UIC Center for Health Equity using Machine Learning and Artificial Intelligence (CHEMA)

What is CHEMA?

UIC's Center for Health Equity using Machine Learning + Artificial Intelligence (CHEMA) is the nation's first Artificial Intelligence/Machine Learning (AI/ML) center to focus specifically on health equity and the elimination of health disparities to develop better outcomes for every patient. CHEMA aims to advance this work by:

- Collecting and analyzing diverse data to develop unique AI/ML tools that will save and improve lives.
- Validating national AI/ML research to amplify findings and impact within marginalized communities.
- Innovating medical school curriculum to train the next generation of professionals in AI/ML.

What is Artificial Intelligence and Machine Learning?

Artificial Intelligence (AI) is the ability for a computer to think, learn, and perform tasks that are typically done by people. For example, when Alexa and Siri answer your questions or when Google Maps tells you the best route to take when you're driving – that is AI! Doctors use AI regularly to diagnose patients based on medical scans, too.

Machine Learning (ML) is part of Artificial Intelligence and studies human patterns to learn, grow, and develop itself by continually assessing data and identifying patterns based on past use and outcomes. For example, when Google provides you with suggestions on movies you may like or when you go to look type something into your phone or computer and it begins to fill in the word you're looking for without you even having to type it all in.

Why UIC?



UIC is uniquely positioned to be a leader in this work due to the highly diverse patient population served by its health system. Furthermore, for over 50 years, UIC has been committed to health equity, including partnering with patients, community based organizations, university faculty, and public health institutions across the Chicagoland area to lift up communities' needs and find actionable solutions.

To learn more about CHEMA, please visit https://medicine.uic.edu/chema/.

What are some examples of the conditions CHEMA hopes to impact?

CHEMA is committed to saving and improving lives across all disease areas, such as:

- Preventing life-threatening complications and early death due to diabetes and hypertension,
- Avoiding cardiovascular disease, heart attacks, and heart conditions,
- Reducing mortality due to opioid use and overdose,
- · Preventing blindness in infants,
- Improving treatments for anxiety in children, and
- So much more!



What's next?

To further develop our work and assure that it is inclusive, explained the right way, and helpful to patients, **the CHEMA team needs community voices like yours to partner with us**. We are looking to develop a coalition of partners across industry, academic, and community to champion this work while standing at the forefront of technological innovation. These collaborations help to develop a team which can revolutionize the future of healthcare, together.

Participants will be compensated \$150 for each virtual or in-person meeting they attend (approximately 90 minutes each) with the first meeting likely taking place in early Fall 2023.

Join Us!

If you or someone you know may be interested in joining the CHEMA Advisory Board – which will include smaller committees based on the projects, questions, and needs of CHEMA – please contact Sarah Rittner at sarah@sasuprojectmanagement.com or via phone/text at 773/909-8596.

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Thank you for your consideration!

Together we can change healthcare's most important and difficult challenges through innovation and equity that will improve the lives of millions!



