



**The 4th Young Investigator Conference  
(EITA-YIC 2015)**

**"Leadership, Innovation, Growth"**

**The Maclaurin Buildings (4)  
Massachusetts Institute of Technology  
Cambridge, Massachusetts, U.S.A.**

**Thursday – Friday, August 6-7, 2015**

**Program**

**(Final)**

***Day 1 (Thursday, August 6, 2015)***

**8/6 (Thu) 8:30 am - 6:00 pm: Registration**

Room: 4-270

**8/6 (Thu) 9:30 am - 9:50 am: Opening Session**

Chair: **Dr. Li-San Wang**, Associate Professor, Department of Pathology and Laboratory Medicine, University of Pennsylvania Perelman School of Medicine (賓州大學醫學院王立三教授)

Chair: **Dr. Yi-Hsiang (Sean) Hsu**, Assistant Professor, School of Medicine, Harvard University (哈佛大學醫學院許益祥教授)

Room: 4-270

**Welcome Remarks:**

**Mr. Ming-chi Scott Lai**

Director-General

Taipei Economic and Cultural Office in Boston

(駐波士頓台北經濟文化辦事處賴銘琪處長)

**Plenary Sessions:**

**8/6 (Thu) 9:50 am - 10:35 am: Plenary Session (I):**

Chair: **Dr. Li-San Wang**, Associate Professor, Department of Pathology and Laboratory Medicine, University of Pennsylvania Perelman School of Medicine (賓州大學醫學院王立三教授)

Room: 4-270

**Plenary Speaker:**

“Metabolic rhythm, immune signaling and obesity-related health conditions”

**Dr. Chih-Hao Lee**

Professor of Genetics and Complex Diseases  
Harvard T.H. Chan School of Public Health  
Division of Biological Sciences  
Department of Genetics and Complex Diseases  
Harvard University

**8/6 (Thu) 10:35 am – 11:20 am: Plenary Session (II):**

Chair: **Dr. Yi-Hsiang (Sean) Hsu**, Assistant Professor, School of Medicine, Harvard University (哈佛大學醫學院許益祥教授)

Room: 4-270

**Plenary Speaker:**

“Bioinformatic Challenges for DNA-Seq and RNA-Seq experiments”

**Dr. Li-San Wang**

Associate Professor, Department of Pathology and Laboratory Medicine  
University of Pennsylvania Perelman School of Medicine  
(賓州大學醫學院王立三教授)

**8/6 (Thu) 11:20 am - 11:35 am: Break**

**Plenary Sessions:**

**8/6 (Thu) 11:35 am – 12:20 pm: Plenary Session (III):**

Chair: **Dr. Hsiang-Ying (Sherry) Lee**, Postdoctoral Associate, Whitehead Institute for Biomedical Research, Massachusetts Institute of Technology (麻省理工學院李湘盈博士)

Room: 4-270

**Plenary Speaker:**

**Dr. Frank Chuan Kuo**

Associate Professor of Pathology, Harvard Medical School  
Director, Pathology Informatics  
Director, Assay Development, Center for Advanced Molecular Diagnostics  
Core Director, Pathology Specimen Locator, DF/HCC

**8/6 (Thu) 12:20 pm - 2:35 pm: Lunch**

**Parallel Sessions:**

**8/6 (Thu) 2:35 pm – 4:05 pm: Technical Session D1-W1-T1: Business Venture and Research, In Silico Research, Big Data and Analytics, Machine Learning, and Data Science**

Chair: **Dr. Woei-jyh (Adam) Lee**, Tyser Teaching Fellow of Information Systems, Robert H. Smith School of Business, University of Maryland, College Park (馬里蘭大學學院市分校史密斯商學院李偉智教授)

Room: 4-270

“WebMeV-A Cloud Based Platform for Genomic Analysis”

**Dr. Yaoyu E. Wang**

Associate Director, Center for Cancer Computational Biology

Department of Biostatistics and Computational Biology  
Dana-Farber Cancer Institute, Harvard University  
(哈佛大學達納法伯癌症研究所王耀煜博士)

**Dr. Hau-Tieng Wu**

Assistant Professor, Department of Mathematics  
University of Toronto  
(多倫多大學數學系吳浩樅教授)

