Grant Proposal

**Analytic Plan**
- Sampling Design
  - Randomization
  - Sample Matching (case-control; propensity score)
- Power and Sample Size Calculation
  - Group Comparison on Means/Proportions
  - Analysis of Variance/Covariance
  - Repeated Measures Analysis of Variance/Covariance
  - Linear Regression
  - Logistic Regression
  - Mediation/Moderation Effect
  - Structural Equation Models
  - Longitudinal Data
  - Growth Curve Models
  - Mixed Effect Models

**Database Management**
- Statistical Modeling
- Data Analysis

**Manuscript/Presentation/Abstract**
- Statistical Methodology
- Data Analysis
- Result

**Data analysis**
- Psychometric Analysis
  - Internal Consistency
  - ROC Analysis
  - Factor Analysis (EFA; CFA)
  - Item Response Theory
  - Multi-group Analysis
- Cross-sectional Data Analysis
  - Descriptive Analysis
  - Group Comparisons
  - Analysis of Variance/Covariance
  - Linear Regression
  - Logistic Regression
  - Multivariate analysis
  - Categorical Data Analysis
  - Factor Analysis
  - Generalized Linear Modeling
  - Mediation/Moderation Analysis

**Survival Analysis**
- Propensity Score Analysis
- Analysis On Cluster Data
- Structural Equation Modeling
- Path Analysis
- Latent Class Analysis
- Latent Growth Analysis
- Hierarchical Linear Modeling
- Multilevel Modeling on Complex Survey Data

**Longitudinal Data Analysis**
- Generalized Estimating Equations
- Repeated Measures Analysis of Variance/Covariance
- Mixed Effect Models
- Generalized Growth Mixture Models

**Missing Data Imputation**
- Maximum Likelihood Estimation
- Multiple Imputation

**Clinical Trials**
- Intent-to-treat Analysis
- Last Observation Carried Forward
- Efficacy Analysis
- Adverse Events

**Genetics**
- Genome-wide Linkage Analysis
- Family-based Association Analysis

**Statistical Software**
- SAS/SPSS/Mplus/STATA/Matlab/S-plus
- Power Calculation (SAS, Mplus, GPower, PASS, etc)
- Dataset Conversion

**And any other hypothesis-based statistical analysis**