**Program for the 3rdTaihu International Statistics Forum**

**Short Program**

July 9

Registration 10:30am – 10:30pm Yi Fu Building

July 10 Day 1

08:00am-08:15am Welcome and Opening Session 逸夫楼报告厅

08:15am – 09:15 am Keynote Talk 1 逸夫楼报告厅

09:15am-09:45 am 茶歇

09:45 am --11:45 am Sessions A1 and B1 ；A1在逸夫楼报告厅，B1在三楼多功能厅

11:45 am – 01:00 pm Lunch（自助餐）

01:00 pm –03:00 pm Sessions A2 and B2；A2在逸夫楼报告厅，B2在三楼多功能厅

03:00 pm – 03:30 pm Coffee/Tea Break茶歇

03:30 pm – 05:30 pm Session A3 and B3；A3在逸夫楼报告厅，B3在三楼多功能厅

06:00pm – 08:00 pm Dinner晚餐

July 11 Day 2

08:00 am –09:00 am Keynote Talk 2；逸夫楼报告厅

09:00 am-09:30 am 茶歇

09:30 am -- 12:00am Sessions A1 and B1；A1在逸夫楼报告厅，B1在三楼多功能厅

12:00 am – 01:00 pm Lunch （自助餐）

01:00 pm –03:00 pm Sessions A2 and B2；A2在逸夫楼报告厅，B2在三楼多功能厅

03:00 pm – 03:30 pm Coffee/Tea Break茶歇

03:30 pm – 05:30 pm Session A3 and B3；A3在逸夫楼报告厅，B3在三楼多功能厅

05:30 pm -- 06:00 pm Closing Session

**Long Program**

July 10 Day 1

08:00am – 08:15am

Welcome and Opening Session/Chair: Jun Liu

08:15am – 09:15am

**Keynote Speech**

Chair: Jun Liu

Probability and Statistics for Bio-Sequence Database Searches,

Professor Michael Waterman

09:15am-09:45 am Tee break

09:45am – 11:45 am

**A1: Bayesian Variable Selection with Application in Genomics and Imaging data**

Chair: Mengjie Cheng

Scalable Bayesian Variable Selection for Structured High-dimensional Data,

Chang gee Chang, Suprateek Kundu and Qi Long\*,

Bayesian Neural Networks for Selection of Anticancer Drug Response Genes,

Faming Liang,

A Variational Algorithm for Bayesian Variable Selection,  
Xichen Huang, Jin Wang, and Feng Liang**＊**

Bayesian Feature Selection for Ultra-High Dimensional Imaging Genetics Data,

Yize Zhao

**B1: Dynamic Networks and Community Detection**

Chair: Le Bao

Sequential Change-Point Detection Based on Nearest neighbors

Hao Chen

Latent Space Models for Dynamic Networks

Yuguo Chen

Community Detection via an Efficient Nonconvex Optimization Approach

Binghui Liu

Detecting Subnetwork-level Dynamic Correlations

Tianwei Yu

11:45 am – 01:00 pm Lunch Break

01:00pm -- 03:00pm

**A2: Novel Methods for Sequencing data analysis**

Chair: Lin Hou

BCurve: Detection of Differentially Methylated Regions Using BS-seq Data Based on Bayesian Credible Bands,

Shi Lin

A mixture model for contamination detection in target DNAseq,

Di Wu

Removing Unwanted Variation Using both Control and Target Genes in Single Cell RNA Sequencing Studies,

Mengjie Cheng

Copy Number Analysis of Whole-Genome Data Using BIC-seq2 and its Application to Detection of Cancer Susceptibility Variants,

Ruibin Xi

**B2:Time Series Models and Spatio-Temporal Analysis**

Chair: Feng Liang

Oracally Efficient Estimation and Consistent Model Selection for Auto-regressive Moving Average Time Series with Trend,

Lijian Yang

Comparison between Spatio-Temporal Random Processes and Application to Climate Model Data,

