UMASS CHAN MEDICAL SCHOOL RESEARCHERS ARE EMBARKING ON A CLINICAL TRIAL OF AN MRNA VACCINE BY MODERNA AGAINST THE EPSTEIN-BARR VIRUS (EBV), A COMMON CAUSE OF INFECTIOUS MONONUCLEOSIS. EBV HAS ALSO BEEN ASSOCIATED WITH SEVERAL AUTOIMMUNE DISORDERS AND HAS BEEN IMPLICATED IN THE DEVELOPMENT OF SEVERAL CANCERS, INCLUDING BURKITT AND HODGKIN'S LYMPHOMAS.

THE STUDY, CALLED THE ECLIPSE TRIAL, IS A RANDOMIZED, OBSERVER-BLIND, PLACEBO-CONTROLLED, DOSE-RANGING PHASE I CLINICAL TRIAL IN 18- TO 30-YEAR-OLD HEALTHY ADULTS. STUDY PARTICIPANTS WILL BE RANDOMLY ASSIGNED TO ONE OF FOUR ARMS: ONE FOR EACH OF THREE DOSES OF THE INVESTIGATIONAL VACCINE AND ONE PLACEBO.
The UMass Center for Clinical and Translational Science (UMCCTS) supports two types of clinical research training award programs, the TL1 and K awards, with funds derived from the National Institutes of Health. The TL1 program provides pre- and post-doctoral trainees with an overview of clinical and translational research, and the K program offers scholars who have already completed an MD or PhD program with training, mentorship and research opportunities needed to launch a career as an independent investigator. The scholars and trainees benefit from the training programs, equipment, databases, mentors, administrative support, and pilot funding opportunities available here at UMass. During our recent Projects in Process Seminar Series (PiPSS), K scholar Dr. Daniel Amante, and TL1 trainee Zach Dyer provided an update on their projects.

Daniel Amante is mentored by Dr. Ben Gerber. His project is titled “DM-BOOST: a Diabetes Mellitus program using Behavioral economics to Optimize Outreach and Self-management support with Technology”. According to the Centers for Disease Control and Prevention (CDC), 34.2 million people, 10.5% of the population - have diabetes. The American Diabetes Association recommends that all patients with diabetes complete diabetes self-management education and training to increase diabetes knowledge and build skills. Dr. Amante’s project aims to increase patient engagement with this recommended guideline of diabetes care by first strategically framing how choices to engage with the training are presented to patients. Once enrolled, a diabetes training appointment is scheduled. Prior to the appointment, the DM-BOOST program sends the patients text messages written by fellow patients with diabetes to provide tips and nudge them to start creating goals related to their own diabetes management. Patients then meet with Dr. Amante’s team to review telehealth tools available to them, including the MyChart patient portal, and refine the diabetes goals the patients highlighted in their text message responses. The program concludes with patients sending a MyChart message with personalized goals to the Certified Diabetes Care and Education Specialist they are scheduled to meet with to complete the diabetes training. DM-BOOST aims to increase patient engagement with diabetes self-management training, improve patients’ ability to manage their diabetes, and enhance patient experience with telehealth and diabetes self-management training.
CCTS NEWS

Dr. Amante has a pending proposal with the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) to further this work by culturally adapting the program for Spanish-speaking LatinX patients with diabetes.

Our second presenter, mentored by Dr. Arlene Ash, was TL1 trainee Zach Dyer, discussing his project “Measuring the neighborhood-level effects of structural racism”. Structural racism is defined for Dyer’s project by Zinzi Bailey et al. as “the totality of ways in which societies foster racial discrimination through mutually reinforcing inequitable systems”. Racial inequity, according to Ibram X. Kendi is “when two or more racial groups are not standing on approximately equal footing”.

Dyer began his project by looking at the geographic disparity in pricing by hospitals and healthcare providers, to see how we can better disperse healthcare more evenly across the state. As expected, hospitals serving areas with higher wealth were charging up to 3 times more for the same services as other hospitals in the state. In addition to the price discrepancies, Dyer also highlighted that there are areas in the state that are not as frequently utilizing the healthcare system, mainly urban and rural areas. After confirming these disparities, his project is currently focusing on the social determinants of health - markers such as employment, housing, wealth, and taxes - to evaluate the health status of our neighborhoods and create an index that looks at life expectancy, physical health, and mental health to put in context the level of healthcare spending in each area and potentially foster an increase in resources available to the areas in need.

