Podcast Title: ACM ByteCast Episode Title: Wendy Chapman - Episode 24

This episode of *ACM ByteCast* is part of a special collaboration with AMIA's *For Your Informatics* podcast. In this new series, we talk to women leaders, researchers, practitioners and innovators who are at the intersection of computing research and practice to apply A to healthcare and life science. Today, host Dr. Sabrina Hsueh of ACM is joined by co-host Dr. Karmen Williams of the American Medical Informatics Association. Their first guest of the series is Dr. Wendy Chapman, Director of the Center of Digital Transformation for Health at the University of Melbourne. Her research focuses on developing computer algorithms to understand information typed into electronic medical records and natural language processing of clinical texts. She sees enormous opportunities for improving healthcare delivery if we can harness information to make decision making, improve processes and behavioral change.

The episode begins with Dr. Chapman recounting her entrance into this field. In 1994, she was offered a PhD program in Chinese literature. Her husband applied to the informatics department at the University of Utah, and the application of linguistics and practicality piqued Dr. Chapman's interest as well. She also applied to the department and was accepted, and obtained a PhD six years later. The biggest challenge of graduate school was learning to program from scratch, all while having a one-year-old child. In 2013, the Chair position of Biomedical Informatics opened at the university. After building up the courage to apply, she ended up accepting the leadership role. After 6 years there, she found herself moving to Melbourne to accept the position she currently holds. She was surprised to learn that Australia was behind in many ways regarding digital health and saw an opportunity to impact the system with her own experience.

Then, Dr. Chapman identifies the most pressing issues she is faced with in her new role. These challenges include creating multidisciplinary teams to be effective and the barriers enacted by private vs. public funding models. For listeners still in the early stages of their careers, Dr. Chapman offers advice based on her own experience. First, always say yes and don't be afraid to pivot. Dr. Chapman defines health equity as the prevention of being treated differently at the doctor regardless of gender, skin color or financial status. A pressing issue relating to this idea in Dr. Chapman's field is that the data used to build the systems of the future often represents biased workflows, processes and decisions. It takes a very cognizant mindset to not encode the biases which already exist into these new automated systems.

As the founder of the Women in AMIA Committee, there are many changes Dr. Chapman has facilitated which she is proud of. The committee created a grassroots movement of women working together to do things where they see needs. She shares the two areas in which she sees opportunity for health AI to do great things. Then, she touches on the development of the Digital

Health Validitron at the University of Melbourne, which will guide innovators through questions in order to obtain funding and reimbursement. Finally, she identifies the areas in which ACM and AMIA can partner together in order to create a real impact in the field.

Key Takeaways:

0:33 – Introducing the new collaboration series between *ACM ByteCast* and *For Your Informatics*.

1:31 - Co-host Dr. Karmen Williams introduces today's gust, Dr. Wendy Chapman.

2:27 - Dr. Chapman's motivation behind joining the field of informatics.

4:40 - The challenges Dr. Chapman encountered during graduate school.

6:00 - How Dr. Chapman decided to pursue a leadership role and what led her to her current role.

11:50 - The most pressing issues Dr. Chapman faces in her new role.

14:48 - Dr. Chapman recounts her most beneficial career moves.

18:30 - Discussing health equity and its challenges.

23:57 - The opportunities for collaboration in the field of health AI.

28:50 The University of Melbourne's digital health validitron project.

33:35 - In what areas can AMIA and ACM partner up to make an impact?

Links:

Learn more about Wendy Chapman

Find more episodes of AMIA: For Your Informatics here.

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