## RESEARCH NEWSLETTER

Northwestern University Feinberg School of Medicine



For more info, please visit our webiste:

www.feinberg.northwestern.edu/sites/emergencymed/research

#### DEPARTMENT OF EMERGENCY MEDICINE

The Department of Emergency Medicine at Northwestern University Feinberg School of Medicine publishes this quarterly research newsletter to highlight department newcomers, Q & A sections from current faculty and alumni, faculty and residency research spotlights, publications updates, and many more features.



## FACULTY SPOTLIGHT CONGRATS!

Dr. Jennifer Chan is an advisor with the CrisisReady organization affiliated with the Harvard Data Science Initiative. She helps this team with translational readiness and guiding the data science to practice and policymaking. This has been a great interdisciplinary collaboration with a health NGO, the Harvard Data Science Initiative, data scientists, and geographic specialists to better understand population movement during natural disasters using anonymized Facebook/Meta data sources. Please take some time to read this abstract that was presented at the American Geographic Union here in Chicago at McCormick Place

NH43C-01 - How crowdsourced human mobility data might save us from disaster: Lessons learned from the 2022 hurricane season



Jennifer Chan, MD MPH

### FACULTY SPOTLIGHT

**CONGRATS!** 

continued...

Drs. Maryann Mason & Regina Royan presented their study, Gender Differences in Circumstances and Weapon Types used in Fatal Interpersonal Violence-Related Deaths in Chicago, IL: 2015-2019, at the National Research Conference for Firearm Injury Prevention.



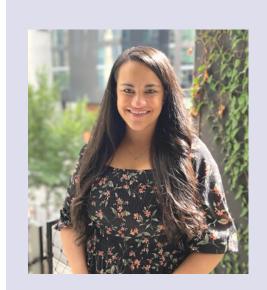
#### **GREAT JOB EVERYONE!**



# Q & A WITH DR. REGINA ROYAN

REGINA HAS A BACKGROUND IN PUBLIC HEALTH PRACTICE AND WORKED AS A RESEARCH EPIDEMIOLOGIST AND PUBLIC HEALTH ADVISOR FOR THE CITY OF DETROIT PRIOR TO OBTAINING HER MD AT THE UNIVERSITY OF MICHIGAN AND COMPLETING HER EMERGENCY MEDICINE RESIDENCY AT THE UNIVERSITY OF CHICAGO.

HER RESEARCH INTERESTS ARE ROOTED IN EQUITY IN CARE. INJURY **PREVENTION** AND ACUTE FIREARM VIOLENCE, AND NEUROLOGIC EMERGENCIES. SHE IS ALSO AN ACTIVE MEMBER OF IMPACT, AN ORGANIZATION THAT **FOCUSES** ON COMBATTING ONLINE HEALTH MISINFORMATION. WHEN NOT IN THE HOSPITAL, SHE ENJOYS SPENDING TIME NEAR THE LAKE AND EXPLORING THE CITY WITH HER HUSBAND BRIAN, HER DAUGHTER AVENTINE AND HER DOG OBERON. IN JULY, REGINA WILL BE STARTING A POSITION AS AN ASSISTANT PROFESSOR AT THE UNIVERSITY OF MICHIGAN.



Regina Royan, MD, MPH
Fellow

#### How did you first become interested in emergency medicine research?

Before going to medical school, I got an MPH and worked as an epidemiologist and public health advisor for the City of Detroit. I loved the intersection of research and clinical care and so I knew I wanted to build a career around these two interests.

How did your residency experiences contribute to your decision to pursue a research fellowship and research career after training?

I did my residency at University of Chicago which was a phenominal experience, but also a very taxing one with the amount of trauma and ED mortality we see. I think having a larger view and impact on some of the problems that we see in the ED through research and advocacy has helped me avoid burnout.

#### Q & A CONTINUED...

How did you ultimately land upon your current areas of research focus?

One of my research interests is firearm injury, which was a direct result of the amount of GSWs I saw on a daily basis during residency, as well as growing up in a very rural environment where firearm ownership is very common. I would say my other research interests are centered on reducing disparities in delivery of acute care, which goes back to my training and interests in public health.

As a resident and fellow, you have been very successful with publications. Please tell us about one of your favorite recent projects or publications.

I am really excited about a current project that I am working on with Alex Lundburg (EM) and Anne Stey (Trauma Surgery). We are estimating hospital costs for firearm injuries in the United States (spoiler alert: it's in the billions!).

Congratulations on accepting a faculty position at the University of Michigan! What are your future research and career plans?

I am very excited to begin the next step in my career in July as an Assistant Professor at UofM with plans for the tenure track. My goal will be to apply for my K award in the next year! Go Blue! Please reach out if you are in Ann Arbor!

