



## Program

**Time:** April 25-28, 2015

**Venue:** Nanjing International Youth Conference Hotel (NIYCH), China

### Registration

*Time: 08:30-18:00, April 24 (Friday), 2015; Place: The Gate of Nanjing Hall, 5<sup>th</sup> Floor, NIYCH*

### Opening Ceremony

*Time: 9:00-09:40, April 25, 2015 (Saturday); Place: Zhonghua Exhibition Hall, 1<sup>st</sup> Floor, Nanjing Jinling Convention Center*

### Plenary Lectures

*Time: 09:40-11:45, April 25, 2015 (Saturday); Place: Zhonghua Exhibition Hall, 1<sup>st</sup> Floor, Nanjing Jinling Convention Center*

**Moderator**      *Dr. Mingde Xia*, Senior Director, Johnson & Johnson Innovation Center AP, USA

09:40-09:45      **Moderator's Introduction**

09:45-10:15      *Title: Instant Identification of Mutations That Cause Phenotype*

*Dr. Bruce Beutler*, Professor and Director, University of Texas Southwestern Medical Center, USA  
Nobel Prize Laureate in Physiology or Medicine, 2011

10:15-10:45      *Title: How to Win a Nobel Prize: The Secret of Cell Division*

*Dr. Tim Hunt*, Emeritus Group Leader, Cancer Research, UK  
Nobel Prize Laureate in Physiology or Medicine, 2001

10:45-11:15      *Title: Defining Interaction Networks and Signaling Pathways That Enable Cell Adhesion and Migration*

*Dr. Vania Braga*, Deputy-Head, Molecular Medicine Section, Faculty of Medicine, Imperial College London, UK

11:15-11:45      *Title: The Biological Role of Stable Isotopes and Experimental Verification of the Isotopic Resonance Hypothesis*

*Dr. Roman Zubarev*, Division Head, Karolinska Institute, Sweden

### Keynote Forum of WDD & CMCB

*Time: 13:30-15:35, April 25, 2014 (Saturday); Place: Room 702, 7<sup>th</sup> Floor, NIYCH*

**Moderator**      *Dr. Yi Pan*, Distinguished University Professor, Georgia State University, USA

13:30-13:35      **Moderator's Introduction**

13:35-14:05      *Title: Size-selected Gold Clusters: Solving the Atomic Structure of Model Nanoparticles with Multiple Medical Applications*

*Dr. Richard E. Palmer*, Head, Nanoscale Physics Research Laboratory; Professor, University of Birmingham, UK

14:05-14:35      *Title: Porosome: The Universal Secretory Machinery at the Cell Plasma Membrane*

*Dr. Bhanu P. Jena*, Distinguished & George E. Palade University Professor, Wayne State University, USA

14:35-15:05      *Title: Regulation of Intracellular pH: Role of Sodium-coupled Bicarbonate Transporters*

*Dr. Walter F. Boron*, Chairman, Department of Physiology and Biophysics, Case Western Reserve University, USA

15:05-15:35      *Title: Manufacturing Biotech Products: From Discovery to Market*

*Dr. Alain Bernard*, Vice President, Technical Operations GPS, UCB Pharma, Belgium

**Group Photo**

Time: 15:40-15:50, April 25, 2015 (Saturday); Place: Outside Square, NIYCH

**BIT's 6<sup>th</sup> Annual World DNA and Genome Day-2015****WDD 01: DNA Damage & Repair, Genome Replication, and Related Enzymes**

Time: 08:30-10:50, April 26, 2015 (Sunday); Place: Room 703, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Chengtao Her*, Associate Professor, Washington State University, USA

