Bio – Amina Ann Qutub

Amina received her PhD in Bioengineering from the University of California, Berkeley and UCSF in 2004, and a B.S. in Chemical Engineering from Rice University in 1999. Following her postdoctoral training in Biomedical Engineering at Johns Hopkins University, School of Medicine (2004-2009), she joined Rice University as an Assistant Professor in the Department of Bioengineering (2009-2018). In 2014, Amina also cofounded DiBS, an adaptive data visualization startup developing technologies to learn, present and interpret high-dimensional biomedical data. Amina joined the University of Texas, San Antonio in Fall 2018 as an Associate Professor in the Department of Biomedical Engineering. Joining UTSA with a research focus that intersects Brain Health, Engineering and Data Science, she is a member of the Joint UTSA/UTHSC Graduate Group in Biomedical Engineering and the Brain Health Consortium.

Amina is a NSF CAREER and NSF Neural & Cognitive Systems awardee; and her research has been supported by NSF, NIH, the Cancer Prevention Research Institute of Texas, the Kleberg Foundation, the Hamill Foundation, and the National Academies Keck Future Initiatives. She has published more than 45 peer-reviewed papers and presented more than 120 invited seminars, including eight keynote addresses, in the fields of systems biology, multiscale modeling, and precision medicine. Amina also served as scientific lead of the 2014-2015 DREAM Biomedical Big Data Algorithm Challenge to develop models to predict outcomes for acute myeloid leukemia patients; won the 2017 Bioinformatics Peer Prize for software to analyze high-dimensional biomedical data; and in 2017, co-launched the Texas Medical Center data workshops, expanding the biomedical data workshops to UT-San Antonio in 2018.

Amina’s research interests are in cellular systems biology, neuroscience and data science. Her lab’s research vision is to interpret human cells’ communication during processes of growth and regeneration in order to understand and improve health. The Qutub Lab develops tightly coupled experimental-computational methods to identify fundamental mechanisms of cell communication in the bone marrow and brain, with clinical applications to treating hematological cancers and neurodegenerative diseases.