UMMS RESEARCH IDENTIFIES POTENTIAL ANTIVIRAL COMPOUND FOR COVID-19, FLU, OTHER VIRAL INFECTION

BY JIM FESSENDEN
UMASS MEDICAL SCHOOL COMMUNICATIONS
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"IDENTIFYING ANTIVIRAL THERAPIES FOR SARS-COV-2 IS STILL DESPERATELY NEEDED WHILE VACCINES CONTINUE TO ROLLOUT WORLDWIDE," SAID DR. FITZGERALD, THE WORCESTER FOUNDATION FOR BIOMEDICAL RESEARCH CHAIR, PROFESSOR OF MEDICINE, VICE CHAIR OF RESEARCH IN THE DEPARTMENT OF MEDICINE AND DIRECTOR OF THE PROGRAM IN INNATE IMMUNITY. "AN APPROACH LIKE THIS, USING A STING AGONIST, COULD BE DEPLOYED TO PROTECT THOSE AT HIGHEST RISK IN THIS PANDEMIC BUT ALSO IN FUTURE PANDEMICS BEFORE WE HAVE DRUGS THAT TARGET THE VIRUS ITSELF." FITZGERALD AND DR. GALIA, A POSTDOCTORAL ASSOCIATE IN THE FITZGERALD LAB, ARE AUTHORS ON THE PAPER.

FULL ARTICLE

RESEARCH PAPER

EVENTS

NHLBI WORKSHOP: THE PROMISE OF NHLBI DATA SCIENCE
JULY 20-21ST

During this workshop, experts in big data, health, and computer science will provide early-, mid- and late-stage investigators, as well as graduate students, opportunities to:

1. Address knowledge gaps in understanding and utilizing NHLBI health datasets (e.g., BioData Catalyst)
2. Understand the value of collaborations between domain experts and computer scientists, engineers, and statisticians
3. Participate in a needs assessment to ensure diverse participation in HLBS data science

Register: https://www.nhlbi.nih.gov/events/2021/nhlbi-workshop-promise-nhlbi-data-science

UMCCTS: INNOVATION & COLLABORATION

“Our ultimate goal is to improve health and health care delivery...We do that by catalyzing new ways of doing translational science, facilitating trans-disciplinary team formation, supporting teams in their work through provision of services and funding, and educating the next generation of translational researchers.”

- Dr. Katherine Luzuriaga
Director UMCCTS
UMASS NEWS
RFA-OD-21-009 – (Released April 13, 2021) Emergency Award: RADx-UP - Social, Ethical, and Behavioral Implications (SEBI) Research on Disparities in COVID-19 Testing among Underserved and Vulnerable Populations (U01 Clinical Trials Optional)
  - This Phase II RADx-UP Funding Opportunity Announcement (FOA) is designed to expand research to understand and address the social, ethical, and behavioral implications (SEBI) of COVID-19 testing interventions among underserved and vulnerable populations. Desirable studies for Phase II will move beyond descriptive health disparities research to focus on developing interventions and other actionable solutions in collaboration with community partners and stakeholders.
  - Due Date: July 7, 2021

RFA-OD-21-008 – (Released April 13, 2021) Emergency Awards: Community-engaged COVID-19 Testing Interventions among Underserved and Vulnerable Populations- RADxSM-UP Phase II (U01, Clinical Trial Optional)
  - This funding opportunity announcement (FOA) uses an emergency U01 mechanism to support Phase II of the Rapid Acceleration of Diagnostics – Underserved Populations (RADxSM-UP) initiative. These two-year Testing Research Projects will (1) expand the scope and reach of RADxSM-UP testing interventions to reduce COVID-19 disparities among underserved and vulnerable populations and (2) address scientific questions on interventions to increase access and uptake of COVID-19 testing given the increasing availability of SARS-CoV-2 vaccines
  - Due Date: July 7, 2021

Congratulations to our scholars who have recently published their research findings!

