

Research Interests



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- **Development and application of statistical methodology to genetic studies of complex disease**
- **Methodology**
 - Family-based approaches
 - Linkage analysis (including methods when relationships are unknown)
 - Correcting for known and unknown relatedness in the context of association analysis
 - Maternal effects, maternal/foetal interactions and parent-of-origin effects
 - Mapping multiple disease loci simultaneously
 - Haplotype effects
 - Gene-gene interactions (epistasis)
 - Integrative analysis of multiple data types (genetic, gene expression, methylation, protein levels etc.)
 - Bayesian Network approaches for identifying causal relationships
- **Applications**
 - Liver disease
 - Non-alcoholic fatty liver disease (NAFLD)
 - Alcoholic liver cirrhosis (ALC)
 - Primary Biliary Cholangitis (PBC)
 - Kidney Disease
 - Vesicoureteric Reflux (VUR)