Dyer is currently awaiting a response to an application for F31 funding and a writing fellowship. Dyer states, “The TL1 has allowed me to put in the groundwork for projects that are traditionally harder to fund—exploratory projects looking at the effects of structural racism and the continued fight against injustice in health care.”

These are two of the research projects in process currently evolving through various programs here at UMass Chan Medical School. If you have completed an MD, PhD, or other doctoral-level health sciences degree and have an interest in research, our KL2 Request for Application (RFA) is posted in the Education and Training section of the newsletter and the TL1 RFA will be released shortly. For more information about the UMCCTS, our training programs or funding opportunities, please sign up for membership at https://umassmed.edu/ccts/about/membership/.
EVENTS

FOCUS GROUPS ON HOW TO BETTER INTERACT WITH DEAF PATIENTS/PARTICIPANTS

Our research team is hosting a series of Zoom focus groups to help us design trainings for hearing healthcare professionals and researchers about how to better interact with Deaf patients/participants.

You can find more information about these focus groups in the attached flyer or in this recruitment video: https://www.youtube.com/watch?v=TH6_4DMGtKI&t=18s

If you would like to participate, please complete this brief survey to see if you qualify.

LONG COVID & FATIGUING ILLNESS RECOVERY PROGRAM

Family Health Centers of San Diego, the ECHO Institute, the University of Washington, and the University of Colorado have collaborated to deliver CDC-funded, monthly learning sessions to rapidly disseminate Post-acute Sequelae of SARS-COV-2 infection (PASC) and Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS) findings and emerging promising practices. This large-scale, national webinar series will be held on the second Thursday of every month and will offer didactic presentations by subject matter experts, examples of emerging promising practices and models of care, and a facilitated question and answer (Q&A) period.

The program is open to all health care professionals and all Long COVID and ME/CFS patient-lived experience experts interested in learning more about the treatment of Long COVID and ME/CFS. One credit hour of Continuing Medical Education (CME), Continuing Nursing Education (CNE), and Continuing Professional Education (CPE) will be available to participants. For questions, please contact LCecho@salud.unm.edu.

K CLUB

Next Meeting
Feb. 9th & 23rd ~ 4:00-5:00 PM ~ Virtual, Zoom

K Club supports junior faculty in the development of K-level "Mentored Research Scientist Career Development Award" applications. According to NIH, the award is intended to provide either progressive training or further experience in research related to biomedical, behavioral, or clinical sciences. The mentored approach provides the knowledge required for the K-Awardee to progress into an independent researcher over the award period.

K Club meets bi-weekly on the 2nd and 4th Wednesdays of the month from 4-5 pm via Zoom. Attendance at K Club meetings can be for information purposes and/or for review of your application. The group meets to outline the K-Award writing process and to review material being submitted by/to the group for input. To register to attend K Club, please email Robyn Leonard@umassmed.ed.
As part of the T. K. MSCI, and Millennium programs, the annual Projects in Process Seminar Series (PiPSS) will take place January through May 2022 on Friday mornings via Zoom. We look forward to hearing about our scholars/trainees progress on their research projects.

We encourage scholars, mentors and faculty to join us at as many PiPSS presentations as possible. This is a great opportunity for scholars to get to know others interested in or who hold research positions. In addition, presentations on CCTS core resources will also be included.

**Zoom Link:** https://umassmed.zoom.us/j/99081667635?pwd=RE9MUGI0TG9uNzIoRWxJYTJOazdwUT09

**Password:** 396027

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EVENTS

M2D2 $200K CHALLENGE
ENTRIES CLOSE FEBRUARY 20TH AT MIDNIGHT

Applications for the $200K Challenge are now open!

Enter the $200K Challenge

The $200K Challenge is back for 2022, and this time it's in person. Put your innovation in front of other entrepreneurs, life sciences experts and investors by entering the $200K Challenge.

Don’t miss this once-a-year opportunity to pitch your innovation to major players in the life sciences ecosystem. Winners receive thousands in in-kind support to help advance their ground-breaking medical device or biotech ideas!

