Together, we are stronger



Workshop on "Advanced Analysis for Understanding Rare Diseases"

Organizer: East China Normal University, China
Time: February 27th - March 1st, 2018
Venue: Room 534, Life Science Building

East China Normal University Minhang Campus, 500 Dongchuan Road., Shanghai, China

Organizing Committee

Dr, Tieliu Shi, Professor - East China Normal University, China
Dr, Leming Shi, Professor - Fudan University, China
Dr, Duan Ma, Professor - Fudan University, China
Dr, Pawel Labaj, Professor - Boku University, Austria
Dr, David Kreil, Professor - Boku University, Austria
Dr Weimin Zhu, Professor - Beijing Proteome Research Center, China

QR Code



PARTNERS & SPONSORS











When there is love, there is hope.

AGENDA

Day 1

Date: 15:30-18:00 p.m. on Tuesday, February 27th, 2018

Time	Event	Speakers
15:30-15:45	Welcome Remark	Dr. Rongming Wang, Vice President of
		East China Normal University
15:45-16:00	Group Photo for All Participants	
16:00-17:00	Plenary Speech: Rare biology and rare cancers in	Dr. Christopher Mason, Weill Cornell
	astronauts	Medicine
17:00-18:00	Plenary Speech: The personalized medicine plan of	Dr. Joaquin Dopazo, Foundation
	Andalusia: the first experience of use of genomic data	Progress and Health, Andalusian Public
	within a public health system	Health System
18:00-Midnight	Dinner & Fun	

Day 2

Session1: Data Analysis & Interpretation

Session Chair: Dr. David Kreil

Date: 09:00-12:00 on Wednesday, February 28th, 2018

Time	Title/Event	Speakers
09:00-09:45	Methylation profiling in therapy related AML	Dr. Polanska, Silesian University of Technology
09:45-10:15	Application of FDAlabel Database to Advance Rare Disease Study	Dr. Fang Hong, FDA/NCTR
10:15-10:45	Machine Learning for Rare Diseases	Dr. Cesare Furlanello, The Kessler Foundation
10:45-11:15	Determination of local chromatic interactions using a combined CRISPR and peroxidase APEX2 system	Dr. Yun Liu, Fudan University
11:15-11:45	Data interpretation with interactive visualization	Dr. William Zhou, SAS Inc.
11:45-12:00	Clustering of heterogeneous rare disease networks and Predicting disease-gene associations based on low-rank matrix Tri-factorization	Ms. Xia Pan, East China Normal University
12:00-13:30	Lunch	

Session2: Data Sharing & Standardization

Session Chair: Dr. Leming Shi

Date: 13:30-17:25 on Wednesday, February 28th, 2018

Time	Title/Event	Speakers
13:30-14:15	Deep study of chromic fatigue syndrome	Dr. Wenzhong Xiao, Harvard Medical School
14:15-14:45	Rare epigenetic diseases	Dr. Duan Ma, Fudan University
14:45-15:15	Biobank as the resource for rare disease study at Beijing Children's Hospital	Dr. Yongli Guo, Beijing Children's Hospital
15:15-15:45	Application of Genome Analysis Strategies in the Clinical Testing for Pediatric Diseases	Dr. Yaqiong Jin, Beijing Children Hospital.
15:45-15:55	Coffee break	
15:55-16:25	Crowd sourcing science to advance integrated analysis of Neuroblastoma	Dr. David Kreil, Mr. Maciej Kandula, Boku University
16:25-16:55	Single amino acid repeats in rare diseases and beyond	Dr. Pawel Labaj, Boku University
16:55-17:10	Phenome-based rare disease annotation and functional analysis	Ms. Jinmeng Jia, East China Normal University
17:10-17:25	Disease standardization platform	Ms. Zhihan Li, East China Normal University
17:25 - Midnight	Dinner & Fun	

Day 3

Session3: Technology Advances in Rare Disease Diagnosis

Session Chair: Dr. Wenzhong Xiao

Date: 09:00-12:15 on Thursday, March 1st, 2018

Time	Title/Event	Speakers
09:00-09:45	Genetic tests for inherited diseases with high sensitivity	Dr. Yongyong Shi, Shanghai Jiaotong
		University
09:45-10:15	Global Genomic Data Platform Empowering Rare Disease	Dr. Hongye Sun, WuXi NextCODE
	Diagnosis and Clinical Research	Genomics
10:15-10:45	Application of gene capture technologies in rare disease	Dr. Jian Wu, MyGenostics Inc,
	diagnosis	Dr. Jian Wu, MyGenostics inc,
10:45-11:15	Comprehensive application of multiple technologies to	Dr. Qian Zhao, SinoPath Diagnostics
	hunt the genetic culprit.	Dr. Qian Zhao, Sinoi ath Diagnostics
11:15-11:45	The application of third generation sequencing	Dr. Depeng Wang, Grand Omics
	technologies in rare disease diagnosis.	Dr. Depeng Wang, Grand Offics
11:45-12:00	RDAD: A Phenotype Based Rare Disease Auxiliary	Mr. Zhongxin An, East China Normal
	Diagnosis System	University
12:00-12:15	Rdpa: A Phenotype-Disease Prediction Algorithm Based	Mr. Xin Li, East China Normal University
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12:15-13:30	Lunch	

