

Department of Population and Quantitative Health Sciences

Weekly Newsletter

AUGUST 17 - 21, 2026



UMass Chan
MEDICAL SCHOOL

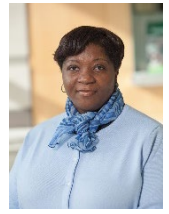
DEPARTMENT REMINDERS

CONNECT WITH THE CHAIR AND VICE CHAIR

Jeroan Allison and Sharina Person invite you to schedule a 30-minute confidential meeting with them. These sessions are an opportunity for you to discuss any topic of your choice in confidence. Whether you have ideas to share, concerns to address, or simply want to connect, this is your chance to speak directly with leadership in a private setting.

If you would like to schedule a meeting with PQHS leadership, please use the scheduling link to reserve your time.

[Sign up here](#) - They look forward to connecting with you.



GRANT REVIEW INTERNAL PROCESS (GRIP)

GRIP is a departmental initiative, now in its second year, designed to support and enhance the grant-writing skills of our postdoctoral fellows and faculty (at all levels) as well as improve the overall quality of grant submissions from our department. This program will offer voluntary, constructive reviews to increase the success rates of submitted proposals.

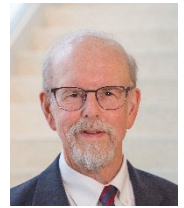
Bi-weekly 30-minute Zoom sessions are held on the first and third Thursdays of each month from 8:30 to 10:00 AM. This year, the program runs from December 4 through May 30. To sign up for a session, [click here](#).

This is a valuable resource, and we encourage you to take full advantage of it to strengthen your proposals. If you have any questions or would like to participate, please feel free to reach out.

Rob Goldberg and Bruce Barton

Co-Committee Chairs

Department of Population and Quantitative Health Sciences



QUANTITATIVE METHODS CORE (QMC)

The **Quantitative Methods Core (QMC)**, housed right here in PQHS, has been helping investigators turn great ideas into funded, high-impact studies for over 15 years! Our team brings together expert biostatistical faculty, seasoned analysts, and skilled data management staff to support projects of all sizes and across a wide range of content areas. We offer:

- **Study Design & Analysis** – support for clinical trials, cohort studies, case-control designs, and health services research (including claims and EHR data).
- **Grant Development** – guidance in shaping specific aims, analytic plans, and power/sample size justifications.
- **Data & Project Support** – robust data management systems, project coordination, and project management.

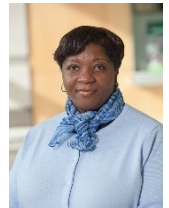
Flexible engagement options: You can involve QMC faculty/staff at the level you need—hourly support or percent effort on grants.

QMC Skillsets Available Through the Talent Share Marketplace

- Power/sample size calculations
- Advanced statistical modeling (longitudinal, survival, hierarchical, SEM, etc.)
- Data cleaning, wrangling, and harmonization
- Creation of study databases and REDCap builds
- Statistical programming (SAS, R, Stata, SQL)
- Data visualization and reporting
- Manuscript tables/figures and publication support
- Project and study coordination

Let's connect!

The QMC Directors, Bruce Barton and Sharina Person, are happy to talk with you about your project needs and how they can partner with you.



UPCOMING EVENTS

Research Methods Meetings – starting September 2 through June 2027

The goal is to share innovative research methods, explore current challenges like reducing inequities, highlight method-focused publications, seek feedback on research problems for grants, and identify collaborators for new or ongoing projects.

Meetings are scheduled on the first and third Wednesdays of each month through the end of June 2027. Always advertised in this newsletter, but if you would like to receive a calendar invite and reminders before each seminar, please email judi.saber@umassmed.edu to be added to the distribution list.