Doctorial Student, Deborah Mack’s findings were featured in Drugs and Aging. Her work on National Trends in Statin Use among the United States Nursing Home Population (2011-2016) brings her one step closer to her goal of informing public health policy and lowering medical costs for the elderly.
The Massachusetts eHealth Institute at MassTech is seeking digital health startups with solutions for unpaid family caregivers to compete in the Massachusetts Digital Health COVID-19 Recovery Challenge. The Challenge is focused on finding solutions for unpaid caregivers who provide support to loved ones outside of traditional child rearing.

Challenge finalists will compete for prizes worth $250,000.

The COVID-19 pandemic has heightened our awareness of the critical role family caregivers play in our society and the ways they impact our healthcare system and the overall economy. Through the support of the U.S. Department of Commerce’s Economic Development Administration and their SPRINT Challenge Grant, we launched this Challenge to uncover digital health solutions that can support these caregivers by helping them return to work or to face challenges that were exacerbated by the pandemic. For more information visit, https://massdigitalhealth.org/covidchallenge.

Undergraduate engineering majors at UMass Lowell complete a senior design project (two semester course) as a capstone to their degree. The purpose of this course is to give students skills in carrying out a project in a multidisciplinary team for a designated client, just as practicing engineers. This project requires the integration of skills developed throughout their undergraduate studies to solve the problems defined in the project. The developed solution(s) in this major design experience must adhere to engineering standards as well as the problem’s constraints. The solution must consider all relevant economic, sustainable, ethical, social, environmental, health and safety, political, and legal issues, as they pertain to the problem. These factors should be addressed and documented as appropriate. Thus, students also acquire additional experience in delivering presentations and technical writing. For more information visit, https://www.umassmed.edu/ccts/education/preparing-engineers-for-professional-practice.pdf.
RESEARCH TOOLS & SERVICES

INTRODUCING THE LIFE COURSE VISUAL TOOLKIT

The innovative NCATS Life Course Research Visual Toolkit was created to advance the recommendations outlined in, Charting the Life Course: Emerging Opportunities to Advance Scientific Approaches Using Life Course Research. The Life Course Research Visual Toolkit serves to increase knowledge about innovative life course research methods by providing content that is widely available and accessible to trainees and researchers across multiple disciplines. The archive includes 6 full webinars with more than 15 national and international experts and 32 shorter education skills building videos can be found here: https://tinyurl.com/NCATSLifeCourseToolkit.

UMCCTS COMMUNITY ENGAGEMENT STUDIO

A structured guidance session that engages community members, patients, and other non-academic stakeholders in biomedical and clinical research, where they may serve as expert consultants and provide feedback from a community perspective to enhance the relevance and utility of research projects.

More Information

UMCCTS BIOREPOSITORY

The UMCCTS Biospecimen, Tissue, and Tumor Bank (Biorepository) is an open access biorepository that supports investigators in patient-oriented research. Specifically, the Biospecimen and Tissue Bank provides services that help UMass and external investigators to obtain, store, and study high quality human research-related specimens, while maintaining patient confidentiality.
Thank you to all of our UMASS scholars who participated in the 2021 Projects in Process Seminar Series this spring! In all twenty-seven scholars presented their work to colleagues and mentors.

For those of you that were unable to join us, we will highlight a few of their presentations over the upcoming issues of the newsletter. Dr. Stephanie Carreiro, a Millennium PhD scholar, presented on her findings, titled Wearable Sensors to Detect Digital Biomarkers of Opioid Use. She aims to use sensor profiles to model opioid use in outpatient settings, identify the onset of tolerance to the drug, and determine if a wearable sensor is a viable intervention for those experiencing Opioid Use Disorder. For more information, see her most recent publication in the Journal of Psychiatry and Brain Science.
SHARE YOUR SUCCESS STORY!
Have you had your research published that cites the UMass Center for Clinical and Translational Science? Has your patent been filed on technology developed using Center funding or resources? Did your pilot project receive external grant funding? Share it with us at ccts@umassmed.edu. Sharing your success demonstrates the importance and effect of the Center for Clinical and Translational Science at UMass.

NEWSLETTER SUBMISSIONS
To be included in the CCTS Monthly Newsletter, please send announcements, including a link, to ccts@umassmed.edu. The newsletter is published the first week of each month.

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CITE & SUBMIT
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