**Dr. Michael Chang**

Chief Executive Officer  
Kyper

**Dr. Wu-Hsi Li**

Founder and CEO, CharmPI LLC  
(CharmPI.com李務熙博士)

“Evidence of positive selection on type 2 diabetes associated loci in the human genome”

**Dr. Yu-Ping Poh**

Postdoctoral Associate, Computer Science and Artificial Intelligence Laboratory  
Massachusetts Institute of Technology

**8/6 (Thu) 2:35 pm – 4:05 pm: Technical Session D1-W2-T1: Bio-Materials, Bio-SoC, Bio-Nanotech, Bio-NEMS/Bio-MEMS, and Biomedical Sciences and Engineering**

Chair: **Dr. Yen-Tsung Huang**, Assistant Professor, Departments of Epidemiology and Biostatistics, Brown University (布朗大學流行病學系黃彥棕黃彥棕教授)

Room: 4-261

“Bio-inspired Microlenses and Microcameras for Biomedical Applications”

**Dr. Hongrui Jiang**

Lynn H. Matthias Professor in Engineering & Vilas Distinguished Achievement Professor  
Department of Electrical and Computer Engineering  
University of Wisconsin, Madison

“Biophysics of Intrinsic Left-Right Asymmetry of The Cell”

**Dr. Leo Q. Wan**

Assistant Professor, Department of Biomedical Engineering  
Laboratory for Tissue Engineering and Morphogenesis  
Rensselaer Polytechnic Institute

“Mechanobiochemical Modeling of Cell-Material Interactions”

**Dr. Hongyan Yuan**

Assistant Professor, Department of Mechanical, Industrial & Systems Engineering  
University of Rhode Island

**Dr. Xi Xie**

Postdoctoral Fellow, Koch Institute for Integrative Cancer Research  
Massachusetts Institute of Technology

**8/6 (Thu) 2:35 pm – 4:05 pm: Technical Session D1-W3-T1: Electronic, Photonic, and Magnetic Materials, Organic Polymer and Soft Materials,**

## **Ceramic Materials, Metallurgy and Materials, Nanotechnology, Clean Energy and Water Purification Technology**

Chair: **Dr. I-Chun Cheng**, Associate Professor, Graduate Institute of Photonics and Optoelectronics, Department of Electrical Engineering, National Taiwan University (台灣大學電機工程學系陳奕君教授)

Room: 4-265

“Integrated nano optoelectronics for biomedical engineering and applications”

### **Dr. Alex (Ya Sha) Yi**

Associate Professor, Department of Electrical and Computer Engineering  
College of Engineering and Computer Science  
University of Michigan, Dearborn

“Tube<sup>2</sup>: Optical and Electrical Properties of Tube-in-a-Tube”

### **Dr. YuHuang Wang**

Associate Professor, Department of Chemistry and Biochemistry  
University of Maryland, College Park

“Short-Range Ordered-Disordered Transition of NiOOH/Ni(OH)<sub>2</sub> Pair Induces Switchable Wettability”

### **Dr. Shien-Ping Feng**

Assistant Professor, Department of Mechanical Engineering  
The University of Hong Kong

(香港大學機械工程系馮憲平教授)

“Tackling the Problems of Lithium-Sulfur Battery: From Molecular Understanding to Nanomaterials Design”

### **Dr. Weiyang (Fiona) Li**

Assistant Professor, Thayer School of Engineering  
Dartmouth College

## **8/6 (Thu) 4:05 pm – 4:20 pm: Break**

## **Parallel Sessions:**

### **8/6 (Thu) 4:20 pm – 5:50 pm: Technical Session D1-W1-T2: Business Venture and Research, In Silico Research, Big Data and Analytics, Machine Learning, and Data Science**

Chair: **Dr. Chen-Hsiang (Jones) Yu**, Founder and CEO, Prentice Lab (Prentice Lab余禎祥博士)

Room: 4-270

### **Dr. Honggang Wang**

Associate Professor, Department of Electrical and Computer Engineering  
University of Massachusetts Dartmouth

### **Dr. Juia Hua Fang**

Associate Professor, Division of Biostatistics and Health Services Research  
Department of Quantitative Health Sciences  
University of Massachusetts Medical School

