



## CENTER FOR CLINICAL AND TRANSLATIONAL SCIENCE

August 2016 Volume 2, Issue 8

### NEWS

#### Small Conference Grants are Available!

Sally Gore, MS, MSLIS

Research Evaluation Analyst, UMCCTS

(with contributions from Drs. Sherry Pagoto and Ed Boudreaux)

The UMass Center for Clinical and Translational Science (UMCCTS) offers [Small Conference Grants](#) (SCG) designed to leverage the convening capacity of the UMCCTS to create new, multidisciplinary teams to address a pressing health need. The conference can be a symposium, educational program, seminar, workshop, or any other organized and formal meeting. The goal of the SCG is to facilitate networking opportunities between faculty that focus on clinical and translational research.

One example, the [UMass Center for mHealth and Social Media](#) used a SCG to host a 3-day Hackathon to catalyze mHealth research between UMass researchers and local academic partners. The focus was on developing novel approaches to tobacco use and obesity, two of the most significant causes of death and disease burden in the U.S. The Hackathon generated several pilot projects producing data now being analyzed for publications and grant applications. One of the most interesting things to come out of the Hackathon was the development of the app, "Slip Buddy." It allows users to hit an "OOPS!" button on their mobile device whenever they find themselves overeating. The result is that individuals are able to track patterns associated with this behavior including stress, sleep, time of day, or location. Results of the "Slip Buddy" pilot have been submitted to a conference, as well as written up for publication.

*Our Hackathon was fantastic. In fact, we would love to do another. Getting investigators from vast backgrounds including engineering, computer science, mathematics, medicine, and behavioral science into one room to discuss a clinical problem led to novel solutions that none of us could have come up with alone. I now regularly collaborate with the folks who came and we have several ongoing projects together.*  
~ Sherry Pagoto, PhD, Hackathon Co-organizer

A Small Conference Grant also helped UMass Memorial Health Care and UMass Medical School catalyze and focus its suicide prevention efforts. Together, the institutions have formed a collaborative effort aimed at building a systems-based approach to suicide prevention referred to as the System of Safety (SOS). The first day of the conference was held in July and helped to set the tone for the SOS effort. Outside speakers from the MA Department of Public Health and the Suicide Prevention Resource Center provided background and context. Three breakout workgroups followed, focusing on helping to identify the "current state" for suicide risk screening, management, and prevention across the UMMHC emergency departments, inpatient units, and primary care practices. Action items were generated that are being fulfilled by the three workgroups. A future second day is scheduled to review the action item progress, including reviewing the more detailed "current state" maps. Day 2 will conclude with brainstorming an "ideal state" and building action items to move from the current to ideal state.

*The CTSA conference funding has made the SOS better prepared to compete for and receive extramural funding to support its efforts. It allowed us to bring together our diverse stakeholders, who are geographically dispersed and who have heretofore only collaborated in "virtual space," to meet in a common physical space with dedicated time to devote to the effort.*

~ Ed Boudreaux, PhD, Conference Organizer

If you have an idea for an event that a SCG could help fund, visit the UMCCTS website under [Funding](#) for more information and RFA, or contact [Nate Hafer, PhD](#), UMCCTS Director of Operations.

## DID YOU KNOW?

### Ethical Dilemmas in Scientific Research and Professional Integrity



The [Atlanta Clinical & Translational Science Institute](#) would like to share their Ethical Dilemmas in Scientific Research and Professional Integrity website, video and podcast with each CTSA and beyond.

This webpage presents 40+ case scenarios involving responsible conduct in research. Each case is followed by a brief, expert opinion that suggests strategies for resolution. These resources have proven useful as teaching aids and are broadly relevant across the research spectrum.

- [Ethical Dilemmas in Scientific Research and Professional Integrity Website](#)
- [Ethics of Authorship in Research Video](#)
- [Ethics Podcast in Research: Reproducibility](#)

**Questions or comments?** Please email [Elizabeth Pittman Thompson](#), Director of Communications, Atlanta Clinical & Translational Science Institute (ACTSI), Emory University, Atlanta, GA

## EVENTS



### August 2016 Events

#### Human Research Protection Program (HRPP) Upcoming Educational Opportunities

#### Clinical Research Professionals Group (CRPG) Meetings:

**Friday, August 19, 2016**

10:00 - 11:00 am

Hiatt Auditorium, S1-608, UMMS, Worcester

**Wednesday, September 14, 2016**

12:00 - 1:00 pm

Albert Sherman Center, ASC7-2072-7th floor conference room, UMMS, Worcester



[Learn More](#)

#### HIPAA and Human Subjects Research

Please save the following dates for an exciting panel discussion series on HIPAA and Human Subjects Research.

