

## The Promises and Pitfalls of Genoeconomics

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### ABSTRACT

As a result of the development of new technologies for analyzing the genome, the costs of measuring common genetic variation across individuals are rapidly declining. In this talk I survey the main ways in which the ability to directly measure genetic variation is likely to contribute to economics, and outline the challenges that have slowed progress in making these contributions. The most urgent problem facing researchers in this field is that most existing efforts to find associations between genetic variation and economic behavior are based on samples that are too small to ensure adequate statistical power. To illustrate the potential of genoeconomics, I report on the findings from a gene discovery study of educational attainment based on a pooled sample of ~130,000 comprehensively genotyped individuals (an order of magnitude larger than previous social-science genetics studies) from 44 different cohorts. The analysis identifies three independent genetic variants that are associated with educational attainment. All three associations replicate in independent samples.