

## Research Interests

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### ***Hongzhe Li Ph.D.***

Dr. Li leads the effort in statistical genetics and genomics at the Perelman School of Medicine. He is developing methodological tools for studying genomics and metagenomics to understand the genomic basis for complex biological systems. Methods for analysis of viral infection, microbiome and metagenomics data are critical for evaluating the interactions between viral agents and the hosts. Some of these methodological strategies include additive genetic gamma fragility models, sparse signal detection, hidden Markov random field model and high dimensional regression analysis.

*Interactions with other trainers:* He has been interacting with Dr. Robertson, Tempera, Yuan, and Chang. He is a major contributor to the training of our students and post-docs particularly in the methodologies required for complex genomic and metagenomics analysis.