“Automated image analysis: extract the thousand words from that picture”

**Dr. Tiao Xie**

Co-leader, Image and Data Analysis Core (IDAC)  
Harvard Medical School  
Harvard University

“Exploration of immune repertoire using next-generation sequencing”

**Dr. Fan Gao**

Supervisor of Bioinformatics, The Picower Institute for Learning and Memory  
Massachusetts Institute of Technology

**8/6 (Thu) 4:20 pm – 5:50 pm: Technical Session D1-W2-T2: Bio-Materials, Bio-SoC, Bio-Nanotech, Bio-NEMS/Bio-MEMS, and Biomedical Sciences and Engineering**

Chair: **Dr. Hsiang-Ying (Sherry) Lee**, Postdoctoral Associate, Whitehead Institute for Biomedical Research, Massachusetts Institute of Technology (麻省理工學院李湘盈博士)  
Room: 4-261

“Biomedical Big Data Analytics for Patient-Centric and Outcome-Driven Precision Health”

**Dr. May Dongmei Wang**

Associate Professor, Wallace H. Coulter Department of Biomedical Engineering  
Kavli Fellow, Georgia Research Alliance Distinguished Cancer Scholar  
Georgia Institute of Technology

“Translating GWAS to Pathobiology in Lungs”

**Dr. Xiaobo Zhou**

Director and Assistant Professor, Functional Genomics Laboratory  
Channing Division of Network Medicine  
Brigham and Women's Hospital, Harvard Medical School

“High-resolution, high-speed 3D optical sensing”

**Dr. Song Zhang**

Associate Professor, School of Mechanical Engineering  
Purdue University

"A Bayesian framework for de novo mutation calling in sequencing data"

**Dr. Bingshan Li**

Assistant Professor, Department of Molecular Physiology and Biophysics  
Vanderbilt University School of Medicine  
Vanderbilt Genetics Institute

**8/6 (Thu) 4:20 pm – 5:50 pm: Technical Session D1-W3-T2: Electronic, Photonic, and Magnetic Materials, Organic Polymer and Soft Materials, Ceramic Materials, Metallurgy and Materials, Nanotechnology, Clean Energy and Water Purification Technology**

Chair: **Dr. Shien-Ping Feng**, Assistant Professor, Department of Mechanical Engineering  
The University of Hong Kong, (香港大學機械工程系馮憲平教授)  
Room: 4-265

“Si nanocrystals for lighting and memory applications”

**Dr. Chuan-Feng Shih**

Associate Professor, Department of Electrical Engineering

National Cheng Kung University  
(成功大學電機工程學系施權峰教授)

“Ultrafast Optical Characterization of Thermal Transport in Micro/Nanostructured Materials”

**Dr. Xiaojia Wang**

Assistant Professor, Department of Mechanical Engineering  
University of Minnesota, Minneapolis

“Quest for High-Temperature Superconductors”

**Dr. Wei-Cheng Lee**

Assistant Professor, Department of Physics, Applied Physics, and Astronomy,  
The State University of New York, Binghamton

“Electrochemical Materials and Devices for Energy Storage and Conversion”

**Dr. Yuan Yang**

Assistant Professor, Materials Science and Engineering  
Department of Applied Physics and Applied Mathematics  
Columbia University

**Day 2 (Friday, August 7, 2015)**

**8/7 (Fri) 8:30 am - 6:00 pm: Registration**

Room: 4-270

**8/7 (Fri) 8:30 am - 9:50 am: Panel Discussions - Big Data Analytics, Data Science and Machine Learning: Challenges and Opportunities**

Moderator: **Dr. Chen-Hsiang (Jones) Yu**, Founder and CEO, Prentice Lab (Prentice Lab 余禎祥博士)

Room: 4-270

**Panelists:**

**Dr. Qizhi Wei**

Vice President, Analytic Consulting Group  
Epsilon

**Dr. Judith Maro**

Instructor, Department of Population Medicine  
Harvard Pilgrim Health Care Institute  
Harvard Medical School

**Dr. Michael Chang**

Chief Executive Officer  
Kyper

**Dr. Wan-Ping Lee**

Senior Lead Scientist, R&D  
Seven Bridges Genomics, Inc.  
(Seven Bridges Genomics李婉萍博士)

