Mathematical & Computational Biology Seminar

Organizer: Lior Pachter

Wednesday, 2:00–3:00pm, 939 Evans

March 18 **Nicholas Eriksson**, 23andMe

Research at 23andMe: Ancestry and association studies

23andMe has two core missions: to provide consumers with access to their genetic data with the necessary tools to interpret it, and to allow those customers to participate in the next generation of genetics research.

Most human genetics has been done on relatively simple and small populations. However, at 23andMe, we are faced with all the complexities of human genetics (admixture both recent and historical, complex patterns of relatedness, etc) and customers who are hungry for knowledge of what their DNA says about their past and future.

I'll present some preliminary results and many open problems in two areas: First, how do you infer detailed ancestry and relatedness information from SNP data? Second, what challenges and opportunities do we face when doing association studies on complex populations with detailed phenotype data?