Bio

Jonathan H Chen MD, PhD is a physician-scientist with professional software development experience and graduate training in computer science. He continues to practice Internal Medicine for the concrete rewards of caring for real people and to inspire his research focused on mining clinical data sources to inform medical decision making.

Chen co-founded a company to translate his Computer Science graduate work into an expert system to solve organic chemistry problems, with applications from drug discovery to a practical education tool distributed to students across the world. To gain first-hand perspective in tackling the greater societal problems in health care, he completed medical training in Internal Medicine and a VA Research Fellowship in Medical Informatics. He has published influential work in venues including the New England Journal of Medicine, JAMA, JAMA Internal Medicine, Bioinformatics, Journal of Chemical Information and Modeling, and the Journal of the American Medical Informatics Association, with research awards and recognition from the NIH Big Data 2 Knowledge initiative, National Library of Medicine, American Medical Informatics Association, Yearbook of Medical Informatics, and American College of Physicians, among others.

In the face of ever escalating complexity in medicine, integrating informatics solutions is the only credible approach to systematically address challenges in healthcare. Tapping into real-world clinical data streams like electronic medical records with machine learning and data analytics will reveal the community's latent knowledge in a reproducible form. Delivering this back to clinicians, patients, and healthcare systems as clinical decision support will uniquely close the loop on a continuously learning health system. Dr. Chen's group seeks to empower individuals with the collective experience of the many, combining human and artificial intelligence approaches to medicine that will deliver better care than what either can do alone.

Refer to Dr. Chen's web-page for additional in-depth bio information, publication lists, CV, etc.
http://web.stanford.edu/~jonc101

CURRENT ROLE AT STANFORD
Assistant Professor - Medical Center Line
Center for Biomedical Informatics Research + Division of Hospital Medicine
Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS
In the face of ever escalating complexity in medicine, integrating informatics solutions is the only credible approach to systematically address challenges in healthcare. Tapping into real-world clinical data streams like electronic medical records with machine learning and data analytics will reveal the community's latent knowledge in a reproducible form. Delivering this back to clinicians, patients, and healthcare systems as clinical decision support will uniquely close the loop on a continuously learning health system. Our group seeks to empower individuals with the collective experience of the many, combining human and artificial intelligence approaches to medicine that will deliver better care than what either can do alone.

Teaching

COURSES
2021-22
• Precision Practice with Big Data: BIOMEDIN 205 (Aut)

STANFORD ADVISEES

Med Scholar Project Advisor
Samson Peter

Doctoral Dissertation Co-Advisor (NonAC)
Rocky Aikens, Conor Corbin, Minh Nguyen

Doctoral Dissertation Reader (NonAC)