USC Dornsife

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Ancestral recombination graphs in Human Genetics

Ancestral Recombination Graphs (ARGs) are graphs that summarize all the complex genealogical relationships among individuals represented in a sample of DNA sequences. Their use is currently revolutionizing the field of population genetics and is leading to the development of powerful new methods for elucidating individual and population genetic processes, including changes in population size, migration and admixture, recombination, mutation, and selection. In this talk I will present recent work from my group on estimation of ARGs and their use in human population genetics. In particular, I will discuss analyses of natural selection in the human genome acting on both simple and complex traits. I will also discuss how the use of Ancient DNA is being used to infer selection in the human genome and to detect environmental drivers of natural selection.

IN PERSON

HEB Seminar
April 8, 2024 | 12:00 PM – 1:00 PM
Allan Hancock Foundation Building - Torrey Webb Room