**Wednesdays, Amphitheater I, S2-102, UMMS, Worcester**

**November 2, 2016**

**November 9, 2016**

November 16, 2016

8:00 - 9:00 am

November 30, 2016

12:00 - 1:00 pm

## Research Coordinator Trainings

The Basic and Intermediate Clinical Research Coordinator trainings will not be offered during the summer months, but stay tuned for upcoming dates in the fall of 2016!

Questions? Please email [HRPEducation@umassmed.edu](mailto:HRPEducation@umassmed.edu)



## Team Science Webinar Series



### Peter Reinhart, PhD

Director, Institute for Applied Life Sciences  
Clinical Professor, Biochemistry and Molecular Biology  
University of Massachusetts Amherst

### "Translating Basic Discoveries into Applied Technologies and Product Candidates at the Institution for Applied Life Sciences"

Monday, August 29, 2016

11:00 am - 12:00 pm

WEBINAR

This presentation will provide an overview of the newly formed [Institute for Applied Life Sciences](#) (IALS) at UMass Amherst, and discuss learnings and challenges faced implementing a biotech-like 'team science' approach within an academic setting.

The Institute seeks to translate life science research into technologies and product candidates that improve human health. Furthermore, IALS will train an entrepreneurial workforce skilled in the discovery, development, and manufacture of medical devices, biomolecules, and delivery vehicles for the life sciences. This vision will be achieved by bringing together faculty from many different departments working in collaboration with industry partners - requiring a 'team science' approach. IALS is a multidisciplinary organization spanning numerous colleges and schools, combining the deep expertise coming from more than 25 departments to fulfill its mission. The Institute, currently consisting of more than 150 UMass faculty members, is organized into three Centers:

- **Center for Bioactive Delivery (CBD)**, seeks to deliver the right drug to the right place. This is achieved by creating novel delivery technologies for small and large molecules. These technologies are then optimized to deliver compounds to specific organs as unique biomolecule/vehicle pairs.
- **Models to Medicine Center (M2M)**, will identify novel drug targets and therapeutic strategies by leveraging mechanistic insights from molecular pathways implicated in cell health and disease. These insights will provide the next generation of therapeutics for a range of diseases with huge unmet patient needs.
- **Center for Personalized Health Monitoring (CPHM)**, seeks to be a world-leading research, partnership, and demonstration facility for accelerating the commercialization of low-cost, multi-function, autonomous, intelligent sensor systems for personalized health care and biometric monitoring. These sensors, and the data they generate, will keep people healthier and contribute to establishing the efficacy of new therapeutics.

IALS is product-focused, interdisciplinary, collaborative, outward-looking, and entrepreneurial.

[Register now](#) for this educational and informative webinar!

For past UMCCTS Team Science Webinar Series presentations - please [click here](#).



## The Digital Health and IoT Journey On the Road to Personalized Medicine and Better Health

Monday, September 12, 2016  
8:15 am - 3:00 pm  
Worcester Polytechnic Institute  
Rubin Campus Center  
100 Institute Road, Worcester, MA 01609

The program will consist of speaker presentations, interactive panels, and lunchtime networking with demos, posters, and exhibitor areas. We invite technology companies, investors, and other organizations focused on innovation in the healthcare industry to sponsor the forum and/or demo your product/technology. Please contact [wpihdi@wpi.edu](mailto:wpihdi@wpi.edu) for more information about sponsorship or demo space.

[Register today!](#)

This MassTERi event is sponsored by the UMMS Office of Innovation and Business Development and the UMass Center for Clinical and Translational Science.



### Robert Hindes, MD

Chief Medical Officer and Co-Founder, TREK Therapeutics, PBC  
Pharma experience includes, BMS, Pharmasset, BeyondWest Pharma

### Clinical Trials: It Doesn't Need to be the "Same Old, Same Old"

Wednesday, September 21, 2016  
Faculty Conference Room, S1-342  
University of Massachusetts Medical School

4:00-5:00 pm - Lecture and Case Study  
5:00-5:30 pm - Networking (refreshments served)

Lecture and Case Study: This lecture will describe the familiar pre IND>>IND>>ph1>>ph2>>ph3>> NDA route for drug development in the U.S. The system is famous for being formulaic and slow to respond to new developments. Difficult questions will be discussed including whether placebo controlled studies are ethical, who should take the risk in compassionate access programs for desperate treatments seeking access to unapproved drugs and issues related to study size, market size and biomarkers. Dr. Hindes will describe examples where the FDA changed their approach in response to data and public pressure.