**Parallel Sessions:**

**8/7 (Fri) 9:50 am - 11:20 am: Technical Session D2-W1-T1: Business Venture and Research, In Silico Research, Big Data and Analytics, Machine Learning, and Data Science**

Chair: **Dr. Chen-Hsiang (Jones) Yu**, Founder and CEO, Prentice Lab (Prentice Lab 余禎祥博士)  
Room: 4-270

“Multipath Search on Large Open Data”

**Dr. Woei-jyh (Adam) Lee**

Tyser Teaching Fellow of Information Systems, Robert H. Smith School of Business  
University of Maryland, College Park

(馬里蘭大學學院市分校史密斯商學院李偉智教授)

**Dr. Yingchun (Spring) Liu**

Senior Bioinformatics Scientist  
Mass General Hospital/Broad Institute of MIT and Harvard

“Cloud-Based Systems and Methods for Analyzing Genomic Information”

**Dr. Wan-Ping Lee**

Senior Lead Scientist, R&D  
Seven Bridges Genomics, Inc.

(Seven Bridges Genomics李婉萍博士)

“The effects of aging on circadian patterns of gene expression in the human prefrontal cortex”

**Dr. Cho-Yi (Joey) Chen**

Postdoctoral Research Fellow, Department of Biostatistics and Computational Biology  
Dana-Farber Cancer Institute  
Harvard University

(哈佛大學達納法伯癌症研究所陳卓逸博士)

**8/7 (Fri) 9:50 am - 11:20 am: Technical Session D2-W2-T1: Bio-Materials, Bio-SoC, Bio-Nanotech, Bio-NEMS/Bio-MEMS, and Biomedical Sciences and Engineering**

Chair: **Dr. Yen-Tsung Huang**, Assistant Professor, Departments of Epidemiology and Biostatistics, Brown University (布朗大學流行病學系黃彥棕黃彥棕教授)

Room: 4-261

“Enriching Silver Nanocrystals with Gold”

**Dr. Dong Qin**

Associate Professor, School of Materials Science and Engineering  
Georgia Institute of Technology

“Quantitative Analysis of Membrane Protein Binding Kinetics”

**Dr. Hung-Jen Wu**

Assistant Professor, Artie McFerrin Department of Chemical Engineering  
Texas A&M University

“Biological and bio-inspired transparent structural materials”

**Dr. Ling Li**

Postdoctoral Fellow in Materials Science and Mechanical Engineering in the Wyss Institute  
School of Engineering and Applied Sciences  
Harvard University

"Bioinspired Active Materials: From Camouflage to Anti-biofouling"

**Dr. Qiming Wang**

Postdoctoral Associate, Department of Mechanical Engineering  
Massachusetts Institute of Technology

**8/7 (Fri) 9:50 am - 11:20 am: Technical Session D2-W3-T1: Electronic, Photonic, and Magnetic Materials, Organic Polymer and Soft Materials, Ceramic Materials, Metallurgy and Materials, Nanotechnology, Clean Energy and Water Purification Technology**

Chair: **Dr. Pei-Cheng Ku**, Associate Professor, Department of Electrical Engineering & Computer Science, The University of Michigan at Ann Arbor, (密歇根大學安娜堡分校電機學系古培正教授)

Room: 4-265

“Harnessing Soft Materials for Functionality through Deformation and Instability”



**Dr. Sung Hoon Kang**

Assistant Professor, Department of Mechanical Engineering  
Hopkins Extreme Materials Institute  
Johns Hopkins University

“One is More than Two: Electron Transfer at Organic/Graphene Hybrid Interfaces”

**Dr. Wai-Lun Chan**

Assistant Professor, Department of Physics and Astronomy  
University of Kansas

“Mechanics and geometry in chiral structures: from nanohelices to bio-inspired structures”

**Dr. Zi Chen**

Assistant Professor, Thayer School of Engineering  
Dartmouth College

**Dr. Nanjia Zhou**

Camille and Henry Dreyfus Environmental Chemistry Fellow  
School of Engineering and Applied Science  
Harvard University

