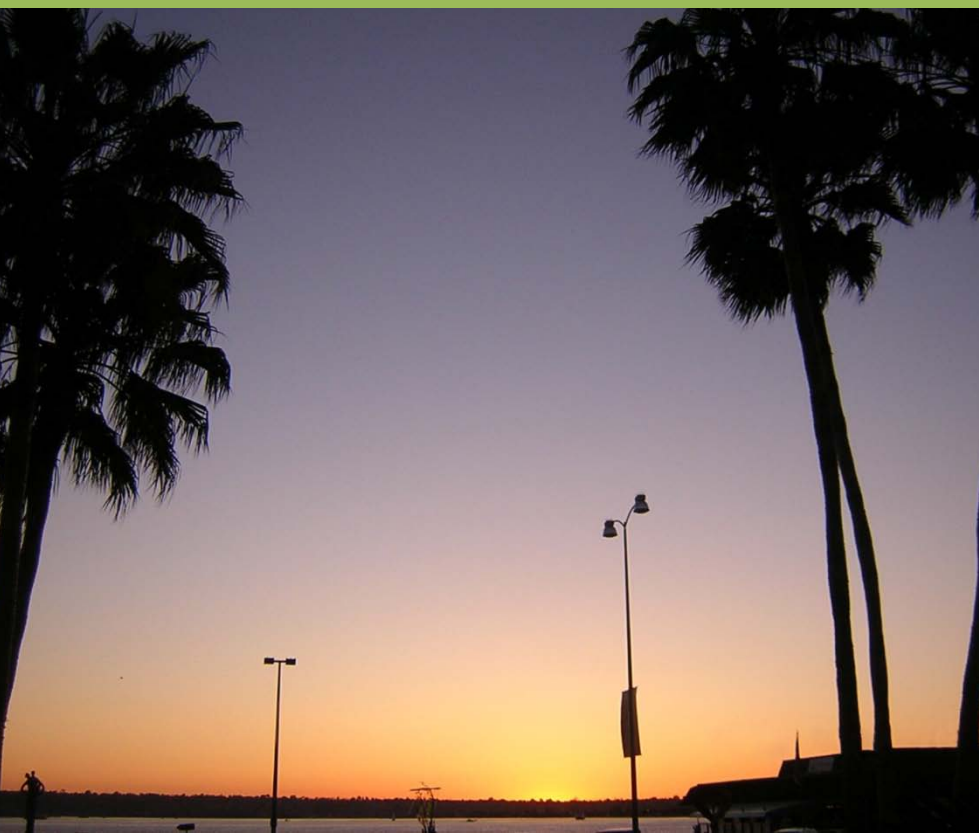




Hilton Torrey Pines
La Jolla, California, USA

Frontiers in Biological Sciences

CBIS Conference
December 27-29, 2009



Dec. 27, 2009

16:00 – 21:00 Registration

18:00 – 23:00 Social gathering

Dec. 28, 2009

6:30 – 7:30 Coffee and Continental Breakfast

8:00 – 8:15 Opening Remarks – Min Li (Johns Hopkins), President, CBIS

8:15 – 8:30 Welcome remarks - Xiangdong Fu (UCSD), Local Host

8:30 – 10:00 Keynote Lecture: Professor Roger Tsien, Nobel Laureate, UCSD & HHMI

10:00 – 10:30 Tea/Coffee Break

10:30 – 12:30 Concurrent Sessions

Session 1 Stem Cell Biology and Regenerative Medicine*Co-Chairs: Sheng Ding (Scripps Research Institute), Linheng Li (Stowel Institute)*

- **Reprogramming: nuclear transfer vs iPS**
Qi Zhou, Institute of Zoology, CAS
- **Human pluripotent stem cells and disease modeling**
Linzhao Cheng, Johns Hopkins Medical Institutions
- **How do hematopoietic stem cells repair DNA damage**
Daohong Zhou, Medical Univ. of South Carolina
- **Mechanisms of axon regeneration**
Zhigang He, Children's Hospital Boston/HMS

Session 2 DNA Repair and Cancer Biology*Co-Chairs: Lei Li (MDA Cancer Center), Guo-Min Li (Univ. of KY)*

