ALL OF US: RELEASE OF NEARLY 100,000 WHOLE GENOME SEQUENCES SETS STAGE FOR NEW DISCOVERIES

NEARLY FOUR YEARS AGO, NIH OPENED NATIONAL ENROLLMENT FOR THE ALL OF US RESEARCH PROGRAM. THIS HISTORIC PROGRAM IS BUILDING A VITAL RESEARCH COMMUNITY WITHIN THE U.S. OF AT LEAST 1 MILLION PARTICIPANT PARTNERS FROM ALL BACKGROUNDS. ITS UNIFYING GOAL IS TO ADVANCE PRECISION MEDICINE, AN EMERGING FORM OF HEALTH...

READ MORE
I am grateful for the generous support from the CCTS KL2 program, which provided resources, guidance, and structured mentorship to accelerate my clinical research training and expertise as related to MRI analysis and neuroinformatics in multiple sclerosis (MS). By protecting research time in parallel with clinical practice, the KL2 allows for an ideal clinical research environment to develop and expand on translational and transformative ideas.

My K23 will springboard off the infrastructure and results garnered from the KL2, as I continue to collaborate with colleagues both near and far to develop and improve MRI-based, translational biomarkers of chronic inflammation in MS. We hope that these biomarkers will be soon be used as novel treatment targets in the quest to halt neurodegenerative processes.

CONGRATULATIONS ON YOUR K23 AWARD, DR. HEMOND!

Dr. Christopher Hemond, a KL2 scholar in the UMass Center for Clinical and Translational Science (UMCCTS), recently received a K23 award.

According to the National Institute of Health (NIH), the K23 Mentored Patient-Oriented Research Career Development Award’s goal “…is to support the career development of individuals with a clinical doctoral degree, who have the potential to develop into productive, clinical investigators, and who have made a commitment to focus their research endeavors on patient-oriented research.”

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RESOURCES

You may be interested in this a new initiative at Moderna to provide materials (mRNA and LNPs) to academics interested in exploring new epitopes for mRNA vaccines.

If interested, please go to this website and enter your information. MORE INFORMATION
RESOURCES

RESEARCH INFORMATICS CORE

TriNetX is a powerful self-service search engine that enables researchers to rapidly identify the aggregate number of potential patients within the UMass network or across TriNetX's global health research network.

You may search clinical data from 1.8 million de-identified patients at UMass Memorial or 212 million de-identified patients nationwide. Furthermore, you may explore multiple clinical data types, including demographics, diagnoses, procedures, vitals, medications, labs, and to a limited extent, other data such as genomics and clinical notes.

Because all data in TriNetX is de-identified, you do not need IRB approval to use it. Therefore, it is an ideal self-service solution to assess the feasibility of a study.

Although there is no need to learn how to code to use TriNetX, we do recommend you take the time and watch the tutorials available on the TriNetX support center after you sign up for an account.

After you get access to TriNetX, please go to: http://support.TriNetX.com to view their training modules. The Research Informatics Core supports TriNetX at UMass.

REGISTER FOR ACCESS

The Research Informatics Core is sponsored by CCTS and PQHS, and partially funded by Grant # UL1-TR001453.
DEAN'S SEMINAR SERIES
APRIL 7TH & APRIL 15TH

Caitlin Dreisbach, PhD, RN
Postdoctoral Research Scientist at the Data Science Institute at Columbia University

"Data-Powered Women’s Health: Intersection of the Microbiome, Nutrition, & Data Science."

April 7, 2022 @ 12:30 PM

Join us Thursday, April 7, at 12:30 pm for a special Dean's Seminar Series event featuring Caitlin Dreisbach, PhD, RN. Dreisbach will deliver a talk titled "Data-Powered Women’s Health: Intersection of the Microbiome, Nutrition, & Data Science."

In her talk, Dr. Dreisbach will discuss the potential of data science methods to improve our understanding of the microbiome and its association with pregnancy outcomes. RSVP here.

