Department of Population and Quantitative Health Sciences

Weekly Newsletter

NOVEMBER 24-28, 2025



ANNOUNCEMENT



<u>Jamie Faro, PhD</u>, and <u>Stephenie C. Lemon, PhD</u>, are leading a new study that will launch the Lifestyle Change Implementation Research Network Collaborating Center at UMass Chan.

To read the full article posted in the UMass News, titled, **UMass Chan launches** new center with study of digital intervention for patients using GLP-1 medications. Click here.

UPCOMING EVENTS

Tuesday, November 25, 9:30 AM, AS9.2072 or Zoom

PhD Dissertation Defense - JT Harvey, MPH, PhD Student - GSBS Population Health Sciences Program



Title: Macronutrient Distribution among GLP-1 Medication Users with Type 2 Diabetes. This open-forum session marks Mr. Harvey's first major evaluation milestone in his PhD program.

The session will feature a 15-minute presentation of the study, followed by a 15-minute Q&A discussion.

All faculty, students, and guests are warmly invited to attend and participate in the discussion, either in person or via Zoom. <u>Click here</u> to Zoom.

Tuesday, December 2, 2:00 PM, AS9.2072 or Zoom

PhD Dissertation Defense - Peng (Billy) Zhou, PhD Student - GSBS Population Health Sciences Program

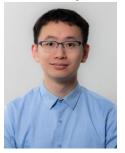


Title: Knowledge-guided machine learning for precision medicine: new methods for robust biomarker discovery and interpretable risk stratification from high-dimensional omics data.

The session will feature a 15-minute presentation of the study, followed by a 15-minute Q&A discussion.

All faculty, students, and guests are warmly invited to attend and participate in the discussion, either in person or via Zoom. <u>Click here</u> to Zoom.

Wednesday, December 3, 10:00 - 11:00 AM



Research Methods Meeting
Presenter: Dongyuan Song, PhD

Title: Synthetic control removes spurious discoveries from double dipping in single-cell and spatial transcriptomics data analyses

Abstract: Double dipping is a well-known pitfall in single-cell and spatial transcriptomics data analysis: after a clustering algorithm finds clusters as putative cell types or spatial domains, statistical tests are applied to the same data to identify differentially expressed (DE) genes as potential cell-type or spatial-domain markers. Because the genes that contribute to clustering are inherently likely to be identified as DE genes, double dipping can result in false-positive cell-

type or spatial-domain markers, especially when clusters are spurious, leading to ambiguously defined cell types or spatial domains. To address this challenge, we propose ClusterDE, a statistical method designed to identify post-clustering DE genes as reliable markers of cell types and spatial domains, while controlling the false discovery rate (FDR) regardless of clustering quality. The core of ClusterDE involves generating synthetic null data as an in silico negative control that contains only one cell type or spatial domain, allowing for the detection and removal of spurious discoveries caused by double dipping. We demonstrate that ClusterDE controls the FDR and identifies canonical cell-type and spatial-domain markers as top DE genes, distinguishing them from housekeeping genes. ClusterDE's ability to discover reliable markers, or the absence of such markers, can be used to determine whether two ambiguous clusters should be merged. Additionally, ClusterDE is compatible with state-of-the-art analysis pipelines like Seurat and Scanpy.

Bio: Dr. Dr. Dongyuan Song is an assistant professor in Genetics and Genome Sciences at UConn Health. He received his Ph.D. in Bioinformatics from UCLA, where he worked with Prof. Jingyi Jessica Li in the Department of Statistics and Data Science, and his M.S. in Computational Biology from the Harvard T.H. Chan School of Public

Health, advised by Prof. Rafael Irizarry at Dana-Farber Cancer Institute. His lab develops rigorous, interpretable statistical methods for analyzing single-cell and spatial omics data. Click here to join.

New England ATTC Presentations

Wednesday, December 10, 2025, 1:00-2:30 PM

Register: Gambling Disorder: Relationship to Suicide and Resources for Help

Kristen Beall is offering a second training on a critical topic: Gambling disorder, which is recognized by the American Psychiatric Association as a behavioral addiction with the highest rate of suicide risk. This session provides crucial information on identifying warning signs using DSM-5 criteria, understanding co-occurring disorders, and initiating life-saving conversations. Leave equipped with essential resources and mitigation strategies to address this public health concern in your community.

Tuesday, December 16, 2025, 1:00-2:30 PM

Register: Impact of the Games We Play

Ted Hartwell is back to the impact of the games we play. Digital gaming has become one of the most dominant forms of entertainment worldwide—surpassing the movie and music industries combined. But with growing popularity comes growing concern. This training explores the line between healthy and problematic gaming, highlighting features in video games and social media that can quickly lead to harm, especially among younger users. Participants will gain insight into how gaming and gambling behaviors intersect, learn to identify warning signs, and discover practical resources to address gaming-related harms.

