The Department of Biomedical Informatics presents:

**Wednesday, November 14th, 2012 | 11:00 – 12:00 PM**
Room H1213 Ross Hospital

**Title:** “Transforming 300 Billion Points of Data into Diagnostics, Therapeutics, and New Insights into Disease”

**Abstract:** With the end of the United States NIH budget doubling and completion of the Human Genome Project, there is a need to translate genome-era discoveries into clinical utility. The difficulties in making bench-to-bedside translations have been well described. The nascent field of translational bioinformatics may help. Dr. Butte’s lab at Stanford builds and applies tools that convert more than 300 billion points of molecular, clinical, and epidemiological data -- measured by researchers and clinicians over the past decade -- into diagnostics, therapeutics, and new insights into disease. Dr. Butte, a bioinformatician and pediatric endocrinologist, will highlight his lab’s work on using publicly-available molecular measurements to find new uses for drugs, relating genes and environment to disease, and evaluating patients presenting with whole genomes sequenced.

**Atul Butte, MD, PhD**
Dr. Butte is Chief of the Division of Systems Medicine and Associate Professor of Pediatrics, Medicine, and by courtesy, Computer Science, at Stanford University and Lucile Packard Children’s Hospital. The Butte Laboratory builds and applies tools that convert more than 300 billion points of molecular, clinical, and epidemiological data -- measured by researchers and clinicians over the past decade -- into diagnostics, therapeutics, and new insights into disease. Examples of this method includes work on cancer drug discovery published in the Proceedings of the National Academy of Science (2000), on type 2 diabetes published in the Proceedings of the National Academy of Science (2003), on fat cell formation published in Nature Cell Biology (2005), on obesity in Bioinformatics (2007), and in transplantation published in Proceedings of the National Academy of Science (2009).

Dr. Butte has authored more than 120 publications and delivered more than 140 invited presentations in personalized and systems medicine, biomedical informatics, and molecular diabetes, including 30 at the National Academies of Science, Institute of Medicine, National Institutes of Health or NIH-related meetings. Dr. Butte’s research has been featured in the New York Times Science Times and the International Herald Tribune (2008), Wall Street Journal (2010 -2012), and San Jose Mercury News (2010). Dr. Butte's recent awards include the 2010 Society for Pediatric Research Young Investigator Dr. Butte also co-authored one of the first books on microarray analysis titled "Microarrays for an Integrative Genomics" published by MIT Press.