Wednesday, September 2, 10:00 – 11:00 AM, In-Person (AS9.2072 Conference Room) or Zoom

Research Methods Meeting



Presenter: Anru Zhang, PhD, Associate Professor, Department of Biostatistics and Bioinformatics and Dept of Computer Science, Duke University

Title: Making EHR Ready for AI: Statistics at the Data Frontier

Abstract: Electronic health records (EHR) are increasingly central to clinical research and AI, but they are not simply “big data.” They are irregular, heterogeneous, imbalanced, privacy-sensitive, and sometimes internally inconsistent. As a result, reliable statistical inference often requires first solving problems of data readiness. In this talk, we will discuss statistical and computational methods our group has developed to make longitudinal EHR more comparable, learnable, shareable, and trustworthy. Topics include timeline registration for aligning patients along latent

disease progression; synthetic data augmentation for learning from imbalanced EHR; privacy-preserving synthetic EHR generation; and large-language-model-assisted detection of clinical documentation inconsistencies. These examples motivate a broader perspective in which preparing EHR for analysis and AI is itself a statistical problem, and a necessary foundation for trustworthy clinical and generative AI.

Bio: Anru Zhang is a tenured full professor with primary appointments in the Department of Biostatistics & Bioinformatics and the Department of Computer Science at Duke University. He also serves as Vice Chair for Research in Duke's Department of Biostatistics & Bioinformatics. His current research interests include generative models, biomedical data science, and tensor learning. He has received the Leo Breiman Junior Award, COPSS Emerging Leader Award, IMS Tweedie Award, ASA Gottfried E. Noether Junior Award, AMIA Data Science Outstanding Paper Award, Bernoulli Society New Researcher's Award, and NSF CAREER Award. He is a Fellow of the American Statistical Association (ASA). He currently serves as an associate editor for *The Annals of Statistics*, *Journal of the American Statistical Association Theory & Methods and Applications & Case Studies*, *Statistica Sinica*, and *ASA Discoveries*. His research is currently supported by two NIH R01 grants, one as sole PI and one as MPI with clinical investigators.

Click [here](#) to join.

Wednesday, September 16, 10:00 – 11:00 AM, Zoom



Research Methods Meeting

Presenter: Shih-Yen Pan, PhD student in Economics at the University of Massachusetts Amherst

Title: The Impact of IMF Programs on Tuberculosis Outcomes and Government Health Spending: A Cross-National Difference-in-Differences Analysis, 1980–2019

Abstract:

The United Nations Sustainable Development Goals (SDGs) set targets (Target 3.3) for tuberculosis (TB) control, including a 90% reduction in TB deaths and an 80% reduction in incidence by 2030 relative to 2015 levels. Progress has fallen far short of these targets, however, as over 10 million people continue to fall ill and over a million die from the disease every year, making TB among the

top 10 causes of death worldwide. The International Monetary Fund (IMF) has faced sustained criticism for the adverse population health consequences of its lending programs, which often require policy conditionalities prioritizing macroeconomic stability and market liberalization over public provision of social protection. These policies may affect TB outcomes both by constraining government health spending and by exacerbating underlying social determinants such as poverty and malnutrition.

This study employs a local projections difference-in-differences design to estimate the impact of IMF programs on TB outcomes and government health spending using cross-national panel data from 1980 to 2019. Focusing on first-time IMF program participation, the approach enables cleaner comparisons between treated and control countries while accounting for prior program exposures. Outcomes examined include TB mortality, prevalence, and incidence rates, alongside government health spending as a key mediating pathway.

The results indicate that IMF programs, on average, lead to a 7% increase in participant countries' TB mortality rate, a 4.8% increase in TB incidence rate, and a 4.8% reduction in government health spending per capita over six years following program entry. These findings suggest that IMF programs may be undermining TB control by weakening health systems and worsening socioeconomic conditions, with important implications for global health policy.

Bio: Shih-Yen Pan is a PhD student in Economics at the University of Massachusetts Amherst. His research applies causal inference methods to study how political-economic forces shape population health and incarceration in the U.S. and globally.

Click [here](#) to join.

Greetings from the New England Addiction Technology Transfer Center Team!

Summer is fast approaching, and we have an exciting lineup of trainings ahead. Take a look and save the dates on your calendar, and register now. We look forward to learning with you this summer!

