

KEYNOTE TALK

Thursday, October 8, 2020 at 1:30pm

To function or not to function

Sridhar Hannenhalli
Cancer Data Science Laboratory
National Cancer Institute
USA

Abstract: The functions of only a minority of genes in any species is known. And even in those cases the functional annotation is highly incomplete and largely devoid of context. At an even more fundamental level, how can we know whether a gene serves any relevant biological function in a given context? In this informal presentation we will discuss a few vignettes related to the broad questions of context-specific functions of genes, in a variety of contexts from bacterial response to drugs, normal tissues, and cancer.



Speaker Bio-Sketch: Dr. Hannenhalli obtained a B. Tech from the Indian Institute of Technology (1990) and his Ph.D. in Computer Science from the Pennsylvania State University (1995). After a postdoctoral fellowship at the University of California-San Diego (1996-1997), he worked as a Senior Scientist at Glaxo Smith-Kline (1997-2000) and then at Celera Genomics (2000-2003), where he was involved in the work reporting the first human genome sequence. He was a faculty member in the Department of Genetics at the University of Pennsylvania (2003-2010), and then at the University of Maryland (UMD) with joint appointments in the Department of Cell Biology and Molecular Genetics, and the University of Maryland Institute for Advanced Computer Studies (2010-2019). Dr. Hannenhalli served as Interim Director of the Center for Bioinformatics and Computational Biology at UMD (2012-2013) and was a Fulbright Scholar and Visiting Professor at the Indian Institute of Sciences and the National Center for Biological Sciences, Bengaluru (2017-2018). The Hannenhalli lab is broadly interested in developing computational and statistical approaches to harness the huge amount of biological data to ultimately answer specific biological questions pertaining to gene regulation and evolution, both from the basic science as well as translational perspective, with specific applications to development and diseases, with an emphasis on cancer.