**8/7 (Fri) 11:20 am - 11:35 am: Break**

**Parallel Sessions:**

**8/7 (Fri) 11:35 am – 1:05 pm: Technical Session D2-W1-T2: Business  
Venture and Research, In Silico Research, Big Data and Analytics,  
Machine Learning, and Data Science**

Chair: **Dr. Woei-jyh (Adam) Lee**, Tyser Teaching Fellow of Information Systems, Robert H.  
Smith School of Business, University of Maryland, College Park (馬里蘭大學學院市分校史密斯商學  
院李偉智教授)

Room: 4-270

“Bioinformatics Approaches for Functional Interpretation of Genome Variation”

**Dr. Kai Wang**

Assistant Professor, Department of Psychiatry & Behavioral Sciences and  
Division of Bioinformatics, Department of Preventive Medicine  
University of Southern California

“Mediation analysis for survival data using semiparametric probit models: application to  
integrative genomics”

**Dr. Yen-Tsung Huang**

Assistant Professor, Departments of Epidemiology and Biostatistics  
Brown University

(布朗大學流行病學系黃彥棕黃彥棕教授)

“Cancer Genomics: when in silico research interact with in vivo experiments”

**Dr. Liye Zhang**

Postdoctoral Fellow, School of Medicine  
Boston University

**Dr. Yiming Zhou**

Research Fellow in Radiology

Brigham and Women's Hospital  
Harvard Medical School

**8/7 (Fri) 11:35 am – 1:05 pm: Technical Session D2-W2-T2: Bio-Materials, Bio-SoC, Bio-Nanotech, Bio-NEMS/Bio-MEMS, and Biomedical Sciences and Engineering**

Chair: **Dr. Hsiang-Ying (Sherry) Lee**, Postdoctoral Associate, Whitehead Institute for Biomedical Research, Massachusetts Institute of Technology (麻省理工學院李湘盈博士)  
Room: 4-261

**Dr. Chongli Yuan**

Assistant Professor, Department of Chemical Engineering  
Purdue University

**Dr. Gang Han**

Assistant Professor, Department of Biochemistry and Molecular Pharmacology  
University of Massachusetts Medical School

“Colloidal Gels as Biomaterials for Regenerative Medicine”

**Dr. Huanan Wang**

Rubicon Postdoctoral Research Fellow  
School of Engineering and Applied Sciences  
Department of Physics  
Experimental Soft Condensed Matter Group  
Harvard University

**Dr. Yi-Dong Lin**

Research Fellow in Medicine  
Cardiac Muscle Research Laboratory  
Brigham and Women's Hospital  
Harvard Medical School

**8/7 (Fri) 11:35 am – 1:05 pm: Technical Session D2-W3-T2: Electronic, Photonic, and Magnetic Materials, Organic Polymer and Soft Materials, Ceramic Materials, Metallurgy and Materials, Nanotechnology, Clean Energy and Water Purification Technology**

Chair: **Dr. Jung-Tsung Shen**, Assistant Professor, Department of Electrical & Systems Engineering, Washington University in St. Louis (聖路易華盛頓大學電機暨系統工程學系沈榮聰教授)  
Room: 4-265

“Development of Membranes for H<sub>2</sub> Purification and CO<sub>2</sub> Capture: From Material Molecular Engineering to Technology Commercialization”

**Dr. Haiqing Lin**

Assistant Professor, Department of Chemical and Biological Engineering  
State University of New York, Buffalo

“Rational Design of Cathodes for Rechargeable Li-S and Li-O<sub>2</sub> Batteries”

**Dr. Yongzhu Fu**

Assistant Professor, Department of Mechanical Engineering  
Indiana University–Purdue University Indianapolis

“Dielectric Elastomers for Optics and Soft Robotics”

**Dr. Samuel Shian**

Research Associate, Harvard John A Paulson School of Engineering and Applied Science  
Harvard University

“Design Principles for Superionic Conductors in Solid-state Lithium Batteries”

**Dr. Yan Eric Wang**

Senior Postdoctoral Associate, Department of Materials Science and Engineering  
Massachusetts Institute of Technology

**8/7 (Fri) 1:05 pm - 2:35 pm: Lunch**

**Parallel Sessions:**

**8/7 (Fri) 2:35 pm – 4:05 pm: Technical Session D2-W1-T3: Business  
Venture and Research, In Silico Research, Big Data and Analytics,  
Machine Learning, and Data Science**