## PUBLICATIONS SPOTLIGHT -

EM faculty, residents, alumni, staff in bold

Gottlieb M, Bailitz J, Fix M, Shappell E, Wagner MJ <u>Educator's blueprint: A how-to guide for developing high-quality multiple-choice questions</u>. AEM Educ Train 2023 Feb;7(1):e10836. pii:e10836

Majka ES, Trueger NS <u>Emergency Department Visits Among Patients With Cancer in the US.</u> JAMA Netw Open 2023 Jan 03;6(1):e2253797. doi:10.1001/jamanetworkopen.2022.53797

Rundle AG, Crowe RP, Wang HE, Lo AX <u>A methodology for the public health surveillance</u> and epidemiologic analysis of outdoor falls that require an emergency medical services response. Inj Epidemiol 2023 Jan 12;10(1):4. pii:4

Klein MR, Schmitz ZP, Adler MD, Salzman DH Simulation-based Mastery Learning Improves Emergency Medicine Residents' Ability to Perform Temporary Transvenous Cardiac Pacing. West J Emerg Med 2022 Dec 28;. doi:10.5811/westjem.2022.10.57773

Gottlieb M, Regan L, Jordan J, Westrick J, Bailitz J Education Value Units in Medical Education: A Scoping Review. Acad Med 2022 Dec 29;. doi:10.1097/ACM.0000000000005130

Nord GA, Doty AM, Monick AJ, McCarthy DM, Casten RJ, Aldeen AZ, Nawrocki PS, Rising KL Emergency Medicine Clinician Experiences Addressing Uncertainty in First-Trimester Bleeding. J Patient Exp 2022;9:23743735221140698. pii:23743735221140698

Haidar DA, Peterson WJ, Minges PG, Carnell J, Nomura JT, Bailitz J, Boyd JS, Leo MM, Liu EL, Duanmu Y et al. <u>A consensus list of ultrasound competencies for graduating emergency medicine residents</u>. AEM Educ Train 2022 Dec;6(6):e10817. pii:e10817

Gottlieb M, Krzyzaniak SM, Natesan S, Quinn A, Robinson D, Fant A, Sherbino J, Chan TM Education Theory Made Practical: Creating open educational resources via an apprenticeship model. AEM Educ Train 2022 Dec;6(6):e10802. pii:e10802

Liu SW, Lee S, Hayes JM, Khoujah D, **Lo AX**, Doering M, de Wit K, <u>Head computed</u> tomography findings in geriatric emergency department patients with delirium, altered mental status, and confusion: A systematic review. Acad Emerg Med 2022 Nov 04;. doi:10.1111/acem.14622

**Kyriacou DN**, Greenland P, Mansournia MA <u>Using Causal Diagrams for Biomedical Research</u>. Ann Emerg Med 2022 Oct 31;. pii:S0196-0644(22)00578-9

Malik S, Cohen PR Rosuvastatin-Induced Dizziness and Pruritus: A Case Report and Summary of Statin-Associated Dizziness and Pruritus. Cureus 2022 Sep;14(9):e29014. pii:e29014

Cloney MB, Kim HS, Dahdaleh NS <u>Risk Factors for Fracture Nonunion and Transverse Atlantal Ligament Injury After Isolated Atlas Fractures: A Case Series of 97 Patients.</u> Neurosurgery 2022 Dec 01;91(6):900-905. doi:10.1227/neu.0000000000002124

Doty AM, Rising KL, Hsiao T, Amadio G, Gentsch AT, Salcedo VJ, McElwee I, Cameron KA, Salzman DH, Papanagnou D, McCarthy DM <u>"Unfortunately, I don't have an answer for you": How resident physicians communicate diagnostic uncertainty to patients during emergency department discharge</u>. Patient Educ Couns 2022 Jul;105(7):2053-2057. doi:10.1016/j.pec.2021.12.002

Fant A <u>A tale of two professions, but should it be?</u> Acad Emerg Med 2022 Feb;29(2):257-259. doi:10.1111/acem.14449

Aronson M, Henderson T, Dodd KW, Cirone M, Putman M, Salzman D, Lovell EO, Williamson K <u>Effects of Brief Mental Skills Training on Emergency Medicine Residents' Stress Response During a Simulated Resuscitation: A Prospective Randomized Trial</u>. West J Emerg Med 2022 Jan 03;23(1):79-85. doi:10.5811/westjem.2021.10.53892

Loke DE, Farcas AM, Ko JS, Aluce LM, McDonald VR, Shakeri N, Fant AL Implementation of a standardized pregnancy screening process to address gender disparities in radiology turn-around-time and ED length of stay. CJEM 2022 Mar;24(2):206-213. doi:10.1007/s43678-021-00227-3

Hsiao JJ, Pedigo R, Bae SW, Jung J, Zhao L, **Trueger NS**, Chan TM, Grock A <u>Systematic</u> <u>online academic resource (SOAR) review: Endocrine, metabolic, and nutritional disorders</u>. AEM Educ Train 2021 Aug;5(4):e10716. pii:e10716





March 21-24, 2023 Las Vegas, NV



March 31- April 2, 2023 San Diego, CA



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The Department of Emergency Medicine at Northwestern University Feinberg School of Medicine welcomes your questions and feedback.

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