**This event will be a great opportunity for networking and collaboration too!**

[Register today!](#)

### Upcoming MassTERi Education Seminars:

10/20/16

*Pharmaceutical Innovation: Why Do Innovative Drugs "Die" Along the Way?*

11/17/16

*Structure Activity Relationship (SAR): Moving the Goal Posts*

The [UMass Center for mHealth and Social Media](#) invites you to attend the **webinar**, hosted by the Mayo Clinic and Vanderbilt University Medical Center,



## "The New Social Media Playbook"



Shaw Building  
419 Belmont Street, 2nd floor conference room #1  
Worcester, MA 01605

Due to popular demand, **Lee Aase, Director, Center for Social Media, Mayo Clinic** and **Cynthia Floyd Manley, Director, Content Strategy, Vanderbilt University Medical Center**, are back to discuss which key platforms are still making an impact, leveraging social technologies to improve patient experience and drive engagement, optimizing your resources to ensure consistent brand messaging, and reviewing the platforms of the future-and which are on the way out.

Please [RSVP](#) by 9/14/16 as space is limited. This webinar will be a streaming live event.



## The Diabetes Innovation Challenge Semi-Finalist Presentations

Please join us for The Diabetes Innovation Challenge qualified semi-finalist translational project presentations.

Thursday, September 29, 2016

4:00 pm

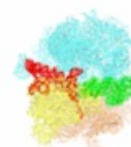
Albert Sherman Center Auditorium (2nd floor), UMMS, Worcester

The Diabetes Innovation Challenge is brought to you by the [T1D Exchange](#) and the [Massachusetts Medical Device Development Center](#) (M2D2) at UMass. The Challenge offers medical device and biotech entrepreneurs the chance to win in-kind awards and receive critical early and later-stage validation of their ideas and products specific to Type 1 and Type 2 diabetes. The Diabetes Innovation Challenge is a proposal- and presentation-based competition for small companies in the T1 and T2 space that are making real progress towards better outcomes for those diagnosed.

[Read More](#)



## Massachusetts Facility for High-Resolution Electron Cryomicroscopy GRAND OPENING



**Tuesday, October 4, 2016**  
**1pm – 4:30pm, AS2- 2102 Auditorium**



**Sriram Subramaniam, Ph.D.**  
Chief, Biophysics Section  
Laboratory of Cell Biology  
National Cancer Institute (NCI)  
National Institutes of Health (NIH)



**Daniela Nicastro, Ph.D.**  
Associate Professor of Cell Biology and Biophysics  
University of Texas Southwestern Medical Center



**Nikolaus Grigorieff, Ph.D.**  
Howard Hughes Medical Institute  
Group Leader, [Janelia](#) Research Campus



**Stephen C. Harrison, Ph.D.**  
Giovanni Armenise-Harvard Professor in Basic  
Biomedical Science, Harvard Medical School  
Investigator, Howard Hughes Medical Institute

For more information contact: The Office of Research 508-856-1572

[Register today!](#)

## Harvard Catalyst Education Program

### Using Metabolomics Data in Network Medicine

November 14, 2016

Sheraton Commander Hotel, Cambridge, MA



**HARVARD  
CATALYST**

THE HARVARD CLINICAL  
AND TRANSLATIONAL  
SCIENCE CENTER

Harvard Catalyst is now accepting applications for *Using Metabolomics Data in Network Medicine*, a one-day module that will focus on metabolomics data and the analytical challenges this type of data presents.

Applications close: Friday, September 16, 2016

[Read More](#)



The Department of Microbiology and Physiological Systems Presents...

## 17<sup>th</sup> Fred Fay Lecture

Wednesday, October 26, 2016

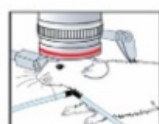
3:00 p.m.

Albert Sherman Center Auditorium  
AS2.2102, 2nd Floor



**Stefan W. Hell, Ph.D.**

Professor and Director  
NanoBiophotonics Department  
Max Planck Institute for Biophysical Chemistry  
Göttingen, Germany

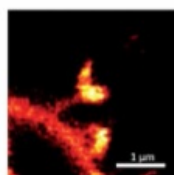


in living mouse brain

STED



Cortical neurons expressing  
cytoplasmic EYFP



Berning et al, Science (2012)



Hell, S.W. Nanoscopy with Focused Light (Nobel Lecture). *Angew. Chem. Int. Ed. Engl.* 54(28):8054-8066, 2015

Figure 11. STED nanoscopy in living mouse brain. The recording shows a part of a dendrite of a neuron expressing a yellow fluorescent protein (EYFP) in the cytosol, thus highlighting the neuron amidst surrounding (nonlabeled) brain tissue. The 3-4-fold improved resolution over confocal and multiphoton excitation fluorescence microscopy reveals the dendritic spines (encircled) with superior clarity, particularly the cuplike shape of some of their terminals containing the receiving side of the synapses.