Chair: **Dr. Chen-Hsiang (Jones) Yu**, Founder and CEO, Prentice Lab (Prentice Lab余禎祥博士)

Room: 4-270

“Change-point models for detecting aberrant gene expression patterns in cancers”

**Dr. Zhi Wei**

Associate Professor, Department of Computer Science  
New Jersey Institute of Technology

"Testing for equality of variance with application to DNA methylation data"

**Dr. Weiliang Qiu**

Assistant Professor, Channing Division of Network Medicine  
Brigham and Women's Hospital  
Harvard Medical School

**Dr. Qiang Liu**

Assistant Professor, Department of Computer Science  
Dartmouth College

**Dr. Han Xu**

Research Scientist  
Broad Institute of MIT and Harvard

**8/7 (Fri) 2:35 pm – 4:05 pm: Technical Session D2-W2-T3: Bio-Materials,  
Bio-SoC, Bio-Nanotech, Bio-NEMS/Bio-MEMS, and Biomedical Sciences  
and Engineering**

Chair: **Dr. Hsiang-Ying (Sherry) Lee**, Postdoctoral Associate, Whitehead Institute for  
Biomedical Research, Massachusetts Institute of Technology (麻省理工學院李湘盈博士)

Room: 4-261

“Twisting mice move the dystonia field forward”

**Dr. Chun-Chi (Richard) Liang**

Research Investigator, Departments of Neurology & Cell and Developmental Biology  
University of Michigan Medical School, Ann Arbor

“NMDAR signaling in cancer: regulation by a polymorphic modifier gene and the tumor  
microenvironment”

**Dr. Leanne Li**

Postdoctoral Fellow, Koch Institute for Integrative Cancer Research  
Massachusetts Institute of Technology

“Photostick: a method for selective isolation of target cells from culture”

**Dr. Miao-Ping Chien**

Postdoctoral fellow, Department of Chemistry & Chemical Biology  
Department of Chemistry and Chemical Biology  
Harvard University

“A CRISPR view of genome editing”

**Mr. Winston X. Yan**

MD/PhD Candidate  
Biophysics Program, Harvard University  
Feng Zhang Lab, Broad Institute

**8/7 (Fri) 2:35 pm – 4:05 pm: Technical Session D2-W3-T3: Electronic, Photonic, and Magnetic Materials, Organic Polymer and Soft Materials, Ceramic Materials, Metallurgy and Materials, Nanotechnology, Clean Energy and Water Purification Technology**

Chair: **Dr. Shien-Ping Feng**, Assistant Professor, Department of Mechanical Engineering

The University of Hong Kong, (香港大學機械工程系馮憲平教授)

Room: 4-265

“Rapid Atmospheric-Pressure-Plasma Processed Nanomaterials for Dye-Sensitized Photovoltaic Cells”

**Dr. I-Chun Cheng**

Associate Professor, Graduate Institute of Photonics and Optoelectronics  
Department of Electrical Engineering  
National Taiwan University  
(台灣大學電機工程學系陳奕君教授)

“Characterization of Nanofluidic Transport Using Hybrid Nanochannels”

**Dr. Chuanhua Duan**

Assistant Professor, Department of Mechanical Engineering  
Boston University

“Organic Molecule Redox Flow Battery”

**Dr. Qing Chen**

Postdoctoral Fellow in Materials Science and Mechanical Engineering  
School of Engineering and Applied Sciences  
Harvard University

**Dr. Hang Z. Yu**

Postdoctoral Associate, Department of Materials Science and Engineering,  
Massachusetts Institute of Technology

**Dr. Po-Yen Chen**

Research Assistant, Department of Chemical Engineering  
Massachusetts Institute of Technology

**8/7 (Fri) 4:05 pm – 4:20 pm: Break**

## **Parallel Sessions:**

### **8/7 (Fri) 4:20 pm – 5:50 pm: Technical Session D2-W1-T4: Business Venture and Research, In Silico Research, Big Data and Analytics, Machine Learning, and Data Science**

