Department of Population and Quantitative Health Sciences

Weekly Newsletter

JUNE 2 – 6, 2025

UMass Chan
MEDICAL SCHOOL

Research Methods Meeting
Wednesday, June 4, 10:00-11:00 AM

Presenter: Julia O'Rourke, PhD, Senior Principal Research Scientist at TriNetX and Affiliate Assistant Professor, PQHS, UMass Chan

Title: Using Real World Data in Breast Cancer Research

Abstract: This presentation will provide an overview of some of her recent work and consists of four parts: 1) a brief introduction to TriNetX data and newly available social determinants of health (SDOH) data; 2) a discussion of the limitations of RWD; 3) an example of RWD use in a causal inference study; and 4) applying machine learning to impute missing data. The first part will describe the types of RWD available to researchers and will include a sample analysis that uses insights from SDOH data to enhance understanding of the factors contributing to late-stage breast cancer diagnosis. The second part will discuss a research study outlining systemic therapies for breast cancer derived from RWD and will examine the limitations of RWD. The third part will present an initial causal inference analysis designed to determine the effect of GLP-1 administration on the recurrence rate of breast cancer. The final part of the presentation will showcase the application of machine learning to impute missing breast cancer stages.

Bio: Julia O'Rourke is a senior principal research scientist at TriNetX, the largest federated network for global real-world patient data (RWD). In her work, she employs methods from epidemiology and machine learning to explore breast cancer treatments and assess the risk of breast cancer recurrence. Dr. O'Rourke has earned multiple advanced degrees (including a PhD in biomedical engineering and master's degrees in computer science and population health) and completed an NIH post-doctoral fellowship in biomedical informatics at Massachusetts General Hospital. She has served as a faculty member at Harvard Medical School, a principal investigator at the Lurie Center for Autism, and has authored and co-authored over a dozen publications on various topics. She is also pursuing an advanced degree in Artificial Intelligence at Northeastern University. During her five-year tenure at TriNetX, Dr. O'Rourke has held roles on the engineering, data science, and research teams, most recently focusing on leading and co-leading client research projects and publishing her research utilizing TriNetX's real-world data. Her research interests focus on using machine learning with real-world data to address various research questions.

To join the meeting click here.

Tea Time
Thursday, June 5, 2:00-3:00 PM

Please join the QMC to celebrate Bruce's 50th anniversary of the beginning of his career as a biostatistician and, especially, as a clinical trial biostatistician. Take this opportunity to connect with colleagues. We look forward to seeing you!

Research Methods Meeting
Wednesday, June 18, 10:00-11:00 AM

Presenter: Bruce Barton, PhD, Professor, PQHS, UMass Chan

Title: Study Designs for First-in-Humans Early Phase Clinical Trials with a Recent Example

Abstract: In developing new treatments (e.g., drugs and biologics) for humans, early development typically employs in vitro and in vivo animal models before advancing to human testing. The transition from non-clinical to clinical testing presents various issues related to doses, safety, and toxicities. Early phase clinical trials, such as Phase Ib (also known as "First-in-Humans") studies, mark the shift to human subjects and require study designs that test a sequence of doses to identify the maximum tolerated dose, which can then support efficacy testing in subsequent phases. Several study designs are commonly utilized; however, these can fail when new classes of drugs/biologics are being tested. We will review these designs and the complications encountered in the design of a First-in-Humans study for a new regenerative engineered cell therapy to treat emphysema.

Bio: Dr. Barton also the Director of the U Mass Chan Quantitative Methods Core. He has substantial experience in statistical methods in clinical trials and has been awarded 80+ federal grants and pharma industry contracts to support biomedical research studies. He has over 49 years of experience in medical research, including study designs

from observational data to randomized clinical trials. He has also designed pre-clinical (animal) studies, Phase I-III clinical trials for pharmaceutical and behavioral projects, and pragmatic trials for NIH-funded projects. He has been involved in studies covering many areas of medical investigation ranging from pain control in pre-term neonates to hip fracture prevention in nursing home residents, with substantial experience in cardiology, oncology, neurology, dermatology, anesthesiology, sickle cell disease, cardiovascular disease risk factors, infectious disease, and alcoholic hepatitis.

To join the meeting click here.

AI Presentation – IN-PERSON ONLY
Wednesday, June 25, 1:00-2:30 PM

Presenter: Jeroan Allison, MD, MS, Professor and Chair
Title: Writing Scientific Manuscripts: Exploring AI, Embracing Personalized Approaches, and Learning from *Experience – Insights from Lumina AI and Me*
Location: Hiatt Auditorium, Room S1-608, First Floor, UMass Chan Medical School
Students and Faculty are warmly invited to an engaging and informative in-person presentation by Dr. Jeroan Allison. Join us for a session that blends technology, personal insight, and practical strategies for enhancing scientific writing.
Event Details: For this presentation, please bring your laptop and work alongside. It would be best if you could familiarize yourself with ChatGPT, Consensus: AI, and Grammarly. The free versions of Chat and Census are adequate, although the paid versions are inexpensive and worthwhile. We will use Grammarly for plagiarism checking, and the paid version is required for that functionality. These are the three main AI programs I use in working for scientific writing. I am excited about our upcoming time together.