Dr. Sarah Gonzalez-Nahm
Assistant Professor of Nutrition

"Maternal and Infant Nutrition: Risk Mitigation and System Supports"

April 15, 2022 @ 3:00 PM

Join us April 15, 2022 from 3:00-4:00 pm, as the School of Public Health and Health Sciences welcomes Assistant Professor of Nutrition Sarah Gonzalez-Nahm for the next talk in our Spring 2022 Dean’s Seminar Series.

Optimal nutrition during the first 1000 days has been associated with a lower risk for child obesity and chronic disease. Dr. Gonzalez-Nahm’s work includes epidemiological and system-level research related to maternal diet, infant feeding, and child health. This talk will review recent and in-progress research on 1) the role of maternal diet in mitigating health outcomes from exposure to chronic stressors and 2) system-level barriers and facilitators to breastfeeding. This seminar will be held in a fully remote format. Please RSVP here to receive the Zoom link.

https://escholarship.umassmed.edu/umccts_news/vol2022/iss4/1
DOI: 10.13028/5keh-f228
EVENTS

UMCCTS: NURSES SPECIAL INTEREST GROUP
SAVE THE DATES: APRIL 28TH & MAY 3RD

Karen Giuliano, PhD, RN, FAAN, MBA
Large Volume IV “Smart” Pumps: Evidence to Guide Practice & Patient Safety
April 28th 11-12 PM

The Nurses Special Interest Group, part of the UMCCTS, is hosting this webinar series and encourages nurse scientists, clinicians and individuals from all UMCCTS campuses and disciplines to attend.

Dr. Giuliano will present on the topic of Large Volume IV Smart Pumps on April 28th. Infusion pumps, specifically large volume IV smart pumps, are ubiquitous within the acute care environment. While IV smart pumps are intended to improve patient outcomes and safety, evidence demonstrates that safe and effective use of IV smart pumps is influenced by numerous factors. Important factors to consider include the end-user, the work environment, the type of IV smart pump, compliance with manufacturer system setup, and organization factors.

Zoom Link:
https://umassmed.zoom.us/j/96410436229?
pwd=aWUvdXJKNWhNcDNzR0w2eEdsY2d4QT09
Password: 663776

Carrie- Ellen Briere
From Bedside to Bench and Back Again: A Nurse Scientist’s Career Trajectory in Translational Research
May 3rd 11-12 PM

Dr. Briere is a neonatal nurse who focuses on the biology of human milk and its involvement with infant health, growth, and development. Her career began at the bedside supporting families to meet their human milk feeding goals and has grown to focus on the biological components of milk which are beneficial to infant health. In this presentation Dr. Briere will talk about expanding her research expertise to include basic science analyses and the importance of nurses in the research laboratory.
PUBLIC ENGAGEMENT WORKSHOP: COMMUNICATING STATISTICAL/NUMERICAL INFORMATION EFFECTIVELY
FRIDAY, APRIL 29, 2022 | 10:00 AM - 12:00 PM EDT | VIA ZOOM

Do you often work with highly technical, numerical and/or statistical information but struggle with how to communicate it effectively to non-experts? Do you find that your audiences often misunderstand or misuse numerical or statistical information in their decision-making? In this workshop, we will explore and practice concrete steps you can take as a communicator to improve your communication of numerical or statistical information with diverse audiences.

EZRA MARKOWITZ, Ph.D. is an Associate Professor of Environmental Decision-Making in the Department of Environmental Conservation at the University of Massachusetts Amherst. His research and teaching focus on the intersection of decision-making, persuasive communication, public engagement with science, and environmental sustainability. He is particularly interested and an expert in the practical application of behavioral science to improve individuals' and communities' environmental decision-making. REGISTER HERE

POPULATION HEALTH SCIENCES: OPPORTUNITIES TO ADVANCE HEALTH EQUITY THROUGH IMPLEMENTATION SCIENCE
MONDAY, MAY 9, 2022 | 12:00 - 1:00 PM