Entries close February 20th at midnight.

This year, sponsors are looking for new, innovative medical device solutions in multiple areas of interest, including digital health solutions in cardiology, automated technologies, and SARS-CoV-2 testing technologies.

Check if your innovation aligns with one of the sponsor’s areas of interest!
**FUNDING**

**2022 AWARD COMPETITION: CENTER FOR ADVANCING POINT OF CARE TECHNOLOGIES IN HEART, LUNG, BLOOD AND SLEEP DISORDERS – FUNDING OPPORTUNITY** [DUE FEB. 28TH]

The Center for Advancing Point of Care Technologies (CAPCaT) in Heart, Lung, Blood, and Sleep Disorders (U54HL143541) announces the 2022 solicitation of grant applications focused on developing, adapting, or validating point of care technologies that can be rapidly applied to heart, lung, blood, or sleep disorders, with additional interest in projects that incorporate complementary and integrative health approaches. We plan, based on the receipt of meritorious applications, to fund up to four awards of up to $100,000 over 12 months, with one or more award(s) focused on complementary and integrative health. [More information]

**CLARIFICATION AND GUIDANCE FOR APPLICANTS PREPARING APPLICATIONS FOR SPRING 2022**

NOT-OD-22-046: Clarification and Guidance for Applicants Preparing Applications for the Spring 2022 Due Dates During the COVID-19 Pandemic (Released 12/27/21)

The notice extends the guidance previously provided (NOT-OD-21-180) for applicants preparing applications for the August/October 2022 Council round, beginning with the January 25, 2022 due date.

**PAR-22-053: CLINICAL TRIAL READINESS FOR FUNCTIONAL NEUROLOGICAL DISORDERS (U01 CLINICAL TRIAL OPTIONAL)**

**CLOSING DATES FOR APPLICATIONS: FEBRUARY 5, 2022 WITH ONGOING CYCLES THROUGH NOVEMBER 6, 2024**

This FOA invites researchers to submit prospective clinical projects that address critical needs for clinical trial readiness in Functional Neurological Disorders (FNDs). Projects appropriate for this FOA include the validation of biomarkers, endpoints and clinical outcome assessments (COA) that are fit-for-purpose and have a defined context of use for clinical trials. [MORE INFO]
FUNDING

RFA-AT-22-001: NIH HEALTH CARE SYSTEMS RESEARCH COLLABORATORY - PRAGMATIC AND IMPLEMENTATION TRIALS OF EMBEDDED INTERVENTIONS (UG3/UH3, CLINICAL TRIALS OPTIONAL)
CLOSING DATE FOR APPLICATIONS: JUNE 17, 2022

The overall goal of this initiative is to support the "real world" assessment of health care strategies and clinical practices and procedures in health care systems (HCS) that lead to improved care for underserved populations, who have suffered a disproportionate disease burden in the US. MORE INFORMATION

PAR-22-069: HIGH IMPACT, INTERDISCIPLINARY SCIENCE IN NIDDK RESEARCH AREAS (RC2 CLINICAL TRIAL OPTIONAL)
CLOSING DATES FOR APPLICATIONS: ONGOING THROUGH OCT. 30, 2024

This FOA seeks novel, interdisciplinary approaches in areas that address specific knowledge gaps, scientific opportunities, new technologies, data generation, or research methods designed to accelerate scientific progress in the understanding, treatment, and prevention of diseases within the mission of the NIDDK. MORE INFORMATION

PAR-22-031: DRUG DISCOVERY FOR NERVOUS SYSTEM DISORDERS (R01 CLINICAL TRIAL NOT ALLOWED)
CLOSING DATES FOR APPLICATIONS: ONGOING THROUGH JAN. 7, 2025

This FOA supports the discovery of novel compounds for the prevention and treatment of nervous system disorders. NIMH and NIA wish to stimulate research in: 1) Identification, design, synthesis, and preclinical testing of compounds of candidate therapeutics; 2) Initial hit-to-lead chemistry to improve activity of compounds against the target of interest; 3) Later stage lead optimization to improve efficacy and pharmacokinetics; and 4) Initial drug metabolism and pharmacokinetic (DMPK). MORE INFORMATION

