STDOI/Human Genetics/UTRGV SOM

Complex Disease Journal Club Presents:

Co-phosphorylation Network and its applications

Dr. Marzieh Ayati obtained her undergraduate and M.Sc. in Computer Science at Sharif University of Technology in Iran. He completed her Ph.D. in Computer Science at Case Western Reserve University in 2018. After her graduation, she joined the department of computer science at UTRGV as an Assistant Professor. Her research area is bioinformatics and computational biology.

Dr. Ayati's research focuses on designing algorithms and development of models and software to extract information from a variety of molecular biology data including genomic,



transcriptomic, proteomic and phospho-proteomic (i.e. omics data). The main challenges in analyzing these types of data include (i) incomplete and noisy nature of high-throughput data, (ii) large scale and high dimensionality of the data, and (iii) complexity and dynamic nature of biological systems. She has designed and developed multiple advanced algorithms and computational techniques to address these challenges. These algorithms are developed to integrate omics data in order to identify biomarkers and potential drug targets and understand the underlying mechanism of complex diseases such as type 2 diabetes, hypertension, psoriasis, and different types of cancer.

This session will be held on November 20th, 2019 at 3:30 pm at the School of Medicine, EMEBL Room 2.125

For additional information or to present, please contact the CDJC organizers: Juan Carlos Lopez-Alvarenga, M.D. (<u>juan.lopezalvarenga@utrgv.edu</u>), Srinivas Mummidi, Ph.D. (<u>srinivas.mummidi@utrgv.edu</u>), Rector Arya, Ph.D. (<u>rector.arya@utrgv.edu</u>)
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