere where everyone joins in. Through lively discussions and activities the Science Cafés promote innovative thought, networking and collaboration. The first Science Café was held in June at the Connecticut Science Center in Hartford, CT. The program included presentations from leaders of three CICATS [Core Interest Groups](#) (CIG), an open discussion segment with refreshments and a visit to the “Mindbender Mansion,” a featured exhibit of the science center.

Presenters at the Café were Dr. [George Kuchel](#), who leads the Aging Research CIG, Dr. [Amy Gorin](#), who leads the Multidisciplinary Obesity Research CIG and Dr. [Jennifer Cavallari](#) who presented for the Occupational Health Research CIG.

Dr. Kuchel spoke about the 2014 UConn-Jackson Laboratory Aging Symposium that was held in March at UConn’s Storrs Campus. The symposium included 37 presentations over two days, with topics including research resources, conditions related to aging, novel interventions, and the role of technology in the promotion of healthy and independent aging. Dr. Cavallari talked about the “Occupational Health Forum” organized as an effort to expand the membership of the Occupational Health CIG and foster new collaborations and grant applications among researchers. Dr. Gorin presented on the Obesity Research CIG’s successful use of “Speed Research Dating” that gave researchers 2 minutes to present 1 slide summarizing their obesity research interests as a way to network with potential research collaborators.

Attendees to the Science Cafe were able to learn of the different approaches each Core Interest Group had taken in member recruitment, community engagement and the organization of events.

With the first Science Café proving to be a successful mixture of science and fun, CICATS will support a reoccurring series of Science Café events where attendees can collaborate on innovative research projects in an informal social setting. In the coming months new Science Cafés will be announced.

To be notified of our upcoming events, contact [Lana Angelo](#), Administrative Program Coordinator or check for announcements at the [CICATS website](#). ■



# Become a Member

## Enjoy the Benefits of a CICATS Membership

Membership includes networking opportunities, newsletters, notification of conferences and seminars, CICATS member listserv, grant announcements, and access to research tools and services.

CICATS can also help you:

- Find researchers to collaborate with on a project
- Get statistical support grant proposal and technology development consultation
- Ensure that your research meets regulatory requirements for involving human subjects
- Find funding opportunities for your research project and
- Learn about advances in clinical and translational research from bench to the community

To inquire about becoming a CICATS member, please contact [Luke Bacewicz](#), our Web & Marketing Associate.



## CICATS

## KUDOS

*Here we celebrate the accomplishments and achievements of those who advance our fields and thank individuals and organizations for their efforts.*

[Biree Andemariam](#), M.D., Assistant Professor, Department of Medicine and leader of the Sickle Cell Core Interest Group presented information on Sickle Cell Disease, its treatment and advances to attendees of the United League of Greater Hartford's Family Day & Back to School Cultural Festival. Also presenting were representatives of the Obesity Core Interest Group led by [Amy Gorin](#), Ph.D., Associate Professor, Department of Psychology. [Awanthi Warnasooriya](#) and [Dominica Hernandez](#) shared information about Obesity Prevention, Weight Loss and Healthy Lifestyles.

[Linda Barry](#), M.D., Chief Operating Officer and Assistant Director, CICATS at UConn and Assistant Professor of Surgery, moderated a networking and mentor relationship workshop and also had a speaking engagement on surgical residency at the [5th Annual International Women in Surgery Career Symposium](#).

## Keep In Touch

Please let us know what events are happening within and around our fields so that we may help share them here and online and don't forget to share the achievements of your institutions and partners for possible inclusion in our Kudos section. Any suggestions or inquiries regarding this newsletter may be directed to [Luke Bacewicz](#), CICATS Web & Marketing Associate.