Presented by:
Dr. Rachel Shelton, ScD, MPH

Zoom link:
https://umassmed.zoom.us/j/95013364343?pwd=Yi9Xc2Z3anFxeTFJcHZjY1V0QUVKQT09

Password: 717383
The UMass Center for Clinical & Translational Science will host their annual Research Symposium featuring an overview of the in-house research being conducted on COVID, digital health, and cancer. [AGENDA]
As part of the T. K. MSCl. 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 as 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=RE9MUG10TG9uNzIoRWxJYTJOazdwUT09  
**Password:** 396027

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<tr>
<th>Presenters</th>
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<td>John Harris</td>
<td>Integrated Biomarker Core</td>
<td>April 8th</td>
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<td>Christopher Hemond</td>
<td>Clinical Implications of “Smoldering” Paramagnetic Rim Lesions in Multiple Sclerosis</td>
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<td>Kate Pivovarova</td>
<td>Using Organizational Linkage Intervention to Enhance Collaborations between Recovery Courts and Community Based Medications for Opioid Use Disorders Providers</td>
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<td>Esther Boama-Nyarko</td>
<td>Examining mental health treatment in perinatal women involved in MCPAP for Moms vs PRISM: Challenges and Considerations</td>
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<td>Sohye Kim</td>
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<td>Meagan Sabatino</td>
<td>Changes in Healthcare Utilization During the First Two Years of Massachusetts Medicaid Accountable Care Organizations</td>
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<td>Michelle Trivedi</td>
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<td>Deborah Mack</td>
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<td>Kamaris Merritt</td>
<td>In-utero Cannabis Exposure in Preterm Infants and Risk of Chronic Lung Disease</td>
<td>April 29th</td>
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The University of Massachusetts Lowell is seeking promising new start-up companies, entrepreneurs, engineers, and scientists who are developing novel sensor-based products. Domain areas include wearables, healthcare, energy, water, packaged good, and others.

Selected startups will pitch their product to potential customers, strategic investors, and partners. Winners will receive vouchers worth thousands that can help them gain office space, access to makerspace, and core research facility usage at UMass Lowell.

Learn more and apply by April 13th [here](#).

**NOT-NS-22-083: NOTICE OF INTENT TO PUBLISH A FUNDING OPPORTUNITY ANNOUNCEMENT FOR CLINICAL TRIAL READINESS FOR RARE NEUROLOGICAL AND NEUROMUSCULAR DISEASES**

**ESTIMATED POST DATE:** APRIL 15, 2022  
**ESTIMATED APPLICATION DUE DATE:** AUGUST 18, 2022

This forecasted FOA will support clinical studies that address critical needs for clinical trial readiness in rare neurological and neuromuscular diseases. These studies should result in clinically validated biomarkers and clinical outcome assessment measures appropriate for use in upcoming clinical trials, enhancing the quality and increasing the likelihood of success of clinical trials in these rare diseases. [MORE INFO](#)
FUNDING

RFA-OD-22-005: RADX-UP - SOCIAL, ETHICAL, AND BEHAVIORAL IMPLICATIONS (SEBI) RESEARCH ON DISPARITIES IN COVID-19 TESTING AMONG UNDERSERVED AND VULNERABLE POPULATIONS
CLOSING DATES FOR APPLICATIONS: MAY 2, 2022

The goals of this RADx-UP FOA are to conduct social, ethical, and behavioral implications (SEBI) research to understand and reduce barriers to COVID-19 testing, as well as COVID-19 disparities that arise from barriers to testing among underserved and vulnerable populations. (U01 Clinical Trial Optional) MORE INFORMATION

RFA-OD-22-006: RADX-UP COMMUNITY-ENGAGED RESEARCH ON RAPID SARS-COV-2 TESTING AMONG UNDERSERVED AND VULNERABLE POPULATIONS
CLOSING DATES FOR APPLICATIONS: MAY 2, 2022