Lukinavicius, G., Reymond, L., Umezawa, K., Sallin, O., D'Este, E., Gottfert, F., Ta, H., Hell, S.W., Urano, Y. and Johnsson, K. Fluorogenic probes for multicolor imaging in living cells. *J. Am. Chem. Soc.* 138(30):9365-9368, 2016

Ta, H., Keller, J., Haltmeier, M., Saka, S.K., Schmied, J., Opazo, F., Tinnefeld, P., Munk, A. and Hell, S.W. Mapping molecules in scanning far-field fluorescence nanoscopy. *Nat. Commun.* 6:7977 doi: 10.1038/ncomms8977 (2015).

## FUNDING and TRAINING OPPORTUNITIES



### World Without Disease QuickFire Challenges

Johnson & Johnson Innovation and Janssen Pharmaceuticals, Inc., are looking for the best idea, technology or solution to **award \$500,000**. The JLABS QuickFire Challenges are competitions designed to attract game-changing, early-stage innovation in the therapeutics, consumer, health technologies and medical device sectors.

Winners will be awarded a variety of prizes (including cash and/or lab space), benefit from world-class lab facilities, be supported by an onsite team and have access to a global network of industry experts and programming.

Deadline to apply: Wednesday, August 31, 2016

[Learn More](#)



### PCORI - Pragmatic Clinical Studies to Evaluate Patient-Centered Outcomes - Cycle 3 2016

PCORI seeks to fund pragmatic clinical trials, large simple trials, or large-scale observational studies that compare two or more alternatives for addressing

prevention, diagnosis, treatment, or management of a disease or symptom; improving healthcare system-level approaches to managing care; communicating or disseminating research results to patients, caregivers, or clinicians; or eliminating health or healthcare disparities.

Proposed studies must address critical clinical choices faced by patients, their caregivers, clinicians, or delivery systems. They must involve broadly representative patient populations and be large enough to provide precise estimates of hypothesized effectiveness differences and to support evaluation of potential differences in treatment effectiveness in patient subgroups.

**Letter of Intent (LOI) Deadline: Wednesday, September 14, 2016**

[Learn More](#)

## The Alfred P. Sloan Foundation Sloan Research Fellowships



The **Alfred P. Sloan Foundation** is now accepting nominations for Sloan Research Fellowships in eight fields: chemistry, computational and evolutionary molecular biology, computer science, economics, mathematics, neuroscience, ocean sciences, and physics.

These **two-year, \$60,000 fellowships** are awarded annually to 126 early-career faculty in recognition of their distinguished performance and exceptional potential as researchers.

**Nominations and other supporting material are due online: Thursday, September 15, 2016.**

[Read More](#)



Health Resources in Action  
*Advancing Public Health and Medical Research*

## Charles H. Hood Foundation Child Health Research Awards Program

The intent of the Award is to support newly **independent faculty**, provide the opportunity to demonstrate creativity, and assist in the transition to other sources of research funding. **Research projects must be relevant to child health.**

**Deadline date: Monday September 19, 2016**

[Learn More](#)

## Pfizer's Centers for Therapeutic Innovation (CTI) Fall 2016 Call for Proposals

Pfizer's CTI is a unique program that collaborates with leading academic medical centers (i.e. UMass), the NIH, and foundations to speed the translation of novel targets to the clinic.



Pfizer's CTI is now accepting proposal applications for the following:

- [Biotherapeutic and Small-Molecule Targets](#)
- [Alzheimer's Disease](#)
- [Lupus and Immunometabolism](#)
- [Crohn's and Colitis Disease](#)

**Pre-Proposal Deadline: Friday, October 7, 2016**

## Pfizer's Centers for Therapeutic Innovation (CTI) and the Jeffrey Modell Foundation (JMF) Call for Proposals - Fall 2016



Jeffrey Modell  
Foundation



Centers for Therapeutic Innovation  
A Pfizer-supported collaboration

Pfizer's CTI and the JMF seek to identify and fund novel research projects that have the potential to benefit patients with **Primary Immunodeficiency**. Pfizer's CTI and JMF will jointly sponsor and fund (**\$150,000 - \$250,000**) selected, novel research projects that increase understanding of immune regulatory pathways with potential implications for Primary Immunodeficiency.

