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: 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 (寶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:

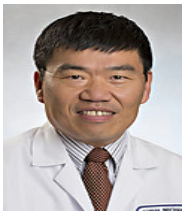
"Bioinformatic Challenges for DNA-Seq and RNA-Seq experiments"
Dr. Li-San Wang
Associate Professor, Department of Pathology and Laboratory Medicine
University of Pennsylvania Perelman School of Medicine
(寶州大學醫學院王立三教授)

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) 1:05 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
(波士頓達納法伯癌症研究所王耀煜博士)

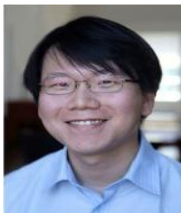
Dr. Hau-Tieng Wu
Assistant Professor, Department of Mathmatics
University of Toronto
(多倫多大學數學系吳浩榳教授)

Dr. Michael Chang
Chief Executive Officer
Kyper

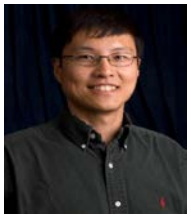
Dr. Wu-Hsi Li
Founder/CEO, CharmPI.com
Massachusetts Institute of Technology
(麻省理工學院媒體實驗室李務熙博士)

"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

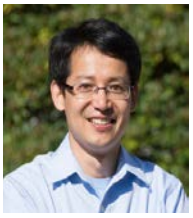


Chair: **Dr. Yen-Tsung Huang**, Assistant Professor, Departments of Epidemiology and Biostatistics, Brown University (布朗大學流行病學系黃彥棕黃彥棕教授)
Room: 4-261



"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^2: 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)2 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

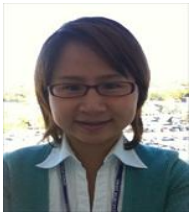
8/6 (Thu) 4:05 pm – 4:20 pm: Break

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

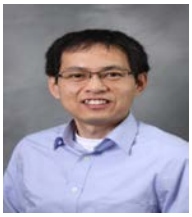
"Exploration of immune repertoire using next-generation sequencing"
Dr. Fan Gao
Supervisor of Bioinformatics, The Picower Institute for Learning and Memory
Massachusetts Institute of Technology

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

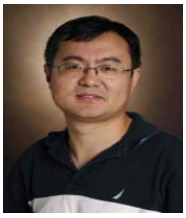
Chair: **Dr. Hsiang-Ying (Sherry) Lee**, Postdoctoral Associate, Whitehead Institute for Biomedical Research, Massachusetts Institute of Technology (麻省理工學院李湘盈博士)
Room: 4-261

"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)

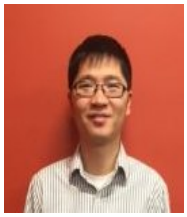
8/7 (Fri) 8:30 am - 6:00 pm: Registration

Room: 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

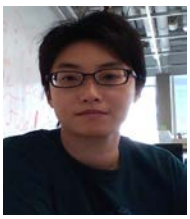
Panelists:



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)

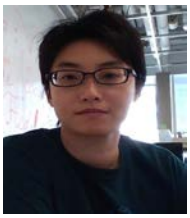
Parallel Sessions:

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

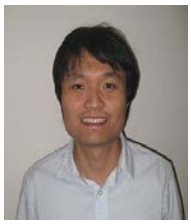
"Biological and bio-inspired transparent structural materials"
Dr. Ling Li
Postdoctoral Fellow in Materials Science and Mechanical Engineering in the Wyss Institute
School of Engineering and Applied Sciences
Harvard University

"Bioinspired Active Materials: From Camouflage to Anti-biofouling"
Dr. Qiming Wang
Postdoctoral Associate, Department of Mechanical Engineering
Massachusetts Institute of Technology

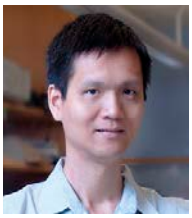
8/7 (Fri) 9:50 am - 11:20 am: Technical Session D2-W3-T1: Electronic, Photonic, and Magnetic Materials, Organic Polymer and Soft Materials, Ceramic Materials, Metallurgy and Materials, Nanotechnology, Clean Energy and Water Purification Technology