Chair: **Dr. Woei-jyh (Adam) Lee**, Tyser Teaching Fellow of Information Systems, Robert H. Smith School of Business, University of Maryland, College Park (馬里蘭大學學院市分校史密斯商學院李偉智教授)  
Room: 4-270

“Decipher Regulatory Grammar from DNA Sequence”

#### **Dr. Zhizhuo Zhang**

Postdoctoral Research Associate, the Computational Biology Group  
Computer Science and Artificial Intelligence Laboratory and Broad Institute  
Massachusetts Institute of Technology

“Inference of transcriptional regulation in cancers”

#### **Dr. Peng Jiang**

Postdoctoral Research Fellow, Department of Biostatistics and Computational Biology  
Dana-Farber Cancer Institute  
Harvard University

"Embryonic Development following Somatic Cell Nuclear Transfer Impeded by Persisting Histone Methylation"

#### **Dr. Yuting Liu**

Postdoctoral Research Fellow, Department of Genetics  
Harvard University

“Skim Reading and Mobile Learning: From Academic Research to Products”

#### **Dr. Chen-Hsiang (Jones) Yu**

Founder and CEO, Prentice Lab  
(Prentice Lab余禎祥博士)

### **8/7 (Fri) 4:20 pm – 5:50 pm: Technical Session D2-W2-T4: Bio-Materials, Bio-SoC, Bio-Nanotech, Bio-NEMS/Bio-MEMS, and Biomedical Sciences and Engineering**

Chair: **Dr. Yen-Tsung Huang**, Assistant Professor, Departments of Epidemiology and Biostatistics, Brown University (布朗大學流行病學系黃彥棕黃彥棕教授)  
Room: 4-261

“T lymphocyte engineering with cytokine nanogels for enhanced cancer immunotherapy”

#### **Dr. Li Tang**

Irvington Postdoctoral Fellow, Koch Institute for Integrative Cancer Research  
Massachusetts Institute of Technology

“Structural studies of lipid-protein interactions using electron crystallography”

#### **Dr. Po-Lin Chiu**

Postdoctoral Fellow, Department of Cell Biology  
Harvard Medical School

“Identification of small-molecule probes of autophagy based-Salmonella clearance”

**Ms. Meredith Szu-Yu Kuo**

Ph.D. Candidate, Department of Chemistry & Chemical Biology  
Harvard University

(哈佛大學化學暨生物化學系郭思妤)

“PPAR- $\alpha$  and glucocorticoid receptor synergize to promote erythroid progenitor self-renewal”

**Dr. Hsiang-Ying (Sherry) Lee**

Postdoctoral Associate, Whitehead Institute for Biomedical Research  
Massachusetts Institute of Technology

(麻省理工學院李湘盈博士)

**8/7 (Fri) 4:20 pm – 5:50 pm: Technical Session D2-W3-T4: Electronic, Photonic, and Magnetic Materials, Organic Polymer and Soft Materials, Ceramic Materials, Metallurgy and Materials, Nanotechnology, Clean Energy and Water Purification Technology**

Chair: **Dr. I-Chun Cheng**, Associate Professor, Graduate Institute of Photonics and Optoelectronics, Department of Electrical Engineering, National Taiwan University (台灣大學電機工程學系陳奕君教授)

Room: 4-265

"Spin Transfer Torque from the Spin Hall Effect in Magnetic Heterostructures"

**Dr. Chi-Feng Pai**

Postdoctoral Research Associate, Department of Materials Science and Engineering  
Massachusetts Institute of Technology

(麻省理工學院白奇峰博士)

“Charge Qubit in a Single Electron Si/SiGe Double Quantum Dot”

**Dr. Ke Wang**

Postdoctoral Fellow, Department of Physics  
Harvard University

**Dr. Dengxin Ji**

Nano-optics & Biophotonics Lab  
Department of Electrical Engineering  
State University of New York, Buffalo

“Solid State Optical Upconversion Utilizing Thermally-Activated-Delayed Fluorescence”

**Mr. Tony C. Wu**

Ph.D. Candidate and Research Assistant, Soft Semiconductor Group  
Department of Electrical Engineering and Computer Science  
Massachusetts Institute of Technology

(麻省理工學院電機工程與計算機科學系吳張祺)