CENTER FOR BIOINFORMATICS & COMPUTATIONAL BIOLOGY and the DATA SCIENCE INSTITUTE (DSI)
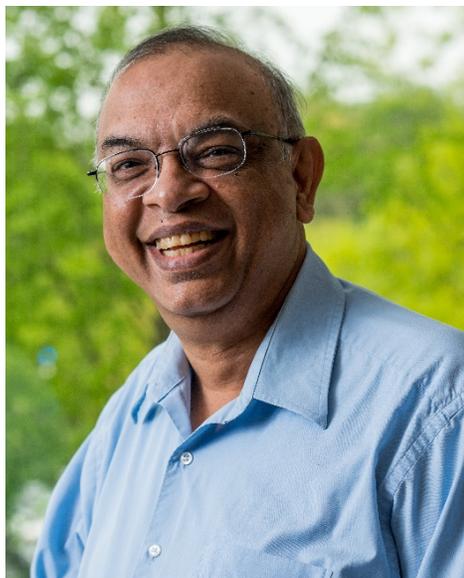
PRESENTS:
Gunaretnam (Guna) Rajagopal

VP, Global Head, Computational Sciences, Discovery Sciences, Janssen Research & Development, A Johnson & Johnson Company

TRANSLATING DATA INTO INSIGHT TO GUIDE DRUG DISCOVERY & DEVELOPMENT

Advances in Science, Technology and Computing has provided us with tools to generate and analyze data over wide range of spatial and temporal scales. In drug discovery & development, our central challenge is the following – how do we translate data into insight that provides a deeper conceptual understanding of the molecular processes that govern the behavior of living organisms in their normal and disease state. In this talk I will describe the work of my Computational Sciences team whose mission is to drive data analytics in support of addressing a wide range questions in drug discovery anchored on close collaboration with researchers within and outside of Janssen R&D. I will provide some examples that illustrate how we engage with our partners to meaningfully impact and help discover and develop safe and effective therapies for patients.

BIOGRAPHY

Guna is the Global Head of Computational Sciences within Discovery Sciences at DPDS. His team is mandated to provide computational analytics expertise and support collaborations with partners within and outside of Janssen R&D. Before joining Janssen, Guna was at the Rutgers Cancer Institute of New Jersey (CINJ), an NCI-designated Comprehensive Cancer Center, as Executive Director (Bioinformatics) and was an Adjunct Professor of Radiation Oncology at the Robert Wood Johnson Medical School (RWJMS) where he drove the partnership in Systems Biology with Rutgers, Princeton and the Institute for Advanced Study. At RWJMS, he deployed an interoperable EMR system connecting the medical school, university hospital and CINJ. He was also a member of the Simons Center for Systems Biology at the Institute for Advanced Study, Princeton working on human genetics of cancer and Autism. Prior to joining CINJ, he was the founding Executive Director of the ASTAR Bioinformatics Institute (BII) at the BIOPOLIS, Singapore where he co-led the building of the cyber-infrastructure. He supported national/international initiatives in Stem Cells, Cancer Biomarkers and the Singapore-MIT Alliance. Prior to his appointment in Singapore, he spent twelve years at the University of Cambridge, United Kingdom where was an Assistant Director of Research at the Cavendish Laboratory, conducting research in theoretical and computational physics and led the High-Performance Computing initiative funded by grants from the UK, EU and Hitachi. He was also a Fellow and Director of Studies in Physics at Jesus College, Cambridge. Guna received his PhD in theoretical physics from the Georgia Institute of Technology and his undergraduate and MSc (in Particle Physics) from the University of Malaya. He is a member of various professional scientific organizations and has sat on research funding bodies in the US, UK, Ireland, Holland, Japan, Malaysia, Singapore, and European Union. He was appointed as a ad hoc Council member to the NIH/NIGMS, to the SAB of IMEC, Belgium and to the Panel of Experts to the European Commission. He is the Principal Investigator from J&J on the industry-government-academia driven UK Biobank Consortium.

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September 30, 2019

DELAWARE BIOTECHNOLOGY INSTITUTE Room 102

3:30 – 4:30pm