Session 4: Clinical Applications in Rare Disease Diagnosis

Session Chair: Dr. Duan Ma

Date: 13:30-17:00 on Thursday, March 1st, 2018

Time	Title/Event	Speakers
13:30-14:15	TBX6 gene dosage-dependent phenotypic variability in both congenital renal and vertebral anomalies	Dr. Feng Zhang, Fudan University
14:15-14:45	In silico Drug Repositioning for Rare Disease at FDA/NCTR	Dr. Zhichao Liu, FDA/NCTR
14:45-15:15	Case Discussion – what we learned from a prenatal case	Dr. Luming Sun, Shanghai First Maternity and Infant Hospital
15:15-15:25	Coffee break	
15:25-15:55	Clinical application of next generation sequencing for rare diseases	Dr. Jian Wang, Shanghai Children's Hospital
15:55-16:15	Application of Chinese Gene Mutation Database for disease causative site detection in pedigree	Dr. Changsheng Liu. Virgilbio Inc
16:15-16:30	A gene and phenotype guided drug repositioning through collaborative filtering model for rare diseases	Ms. Yue Ming, East China Normal University
16:30-16:45	Modular-based mapping between HPO and MPO	Mr. Yunxiang Liang, East China Normal
	provides new insights into phenotypic mechanisms	University
16:45-17:00	Phenotypic insights on the relation between adverse	Mr. Dongming Guo, East China Normal
	drug reaction and disease phenotype	University

Participants (in alphabetical order):

Dr. Geng Chen

Associate Professor, Shanghai Key Laboratory of Regulatory Biology, East China Normal University, Shanghai, China

Dr. Joaquin Dopazo

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Dr. Yongli Guo

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Dr. Yaqiong Jin

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Dr. Christopher Manson

Associate Professor, Department of Physiology and Biophysics, Weill Cornell Medicine, WorldQuant (WQ) Scholar; Director, WQ Init. for Quantitative Prediction; Fellow, Information Society Project, Yale Law School

Dr. Duan Ma

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Vice President of Operation & Technology Platform and Chief Operation Officer of Wuxi Genomic Center, WuXi AppTec, Inc

Dr. Luming Sun

Professor, The committee member of Safe Motherhood and Newborn Health of FIGO. Committee member of Chinese Perinatal Society (Fetal Medicine Group), Director of fetal medicine unit & Prenatal Diagnosis Center at Shanghai First Maternity and Infant Hospital, China

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Dr. Jian Wang

Professor, Director of Molecular Diagnostic Laboratory; Vice Director of Department of Medical Genetics; Vice Director of Rare Diseases Center; Vice Director of Research Division of Birth Defects / Shanghai Children's Medical Center, China

Dr. Depeng Wang

CEO, Grand Omics, Beijing, China

Dr. Rongming Wang,

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Dr. Jian Wu

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Associate Professor, MGH and Stanford Genome Technology Center / Harvard Medical School, Boston & Genome Center, Stanford University, U.S.A.

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会议须知/Notice

会议须知

一、注意事项

- 1. 请各位参会嘉宾带好会议胸牌, 凭胸牌进入会场。
- 2. 会议开始请将手机铃声调为静音, 避免影响会议的正常进行。

二、会议信息

- 1. 地址: 华东师范大学闵行校区(上海市闵行区东川路 500 号) 生命科学学院 534 报告厅
- 2. 午餐:华东师范大学闵行校区夏雨厅一楼 12:00-13:30 (凭餐券入场)
- 3. 酒店地址:沪华国际大酒店(上海市闵行区剑川路 368 号)

NOTICE

Attention

- 1. Please carry out your conference badge during the conference.
- 2. Please ring the phone to mute during the conference.

Information

- Venue: Room 534, Life Science Building, East China Normal University
 Minhang Campus
- Lunch: 12:00-13:30, First Floor, Xiayu Cafeteria, East China Normal University Minhang Campus
- 3. Hotel: Huhua International Hotel, 368 Jianchuan Rd., Shanghai, China