Addiction Implementation Science Webinar Series – June 11, July 9, & Aug 13; 12-1 PM
Presented by: New England Addiction Technology Transfer Center (ATTC) Network, Northwestern Medicine, Center for Dissemination and Implementation Science, and UMass Chan Medical School. We invite you to join us in a 3-part *Addiction Implementation Science* webinar series introducing essential Implementation Science (IS) concepts and tools to integrate evidence-based practices (EBPs) in real-world settings to improve the quality of addiction treatment and recovery services. This series is designed for anyone interested in applying evidence-based solutions for better addiction treatment and recovery outcomes.

Session 1 – June 11 - WHY IMPLEMENTATION SCIENCE? FOUNDATIONS AND FRAMEWORKS
- Discover the core principles of IS and how IS bridges addiction research and practice.
- Learn how to identify meaningful research questions and select appropriate EBPs.
- Explore foundational frameworks that guide successful implementation.

Session 2 - July 19 - THE "HOW" OF IMPLEMENTATION: STRATEGIES AND CONTEXT
- Assess real-world factors that influence the implementation of addiction services.
- Identify and tailor implementation strategies to your setting.
- Apply the Implementation Research Logic Model through an interactive case study.

Session 3 - Aug 13 – SUSTAIN SUCCESS: MONITORING, EVALUATION, AND ADAPTATION
- Learn practical tools for evaluating both addiction and implementation outcomes.
- Discuss principles of how to adapt EBPs to changing contexts.
- Explore strategies for sustaining impact over time.
- Engage in hands-on activities and leave with actionable tools

To Register, click here

2025 JUNE

Monthly observances:
* Caribbean American Heritage Month
* Immigrant Heritage Month
* Lesbian, Gay, Bisexual, Transgender, and Queer Pride Month
*National Indigenous History Month

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1 * Children's Day *Shavout starts	2 * Native American Citizenship Day * Republic Day	3 Shavout ends	4	5 Waqf al Arafa begins	6 * Waqf al Arafa ends * Eid-al-Adha begins * Memorial Day	7 Feast of the Most Sacred Heart
8 * Eid-al-Adha ends * Pentecost	9 * King's Birthday * Whit Monday	10 Portugal Day	11	12 Philippines Independence Day	13	14 Flag Day
15 Trinity Sunday	16	17	18	19 * Juneteenth * Corpus Christi * New Church Day	20 Litha	21 * National Day of Indigenous Peoples in Chile * First Nations Day
22	23	24	25	26 Islamic New Year/ Muharram 1	27	28 LGBTQ+ Pride Day
29 Feast Day of Saints Peter & Paul	30 Armed Forces Day	1	2	3	4	5

FOR YOUR INFORMATION (FYI)

Farmers' Market, CSA, and Food Trucks at UMass Chan
Sponsored by Office of Well-Being and Office of Sustainability

Weekly on Tuesdays
June 3 - Nov. 4 at 10-2 p.m.
(No market or food trucks on Sept. 2 and 9)

Location: Outdoors, Medical School Building Terrace (Rain location: Old School Lobby or Albert Sherman Cafeteria)
In an effort to enhance campus sustainability, foster **engagement**, and promote well-being, we are proud to provide fresh, locally sourced food and products to our UMass Chan community and support small, local businesses in the region.
A variety of food trucks will be available each week offering food for purchase.
Questions? Email **OWB@umassmed.edu**.

Discover the Sixth Floor Lending Library!
Looking for your next great read? Dr. Kate Lapane has sparked something wonderful—a little Lending Library on the sixth floor, near the elevators and stairs!
Whether you're in the mood for a quick escape, an inspiring memoir, or a gripping mystery, swing by and see what treasures are waiting for you. The best part? It's totally free and community-driven.
✨ Take a book, share a book, and spread the joy of reading.
Have a favorite book that changed your life or made you laugh out loud? Drop it off and give someone else the chance to love it too!

Use Your Excess Vacation Leave by June 28
As we get closer to fiscal year end, we want to remind you of the [UMass Chan Holiday, and Personal and Vacation Time Policy](#) and maximum accruals so you can plan accordingly. The maximum number of vacation hours employees may carry over into the next fiscal year is 240. During the fiscal year, employees are allowed to accrue hours over 240. Hours over this accrual limit are automatically re-set in the payroll system to the accrual maximum.

Remaining Holiday Schedule for 2025:
- Juneteenth National Independence Day – Thursday, June 19th
- Independence Day – Friday, July 4th
- Labor Day – Monday, September 1st
- Indigenous Peoples' Day – Monday, October 13th
- Veterans Day – Tuesday, November 11th
- Thanksgiving Day – Thursday, November 27th
- Day After Thanksgiving – Friday, November 28th
- Christmas Eve – Wednesday, December 24th
- Christmas Day – Thursday, December 25th

PQHS Weekly will be sent to all members of PQHS on Monday mornings. The intent is to provide a snapshot of what is going on that week in PQHS and to share our faculty and staff activities with the department. We depend on you to provide the items we need to share. Please send suggestions of events, faculty invited seminars & talks, honors, student thesis presentations, and news – new babies born! – to Judi (judi.saber@umassmed.edu) & Sarah (sarah.yeboah@umassmed.edu) by Friday each week.