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

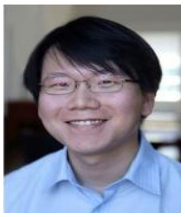
8/7 (Fri) 11:20 am - 11:35 am: Break

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

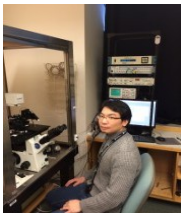
Chair: **Dr. Woei-jyh (Adam) Lee**, Tyser Teaching Fellow of Information Systems, Robert H. Smith School of Business, University of Maryland, College Park (馬里蘭大學學院市分校史密斯商學院李偉智教授)
Room: 4-270

"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

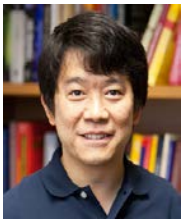
Dr. Chongli Yuan
Assistant Professor, Department of Chemical Engineering
Purdue University

Dr. Gang Han
Assistant Professor, Department of Biochemistry and Molecular Pharmacology
University of Massachusetts Medical School

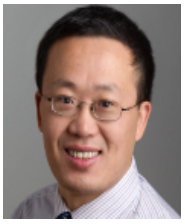
"Colloidal Gels as Biomaterials for Regenerative Medicine"
Dr. Huanan Wang
Rubicon Postdoctoral Research Fellow
School of Engineering and Applied Sciences
Department of Physics
Experimental Soft Condensed Matter Group
Harvard University

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 H2 Purification and CO2 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-O2 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

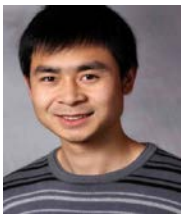
Parallel Sessions:

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

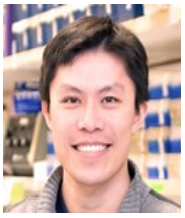


Dr. Qiang Liu
Assistant Professor, Department of Computer Science
Dartmouth College

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

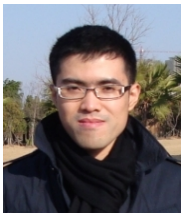
"A CRISPR view of genome editing"
Mr. Winston X. Yan
MD/PhD Candidate
Biophysics Program, Harvard University
Feng Zhang Lab, Broad Institute

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

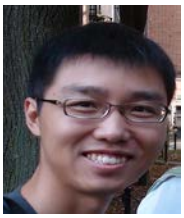
Dr. Po-Yen Chen
Research Assistant, Department of Chemical Engineering
Massachusetts Institute of Technology

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



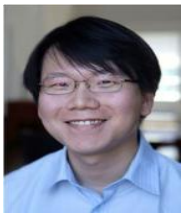
"Decipher Regulatory Grammar from DNA Sequence"
Dr. Zhizhuo Zhang
Postdoctoral Research Associate, the Computational Biology group
Computer Science and Artificial Intelligence Laboratory and Broad Institute
Massachusetts Institute of Technology

"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

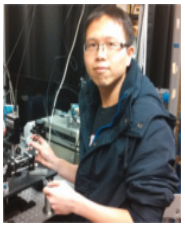
“Structural studies of lipid-protein interactions using electron crystallography”
Dr. Po-Lin Chiu
Postdoctoral Fellow, Department of Cell Biology
Harvard Medical School

“Identification of small-molecule probes of autophagy based-Salmonella clearance”
Ms. Meredith Szu-Yu Kuo
Ph.D. Candidate, Department of Molecular and Cellular Biology, Harvard University
Center for the Science of Therapeutics, Broad Institute of Harvard and MIT
(哈佛大學化學暨生物化學系郭思妤)

“PPAR-α 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)

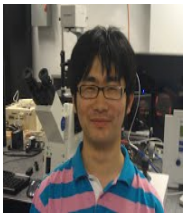
8/7 (Fri) 4:20 pm – 5:50 pm: Technical Session D2-W3-T4: Electronic, Photonic, and Magnetic Materials, Organic Polymer and Soft Materials, Ceramic Materials, Metallurgy and Materials, Nanotechnology, Clean Energy and Water Purification Technology

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 Themally-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)