Tuesday, September 1, 12-1:30 PM

Gambling & Youth: Understanding the Why, Spotting the Signs, and Having Better Conversations

Sports betting apps, instant deposits, and 24/7 access have changed the game for today's college students. What was once occasional or social is now fast, frequent, and often difficult to detect – leaving many students vulnerable to gambling-related harm before it's recognized. As access expands and normalization grows, the line between “just for fun” and real harm is becoming increasingly blurred. This 90-minute webinar goes beyond the basics to examine the unique vulnerabilities of college students and the evolving culture of gambling on campus.

[Meeting Registration - Zoom](#)

Wednesday, September 16, 12:00 - 1:30 PM

Synthetic Cannabinoids and Hemp-Derived Intoxicants: A Discussion of Policy & Public Health

This webinar will provide participants with an overview of the federal and state regulatory landscape governing hemp-derived cannabinoids, including emerging efforts to address regulatory loopholes and recent legislative actions. Participants will explore the pharmacology and health effects of synthetic cannabinoids and hemp-derived THC products, review current public health surveillance data and poison center trends, and examine the short- and long-term medical and psychiatric consequences associated with use, including intoxication, overdose, and psychosis.

[Meeting Registration - Zoom](#)

Please feel free to share this with anyone who may be interested. We hope to see you there!

The New England ATTC Team

Population and Quantitative Health Sciences

UMass Chan Medical School

NewEnglandATTC@umassmed.edu

[New England ATTC - Addiction Technology Transfer Center \(ATTC\) Network](#)

[New England ATTC | LinkedIn](#)

Tuesday, September 22, 12:30 – 5:30 PM

Health Education Academy for Leadership and Learning (HEALL) Education Day

Location: Paul J. DiMare Center, N1-1200 - N1-1500

Education Day offers an ongoing opportunity to engage in meaningful conversation, connect with like-minded colleagues, plan collaborations, and celebrate our educational activities and scholarship. This annual event serves to highlight the academic scholarly work that happens here, complementing your daily teaching, lab or clinical responsibilities, and curriculum development.

Education Day features plenary speakers who address topics such as the influence of Academies, conducting educational scholarly projects, and innovative trends in Health Sciences education. The event brings together key institutional leaders and educators who shape the future of Health Sciences education at UMass Chan and beyond. It also provides a forum for presenting and discussing novel educational initiatives underway at UMass Chan, enhancing our school's reputation and fostering collaboration within our educational community.

- 12:30-12:45 pm, Welcome Remarks
- 12:45-1:45 pm, Plenary (details coming soon)
- 1:55-4:00 pm Workshops
- 4:10-5:30 pm, Collaborative and Conversations (includes reception)

Click [here](#) to register.

Sunday, September 27, 8:00 AM - 2:00 PM

2026 UMass Cancer Walk

Polar Park, 100 Madison Street, Worcester

Join Us for the Cancer Walk!

We're putting together a team for this year's cancer walk, and everyone is welcome to join! It's a great opportunity to support cancer research, honor those affected by cancer, and connect with colleagues outside of work. If you're interested in participating, please use the team invitation link below. We'd love to have you with us!



2024 PQHS Team

To register, click [here](#).

UMASS REMINDERS

UMass Chan Farmers' Market



Every Tuesday through October 27
(No market on Sept.15)
10 AM - 1 PM

Two Locations:

- Market Vendors will be set up in the Albert Sherman Center, MPR - East, First Floor.
- Food Trucks and Food Vendors will set up outside on the Medical School Building Terrace.

[Click here](#) for more details and to view the list of attending food trucks and vendors



- 🇺🇸 Labor Day – Monday, September 7th
- 🇺🇸 Indigenous Peoples' Day – Monday, October 12th
- 🇺🇸 Veterans Day – Wednesday, November 11th

- 🇺🇸 Thanksgiving Day – Thursday, November 26th
- 🇺🇸 Day After Thanksgiving – Friday, November 27th
- 🇺🇸 Christmas Eve – Thursday, December 24th
- 🇺🇸 Christmas Day – Friday, 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.