- **Introduction/Overview**
Lei Li, M.D., Anderson Cancer Center
- **DNA damage signaling and DNA repair**
Junjie Chen, M.D., Anderson Cancer Center
- **Telomere signaling networks in human cells**
Zhou Songyang, Baylor College of Medicine
- **Apoptosis Proteins in DNA Damage Response**
Chunying Du, Univ. of Cincinnati Medical Center
- **Sensing and Signaling DNA Damage through the ATM and ATR Checkpoint Kinases**
Lee Zou, Harvard Medical School
- **FANCI is a DNA binding protein and involved in recognition of branched structures**
Yanbin Zhang, Univ. of Miami Medical School
- **BRCA1 A complex and DNA damage induced ubiquitin signaling**
Bin Wang, M.D., Anderson Cancer Center

- 12:30 – 14:00 Lunch break and Poster viewing
- 14:00 – 16:00 Concurrent Sessions
- Session 3 Immunity and Host Defense**
Co-chairs: Genhong Cheng (UCLA), Chen Dong (MDACC)
- **Host Defense in Plants**
Xinnian Dong (Duke)
 - **Innate Immunity against Bacterial and Viral Infections**
Genhong Cheng (UCLA)
 - **Regulation of Adaptive Immunity**
Chen Dong (MDACC)
 - **Immunotherapy using TLR8 agonists as adjuvants**
Rongfu Wang (Baylor College of Medicine)
- Session 4 Biotechnology and Therapeutics**
Co-Chairs: Yang Lu (Sirnaomics, Inc.), Jing-shan Hu (Merck)
- **Application of Chemical Genomics Approach in Early Stage Assessment of Molecular Pharmacology and Toxicology of Lead Compounds**
Xian-Ping Lu, ChipScreen
 - **Biologics, Biosimilar and Biobetter: Innovations That Drive new Therapeutics**
Guo-Liang Yu, Epitomics
 - **RNAi Therapeutics, A New Frontier of Targeted Medicine**
Patrick Yang Lu, Sirnaomics
 - **New Trend for Innovation in Biotech and Therapeutics: Partnership between Academia, Biotech, and Big Pharma**
Jing-Shan Hu, Merck & Co, Inc.
 - **Commercialization of Life Sciences Discoveries**
Jonathan Wang, OrbiMed Asia
- 16:00 – 16:30 Coffee Break
- 16:30 - 17:30 Special presentation
- Funding Opportunities beyond R01s**
Yali Fu, Ph.D., Program Director (NCI); Daofen Chen, Ph.D., Program Director (NINDS)
Moderator: Dihua Yu, M.D. Anderson Cancer Center
Invited Panelists: Yang Liu & Bing Ren
- 17:30-18:00 Tea and Biscuits

18:00-20:00

Society Lecture

Life Sciences in China – Teaching, Research & Collaboration*Yan Shen, Deputy Director, National Science Foundation of China*

Panel Discussion

Opportunity in China

Moderator: Yigong Shi & Weimin Zhong

Invited Panelists: Yan Shen (NSFC) Zhen Wang (MOST), Duanqing Pei (GIBH), Jinwu Zhang (GSK), Xinhua Feng (Zhejiang Univ.)

Dec. 29, 2009

6:30-7:30

Coffee and Continental Breakfast

8:00 – 10:00

Concurrent Sessions

Session 5 Epigenetics and Regulation of Gene Expression*Co-Chairs: Haifan Lin (Yale) and Bing Ren (UCSD)*

- **Epigenetic link between DNA methylation and histone modifications**
Xiaodong Cheng, Emory Univ. School of Medicine, Atlanta, GA, USA
- **5-methylcytosine hydroxylase TET1/CXXC6 in epigenetic regulation of gene transcription**
Y. Geno Shi, Ph.D., Harvard Medical School, Boston, MA, USA
- **TBA**
Yang Shi, Ph.D., Harvard Medical School and Dana Fabar Cancer Research Institute, Boston, MA, USA
- **A novel Epigenetic Programming Mechanism Mediated by piRNAs**
Haifan Lin, Ph.D., Yale Stem Cell Center

Session 6 Chemical Biology and Chemical Genomics*Co-chairs: Shuo Lin (UCLA), Yang Zhen (Beijing U)*