**Submission Deadline: Friday, October 7, 2016**

[Learn More](#)

## National Science Foundation 2017 Alan T. Waterman Award



The National Science Foundation (NSF) is pleased to accept nominations for the 2017 Alan T. Waterman Award. Each year, the Foundation bestows the Waterman Award in recognition of the talent, creativity, and influence of a singular young researcher.

Nominees are accepted from all sources, and from any field of science and engineering that NSF supports. The award recipient will receive a medal and an invitation to the formal awards ceremony in Washington, DC. In addition, **the recipient will receive a grant of \$1,000,000 over a five-year period** for scientific research or advanced study in any field of science or engineering supported by NSF, at any institution of the recipient's choice. We are especially interested in nominations for women, members of underrepresented groups in science and engineering, and persons with disabilities.

**Application packets are due by Friday, October 21, 2016.**

[Read More](#)



### NIH Science of Behavior Change: Use-inspired Basic Research to Optimize Behavior Change Interventions and Outcomes PA-16-334

The goal of this funding opportunity announcement is to test how and why behavior change interventions produce and sustain desired outcomes when implemented in experimental, clinical, community or population-level settings.

Please contact [Nate Hafer](#) if interested in applying.

**Deadline date: November 10, 2016**

[Learn More](#)

### NIH Limited Competition: Exploratory CTSA Collaborative Innovation Awards (R21) PAR-16-343

The purpose of this funding opportunity announcement is to support highly innovative, exploratory, collaborative research projects in the NCATS' Clinical and Translational Science Award (CTSA) program, with the goal of assessing utility and feasibility of proposed innovation(s).

Please contact [Nate Hafer](#) if interested in applying.

**Deadline date: Rolling deadlines**

[Learn More](#)

### NIH Limited Competition: Administrative Supplements to Enhance Network Capacity: Collaborative Opportunities for the CTSA Program (Admin Supp) PA-16-328

NCATS announces the availability of funds for Administrative Supplements to enhance network capacity in the Clinical and Translational Sciences Awards (CTSA) program. These funds are intended to enhance network capacity through implementing, assessing, and/or disseminating discoveries in methods, approaches, education, and training in clinical and translational science. Funds will allow investigators from two or more different CTSA hubs to form collaborations within the CTSA network and/or with external partners to implement, assess, and/or disseminate discoveries from across the network. These activities



must be within the scope of the approval aims of the parent award and provide significant advances across the translational science spectrum.

Please contact [Nate Hafer](#) if interested in applying.

**Deadline date: Rolling deadlines**

[Learn More](#)

## University of Massachusetts Medical School Transdisciplinary Training in Cardiovascular Research (T32)



UMass has a cardiovascular T32 training grant entitled "**Transdisciplinary Training in Cardiovascular Research**" under the direction and senior leadership of Drs. Catarina Kiefe and John Keaney. The program represents a wonderful opportunity for the institution to promote the entire spectrum (T0-T2+) of cardiovascular research on our campus. We are writing to request applications from trainees who wish to become part of this exciting program at the postdoctoral level. New trainees will join 4 other current trainees in the program.

**Eligibility:** Please see <http://grants.nih.gov/grants/guide/pa-files/PA-14-015.html>

**Duration of support:** Funding for two years of support provided. Trainees may apply for an additional year.

**Amount of support:** Based upon the NIH stipend schedule as outlined in the link below. Faculty sponsors may, at their discretion and with department and institutional approval supplement the NIH stipend, but only from a non-federal, non-sponsored funding source.

<http://grants.nih.gov/grants/guide/notice-files/NOT-OD-15-048.html>

**Proposals are accepted on a rolling basis.**

[Learn More](#)



Please remember to cite the CTSA Grant # UL1-TR001453 in all supported journal publications.

The UMass Center for Clinical and Translational Science (UMCCTS) was founded in 2006 to enhance clinical and translational research across the five University of Massachusetts campuses and our clinical partner, UMass Memorial Health Care. With the receipt of an NIH Clinical and Translational Science Award (CTSA) in 2010, and its successful renewal in 2015, the UMCCTS joined a network of 62 NIH-funded centers collaborating to transform the conduct of clinical and translational research across the U.S. Other key partners include our patients and communities, foundations, biotechnology and pharmaceutical companies, and members of the venture capital and philanthropic communities.

We encourage you to browse through our [website](#) to learn more about how the UMCCTS catalyzes clinical and translational research through education and training, pilot funding programs, cores, services and collaboration.