CITE & SUBMIT

Please cite the NIH CTSA award any time you use The UMMS Center for Clinical and Translational Science resources, services and facilities or received funding through the Center. “The project described is supported by the National Center for Advancing Translational Sciences, National Institutes of Health, through Grant UL1 TR001453, (or TL1 TR001454, or KL2 TR001455, as appropriate). The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH.”

https://escholarship.umassmed.edu/umccts_news/vol2022/iss2/1
DOI: 10.13028/qc7b-ez89
EDUCATION

The University of Massachusetts Center for Clinical and Translational Science (UMCCTS) aims to develop and support the next generation of leaders in clinical and translational research. The K program offers scholars who have already completed an MD or PhD program with training, mentorship and research opportunities needed to launch a career as an independent investigator. The scholars and trainees also benefit from the training programs, equipment, databases, mentors, administrative support, and pilot funding opportunities available here at UMass. For More Information click here - KL2 RFA

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KL2 REQUEST FOR APPLICATION (RFA)
APPLICATIONS ACCEPTED FEBRUARY 11TH THROUGH MAY 1ST, 2022 AT 5:00PM EST.

Interested applicants are invited to attend an informational meeting to be held via Zoom on Friday February 11, 2022 from 10:00-10:30 am EST at https://umassmed.zoom.us/j/92853102725?pwd=SFI1WG0zMmxabkZEU1ZTNmQwN2o1Zz09. This meeting will clarify expectations for the program and answer questions.

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ECIRTIFICATION HUMAN RESEARCH PROTECTIONS TRAINING PROGRAM: NOW AVAILABLE THROUGH UMCCTS COMMUNITY ENGAGEMENT AND COLLABORATION CORE

The UMMS IRB will now accept completion of the CIRTification program as an alternative to the CITI Program for community members who collaborate on UMMS research projects. CIRTification is a web-based human research protections training program tailored for community research partners. CIRTification Online was designed as an alternative to the CITI training program with community research partners in mind and focuses on the unique roles and responsibilities that community partners hold in health research projects. This program is specifically and only for community members that do not have an eIRB account who will work on UMMS studies. This training program takes about three hours to complete and includes audio, text and interactive activities around research involvement. Community partners will receive a certificate of completion for this training. This program has received positive feedback from local users. CIRTification was developed and is administered by the University of Illinois Chicago Center for Clinical and Translational Science. The program is available to UMMS through the UMCCTS Community Engagement and Collaboration Core (CECC) in collaboration with the IRB. Details for researchers and learners are available here.
TRANSDISCIPLINARY TRAINING IN CARDIOVASCULAR RESEARCH
T32 TRAINING PROGRAM

In collaboration with the Division of Cardiovascular Medicine, the Department of Population and Quantitative Health Sciences (PQHS) has established a NHLBI-funded T32 program with the aim of producing a new generation of investigators who have the enthusiasm, knowledge, and skills to make meaningful contributions to cardiovascular research across the translational spectrum. Directed by Catarina Kiefe, MD, PhD (PQHS) and Kevin Donahue, MD (Cardiovascular Medicine), the program is truly transdisciplinary, with investigators working together to expand knowledge beyond discipline-based concepts, theories, and methods.

UMass Chan Medical School offers an outstanding environment for this training, with exceptional depth and breadth of well-funded cardiovascular research, experienced and involved mentors, and extensive resources for training in the full spectrum of cardiovascular research from laboratory- to population-based.

Program Activities
The program offers 4 pre-doctoral fellowship slots, 4 post-doctoral fellowship slots, and 8 short-term summer training slots for medical students per grant year.

In addition to an intensive mentored research experience, trainees will participate in didactics, seminars, journal clubs, and scientific and grant writing workshops to develop the essential skills needed to be successful investigators. Post-doctoral T32 trainees may have a maximum of 20% effort dedicated to clinical responsibilities while funded through the T32.

For Eligibility Information and to Apply
Contact the Department of Population and Quantitative Health Sciences at 508-856-8999 or email to rebecca.gigliello@umassmed.edu.
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.

KATHERINE LUZURIAGA, MD
PI AND DIRECTOR, UMCCTS

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CO-DIRECTOR, UMCCTS