- **A chemical approach to controlling cell fate**
Sheng Ding, Scripps Research Institute
- **New methods for chemical genetics and proteomics analyses**
Jing Huang, UCLA
- **Dynamic Visualization of Signaling Activity in Living Cells**
Jing Zhang, Johns Hopkins Univ. School of Medicine
- **ADME characterization of drugs and new technology for evaluation**
Ling Yang, Dalian Institute of Chemical Physics, Chinese Academy of Sciences
- **Zebrafish based chemical genetics for drug discovery**
Zhen Yang, PKU/UCLA

10:00 – 10:30 Tea/Coffee Break

10:30 – 12:30 Concurrent Sessions

Session 7 Metabolism and Diseases

Co-Chairs: Kunliang Guan (UCSD), Jiandie Lin (Univ. of Michigan)

- **How does the brain direct nutritional challenges to cause metabolic diseases**
Dongsheng Cai, Einstein College of Med.
- **Regulation of lipid storage and secretion by CIDE proteins**
Peng Li, Tsinghua Univ.
- **SH2B1 regulation of glucose and energy metabolism**
Lingyou Rui, Univ. Michigan
- **Nuclear receptors CAR and FXR in regulating liver metabolism and diseases**
Wendong Wang, City of Hope National Medical Center
- **GlcNAc: a sweet metabolic switch**
Xiaoyong Yang, Yale
- **Class III Phosphoinositide 3-kinase controls the formation and maturation of autophagosome differentially via assembling organelle specific complexes**
Qing Zhong, UC Berkeley

Session 8 Plant Sciences

Co-chairs: Xiaomei Chen (UCR), Jian-Kang Zhu (UCR)

- **Role of small RNAs in plant resistance to bacterial and fungal diseases**
Hailing Jin, UC Riverside
- **Blue light receptor cryptochrome and its signaling mechanisms**
Chentao Lin, UCLA
- **Steroid signaling in plants: receptor kinases, GSK3s and similarity to the Wnt pathway**
Zhiyong Wang, Carnegie Institution of Washington
- **Active DNA demethylation in plants**
Jian-Kang Zhu, UC Riverside

12:30 – 13:30 Lunch break and Poster viewing

13:30 – 15:30

Concurrent Sessions

Session 9 Neuroscience, Development and Behavior*Co-Chairs: Yishi Jin (UCSD), Manyun Long (Univ. of Chicago)*

- **The role of tumor suppressors in tissue growth and organ size control in *Drosophila***
Zhichun Lai, Penn State Univ.
- **Molecular modeling of nAChRs**
Chenglong Li, Ohio State Univ.
- **Lessons Learned from SV40 T-antigen: A Mechanical, Energetical, and Biochemical Analysis of a Ring Helicase, a Motor Critical for DNA Replication**
Xiaojiang Chen, Univ. of Southern California
- **T-cells are required for development of fat tissues**
Yang-Xin Fu, Univ. of Chicago
- **Evolution of Behavior Genetic Systems Driven by New Gene Origination**
Manyuan Long, Univ. of Chicago

Session 10 Large Scale Biology*Co-chairs: Xiangdong Fu (UCSD), Tian Xu (Yale)*

- **Epigenome in Human Stem Cells**
Bing Ren, Ludwig Institute for Cancer Research, UCSD
- **Large-scale Mouse Genetics**
Tian Xu, Fudan Univ., China
- **Genome-wide and Quantitative and Genome-wide Mass Spec Analysis of DNA Damage Response**
Huilin Zhou, Ludwig Institute for Cancer Research, UCSD
- **Genome-wide RNAi to Dissect the Nuclear Import Pathway**
Lan Xu, UMass Medical School
- **Systems Biology Study of Complex Behaviors**
Ping Ao, Institute for Systems Biology, Shanghai Jiao Tong Univ.

15:30 – 16:00

Coffee Break

16:00 -17:00

Society Lecture

Yigong Shi, Tsinghua Univ., China

17:00-18:00

Presentation of CBIS Awards, Ray Wu Award, and announcement of voting results

Chenjian Li, Lin Mei, & Weimin Zhong

18:00-18:15

Closing remarks

Min Li & Kun-Liang Guan

19:30

Dinner at local place

*Xiang-Dong Fu & Gen-Sheng Feng*To Register Online: www.cbisociety.org