Bo Li

Spectral Filtering for Spatial-Temporal Dynamics,

Tian Zheng

ZD-GARCH Model:  a New Way to Study Heteroscedasticity,

Dong Li

03:00 pm – 03:30 pm Coffee/Tea Break

03:30pm—05:30pm

**A3: Dimension Reduction and Disease Modeling**

Chair: Ke Deng

Probability-Enhanced Sufficient Dimension Reduction for Binary Classification,

Hao Helen Zhang

Sufficient Dimension Reduction for Tensor Data,

Wenxuan Zhong

Detecting Multiple Variants Associated with Disease Based on Haplotypes of Case-Parent Trios

Chan Wang, Yue-Qing Hu

Incorporating Hierarchical Structure into Dynamic Systems: An Application of Estimating HIV Epidemics at Sub-National and Sub-Population Level

Le Bao

**B3: Statistical Methods for Accommodating Data with Special Characteristics**

Chair: Bo Li

Quantile Estimation Based on Clustered Data,

Jiahua Chen

Model Averaging for Regression with Fragmented Data

Fang Fang

On Imbalanced and High Dimensional Low Sample Size Classification

Lingsong Zhang

Identification of No-ignorable Missing Data

Wang Miao

Day 2

08:00 am – 09:00 am

**Keynote Speech**

Chair: Michael Zhu

Recent Advances in Handling Non-ignorable Nonresponse,

Professor Jun Shao

09:00am – 09:30am Tee break

09:30am – 12:00am

**A1:Statistical Methods for Cancer Research and GWAS**.

Chair: Wenxuan Zhong

CRISPR Screen for Precision Cancer Medicine

Xiaole Shirley Liu

Multiplatform Analysis of Molecular Heterogeneity in Cancer

Ronglai Sheng

Powerful Test Based on Conditional Effect for Genome-Wide Screening

Jun Xie

Statistical Issues in Genome-Wide Association Studies of AMD progression

Wei Chen

The impact of genotyping errors on the statistical power of association test in genome-wide association studies.

Lin Hou

**B1: Big Data and Statistical Learning**

Chair: Lingsong Zhang

Statistical Learning for Biomedical Data Integration and Analysis

Yuping Zhang

Leveraging in Big Data Logistic Regression

Ping Ma

Automated Feature Extraction and Selection for High-Throughput Phenotyping

Sheng Yu

Simultaneous Sparse Dictionary Learning and Pruning

Xiao Wang

12:00 am – 01:00 pm Lunch Break

01:00pm—03:00pm

**A2: Statistical Analysis of Metagenome data and other Genomic Studies**

Chair: Yize Zhao

Looking into Genome Coverages of Metagenome Sequencing Data

Xuegong Zhang

Network Inference of Microbial Communities from Metagenome Data

Minghua Deng

Rabbit Genome and Related Animal Model of Cardiovascular Diseases

Yixue Li

TROM: A Testing-based Method for Finding Transcriptomic Similarity of Biological Samples

Jingyi Li

**B2: Statistical Theory, Methods, and Application**

Chair: Xiao Wang

Structured Correlation Detection with Application to Colocalization Analysis in Dual-Channel Fluorescence Microscopic Imaging

Ming Yuan

A Bias Corrected Mean Score Estimator with Covariates Missing at Random

Qihua Wang

Control Charts for Sparse Contingency Tables in Multivariate Categorical Processes

Dongdong Xiang

Statistical Consulting and Collaboration: Open the Door to the World

Xiaoyue Niu

03:00pm—03:30pm Coffee/Tea Break

03:30pm—05:30pm

**A3:Topic Models and Text Mining**

Chair: Dong Li

Dynamic Topic Model with Multiple Change Points

Jinzhu Jia

Bayesian Analysis of A Class Structured Topic Model

Junni Zhang

Novel Statistical Approaches for Mining Big Chinese Medical Text Data

Ke Deng

**B3: Instrumental Variable Estimation and Semi-Parametric Modeling.**

Chair: Sheng Yu

Instrumental Variable Estimation under The Semiparametric Accelerated Failure Time Model

Menggang Yu

High-Dimensional Instrumental Variables Estimation and Inference with Possibly Invalid Instruments

Wei Lin

Generalized Time-Varying Treatment Switching Effect Model for Hospitalization

Riquan Zhang

A General Semiparametric Accelerated Failure Time Model Imputation Approach for Censored Covariate

Ying Ding

05:30 pm – 06:00 pm Closing Session/Organizing Committee