
Computer Science Colloquium

Biomarkers and Pre- and Post-Market Surveillance

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Olsen 311

Refreshments at 2:30, Talk from 3:00-4:00

In the era of high throughput genomic measurements we are finally in the position where we can use computational techniques to comprehensively identify biomarkers of high specificity. I will discuss this opportunity illustrating it with examples from aging research and cancer therapeutics.

Bio: Isaac (Zak) Kohane is the director of the Children's Hospital Informatics Program and is the Henderson Associate Professor Health Sciences and Technology at Harvard Medical School. He is also Director of the Countway Library of Medicine of Harvard Medical School and co-Director of the HMS Center for Biomedical Informatics. Dr. Kohane leads multiple collaborations at Harvard Medical School and its hospital affiliates in the use of genomics and computer science to study cancer and the development of the brain (with emphasis on autism). He also has developed several computer systems to allow multiple hospital systems to be used as "living laboratories" to study the genetic basis of disease while preserving patient privacy.

Dr. Kohane has published over 115 papers in the medical literature and authored a widely used book on Microarrays for an Integrative Genomics. He has been elected to multiple honor societies including the American Society for Clinical Investigation and the American College of Medical Informatics. He leads a doctoral program in genomics and bioinformatics at MIT. He is also a practicing pediatric endocrinologist and father of two energetic children.