

## Genetics, Bioinformatics, & Systems Biology Colloquium

presents

Zoom

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IN-PERSON

Live stream via

Zoom available

with Pizza

## Alan Shuldiner, MD **University of Maryland**







## <u>Human Genetics in Drug Development or The Path to</u> **Precision Medicine: From Discovery to Patient Care**

Traditional approaches to identifying successful therapeutic targets for diseases of unmet clinical need are inefficient and costly. Evidence suggests that therapeutic targets supported by human genetics are more likely to succeed. To this end, the Regeneron Genetics Center (RGC) performs large-scale genetic analyses in diverse populations world-wide seeking genotype-phenotype associations that inform human health and disease. With academic and health care system collaborators, the RGC has sequenced more than 2 million exomes from patients and populations globally, including patient cohorts linked to broad electronic health record data, disease case-control cohorts, diverse understudied populations and founder populations, and families with rare diseases and extreme phenotypes. Dr. Shuldiner will review how human genetics is informing therapeutic development with specific examples from diverse populations and therapeutic areas, all with important implications for precision medicine and population health.