This FOA aims to implement and rigorously evaluate SARS-CoV-2 rapid testing strategies in communities experiencing COVID-19 health disparities. Two-year Rapid Testing Research Projects will evaluate (1) rapid testing interventions to prevent and control COVID-19 transmission among underserved and vulnerable populations and (2) partnership-driven research to implement and evaluate rapid testing and reduce COVID-19 disparities. (U01 Clinical Trial Optional) MORE INFORMATION

PAR-22-089: DEVELOPMENT OF BIOMARKERS OR BIOMARKER SIGNATURES FOR NEUROLOGICAL AND NEUROMUSCULAR DISORDERS
CLOSING DATES FOR APPLICATIONS: MAY 7, 2025

This FOA promotes the discovery and/or early evaluation of strong candidate biomarkers and biomarker signatures that can be used as tools to facilitate the clinical development of neurotherapeutics and their use in clinical practice. The goal of this initiative is to deliver candidate biomarkers or biomarker signatures that are ready for definite analytical and clinical validation studies. (R61/R33 Clinical Trial Optional) MORE INFORMATION
FUNDING

PAR-22-101: CLINICAL TRIAL READINESS FOR RARE DISEASES, DISORDERS, AND SYNDROMES
CLOSING DATES FOR APPLICATIONS:
MAY 17, 2022 WITH ONGOING CYCLES THROUGH OCTOBER 17, 2024

These FOAs support clinical projects addressing critical needs for clinical trial readiness in rare diseases. The initiative seeks applications that enable efficient and effective movement of candidate therapeutics or diagnostics towards clinical trials, develop and test rigorous biomarkers and clinical outcome assessment measures, and/or define the presentation and course of a rare disease. (R21 Clinical Trial Not Allowed) MORE INFO

PAR-22-100: CLINICAL TRIAL READINESS FOR RARE DISEASES, DISORDERS, AND SYNDROMES
CLOSING DATES FOR APPLICATIONS:
MAY 17, 2022 WITH ONGOING CYCLES THROUGH OCTOBER 17, 2024

These FOAs support clinical projects addressing critical needs for clinical trial readiness in rare diseases. The initiative seeks applications that enable efficient and effective movement of candidate therapeutics or diagnostics towards clinical trials, develop and test rigorous biomarkers and clinical outcome assessment measures, and/or define the presentation and course of a rare disease. (R03 Clinical Trial Not Allowed) MORE INFO

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.”
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.

Applications will be reviewed and appointments will be made on a rolling basis. Send completed applications on or before June 1, 2022 by 5:00 pm EST to: Rebecca.Gigliello@umassmed.edu
EDUCATION

TL1 & KL2 REQUEST FOR APPLICATION (RFA)
MENTORED CAREER DEVELOPMENT OPPORTUNITIES

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 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 also benefit from the training programs, equipment, databases, mentors, administrative support, and pilot funding opportunities available here at UMass.
For More Information click here.

POSTDOCTORAL FELLOWSHIP
FOCUSBING ON HEALTH EQUITY IN CANCER PREVENTION AND CONTROL

PRACCTIS, an NCI-funded T32 program at UMMS is now accepting applications for postdoctoral scholars to start in August 2022. We train independent researchers to address critical prevention and control care delivery issues across the cancer continuum, including primary prevention, screening, diagnosis, treatment and survivorship, with emphasis on promoting change in individuals, providers and systems. We are seeking a postdoctoral trainee to further our emphasis on addressing health equity in cancer prevention and control. Our faculty mentors are leaders in health equity and low resource settings, health behavior change, implementation science, health informatics, systems change and health policy, health communications, population health sciences, and prevention and intervention research. Applicants must plan to pursue an independent research career focused on cancer prevention and control, have earned a doctoral degree (PhD, ScD, MD, DO, etc.), and be a U.S. citizen or permanent resident.
For more information and Website or contact Barbara Estabrook, Barbara.estabrook@umassmed.edu
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.
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

TERENCE R. FLOTTE, MD
CO-DIRECTOR, UMCCTS