Please feel free to share this with anyone who may be interested. We hope to see you there! Keep checking our <u>website</u> and our <u>LinkedIn</u> page for updates!

The New England ATTC Team

New England ATTC
Population and Quantitative Health Sciences
UMass Chan Medical School
New England ATTC - Addiction Technology Transfer Center (ATTC) Network
NewEnglandATTC@umassmed.edu





This is a friendly reminder that the 2025 UMass Chan Cares Employee Giving Campaign runs through **November 26**th — which means there are 3 days left to donate!

Visit <u>UMassChanCares.org</u> to make your donation by payroll deduction, check, or credit card, and support meaningful causes like student scholarships, research, and local community programs. Remember, every donor is automatically entered into weekly raffles for Dunkin', Starbucks, and UMass Chan swag. Please email our department lead, Carla McDonald, if you have any questions or need assistance.

Thank you to everyone who has already donated!

DIVERSITY

Working Wisdom: Celebrating Diversity in How We Work

Diversity shows up in many ways — not just in our backgrounds, but also in our **behaviors**, **communication styles**, **and energy sources**. Some of us thrive in bustling group settings, others prefer quiet reflection, and many move between both.

This new *Education Corner* in the **Diversity Digest** will offer **short, engaging insights** into how personality and behavior shape our workplace experience. Each installment will highlight a different angle — from introversion and extroversion to communication, decision-making, and well-being — with quick takeaways and fun polls to spark reflection.

Together, we'll explore the **full spectrum of diversity in how we work** — and celebrate the strengths each style brings to our community.

Week 5

Working Wisdom: Celebrating Diversity in How We Work

Happiness & Well-Being — What Sparks Joy?

Happiness looks different for everyone — and how we express it can depend a lot on our personality style. Extroverts may light up and celebrate openly, while introverts might feel just as joyful but show it in quieter ways. Ambiverts, of course, adapt depending on the moment.

★ The Science Behind It

- Extroverts tend to report higher levels of happiness, often because they are outwardly expressive and seek social rewards
- Introverts may experience happiness more quietly sometimes reporting less joy simply because they are less declarative.
- Ambiverts move between both, finding joy in social settings as well as in solitude.

At a Glance

	Extrovert	Introvert	Ambivert
Definition	Outwardly expressive, show joy openly	Quietly content, may keep happiness internal	Balance of both, adaptable expression
Happiness Style	Energized by shared joy, celebrations, social fun	Find joy in solitude, reflection, or small circles	Express joy socially at times, quietly at others
Style in Action	Enjoys parties, group successes, recognition	Finds satisfaction in reading, hobbies, or personal wins	Feels comfortable joining the party <i>or</i> enjoying quiet time

Your Turn

What sparks joy in your workday?

- People (connection, collaboration)
- Purpose (meaningful work, goals achieved)

Take this guick, two-question poll and see where our department lands

https://arcsapps.umassmed.edu/redcap/surveys/?s=HXP44NKJ38NC9MTT

Practical Tip

Recognize that happiness doesn't look the same for everyone. Some colleagues may celebrate loudly, while others quietly savor success — both are valid expressions of well-being.

Next Week: We'll shine a spotlight on Ambiverts — the often-overlooked middle ground that brings balance and flexibility to our teams.

Check-in

We're nearing the end of our series exploring how introverts, extroverts, and ambiverts show up in the workplace. So far, we've looked at:

- Week 1: Where we fall on the introvert–extrovert spectrum
- Week 2: How we gain and lose energy
- Week 3: Communication styles talking it out vs. thinking it through
- Week 4: Risk & decision-making styles

This week (Week 5), we're exploring Happiness & Well-Being — how different personalities find and express joy.

→ What's Next?

- Week 6: Spotlight on Ambiverts the flexible middle ground
- Week 7: Pulling it all together celebrating diversity in how we work

Thanks to everyone who's participated in the polls so far! Your input is helping us see the spectrum of strengths across our department.

UMASS CHAN REMINDERS

A Reminder from Payroll Services: 2026 Personal Time Schedule

- Employees have until 1/10/2026 to use 2025 personal time
- 2026 personal time will be granted on 1/13/2026
- Employees may begin using 2026 personal time after 1/13/2026 for the week beginning 1/11/2026



Remaining Holiday Schedule for 2025:

- Thanksgiving Day Thursday, November 27th
- Day After Thanksgiving Friday, November 28th
- Christmas Eve Wednesday, December 24th
- Christmas Day Thursday, December 25th

Looking Ahead - Holiday Schedule for 2026:

- New Year's Day Thursday, January 1st
- Martin Luther King Jr. Day Monday, January 19th
- Presidents Day Monday, February 16th
- Patriots' Day Monday, April 20th
- Memorial Day Monday, May 25th
- Juneteenth National Independence Day Friday, June 19th
- Independence Day Friday, July 3rd (observed)
- 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.