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# COMPUTATIONAL EXPERIMENTS ON THE GENOME

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**Thursday, Nov. 16, 2017**  
**5 p.m. in 101 Jordan Hall**

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**Broad Institute**

The Human Genome Project was a 15-year, \$3 billion international effort that in 2003 completed the first reference map of the 3 billion nucleotides in human DNA. Today, you can have your whole genome sequenced in days for about \$1,000. Researchers have assembled datasets consisting of genetic and medical information from hundreds of thousands of individuals, and plan to include millions. How can we use such massive data to uncover the biological basis of disease? In this talk, I'll describe the rapid emergence of biomedicine as a data-intensive science, and some of the ways math is used to link genetics, biology, and disease.