**Co-Chair** *Dr. Jing H. Wang*, Assistant Professor, University of Colorado, USA

**08:30-08:35 Chair's Introduction**

**08:35-08:55** *Title: DNA Repair Choice after Irradiation of Cells with Heavy Ions*

*Dr. Francis A. Cucinotta*, Professor, University of Nevada, USA

**08:55-09:15** *Title: The Harness of Error-prone DNA Double-strand Break Repair by hMSH4*

*Dr. Chengtao Her*, Associate Professor, Washington State University, USA

**09:15-09:35** *Title: Mechanisms Underlying Widespread Genomic Rearrangements in B cell Lymphomas*

*Dr. Jing H. Wang*, Assistant Professor, University of Colorado, USA

**09:35-09:55** *Title: Phosphorothioation: An Unusual Post-replicative Modification on the DNA Backbone*

*Dr. Shi Chen*, Professor, Wuhan University, China

**09:55-10:15** *Title: Ubiquitin E3 Ligase SPOP Regulates the Stability of Histone H3K36 Methyltransferase SETD2 and DNA Damage Response*

*Dr. Min Wu*, Professor, Wuhan University, China

**10:15-10:30 Coffee Break**

**10:30-10:50** *Title: Premature Aging and Cancer: A Lesson from the Human RECQ4 DNA Helicase*

*Dr. Yilun Liu*, Associate Professor, Beckman Research Institute of City of Hope, USA

**WDD 02: Special Symposium of Nucleic Acids**

Time: 08:30 -09:55, April 26, 2015 (Sunday); Place: Room 705, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Xianbin Yang*, Director of R & D, AM Biotechnologies, USA

**08:30-08:35 Chair's Introduction**

**08:35-08:55** *Title: The Sequence-specific Cellular Uptake of DNA Nanostructures*

*Dr. Chung Hang J. Choi*, Assistant Professor, The Chinese University of Hong Kong, Hong Kong, China

**08:55-09:15** *Title: New Reagent for RNA-based Therapeutic Technologies*

*Dr. Xianbin Yang*, Director of R & D, AM Biotechnologies, USA

**09:15-09:35** *Title: Controlled Downstream Processing of Plasmid DNA on Monolithic Chromatographic Columns*

*Dr. Nika Lendero Krajnc*, Chief Scientific Officer, BIA Separations GmbH, Austria

**09:35-09:55** *Title: Sensing of Sequential-assembly of Synthetic DNA on a Planar Surface Using QCM-D and SPR*

*Dr. Lu Sun*, Postdoc., Chalmers University of Technology, Sweden

**WDD 03: Functional Genomics Screening and High-Yield Genetics/Genomics, Next-Generation Sequencing***Time: 09:55-11:40, April 26, 2015 (Sunday); Place: Room 705, 7<sup>th</sup> Floor, NIYCH***Chair** *Dr. Xinsheng Sean Ling*, Professor, Brown University, USA**Co-Chair** *Dr. Ping Xu*, Professor, Virginia Commonwealth University, USA**09:55-10:00 Chair's Introduction****10:00-10:20** *Title: Building a Solid-state Polymerase for DNA Sequencing and Other Applications**Dr. Xinsheng Sean Ling*, Professor, Brown University, USA**10:20-10:40** *Title: Essential Gene Identification by Genomics and Systems Biology**Dr. Ping Xu*, Professor, Virginia Commonwealth University, USA**10:40-11:00** *Title: The Integration of NGS Technology Will Change Molecular Diagnostic Market**Mr. Junpu Xu*, CEO, Beijing ACCB Biotech Ltd., China**11:00-11:20** *Title: Genome Survey Sequencing and Genetic Background Characterization of Gracilariopsis Lemaneiformis (Rhodophyta) Based on Next-generation Sequencing**Dr. Wei Zhou*, Postdoc, The Ocean University of China, China**11:20-11:40** *Title: The Complete Chloroplast Genome of Gracilariopsis Lemaneiformis (Rhodophyta) Derived Directly from Next-generation Sequencing Data**Mr. Qingwei Du*, The Ocean University of China, China**WDD 04: Cancer Genetics/Genomics***Time: 08:30-11:50, April 26, 2015 (Sunday); Place: Room 707, 7<sup>th</sup> Floor, NIYCH***Chair** *Dr. Shulin Li*, Professor, The University of Texas MD Anderson Cancer Center, USA**Co-Chair** *Dr. Susana C. Raimondi*, Professor, St. Jude Children's Research Hospital, USA**08:30-08:35 Chair's Introduction****08:35-08:55** *Title: MicroRNAs Regulation of Colon Cancer Stem Cells**Dr. Adhip P. N. Majumdar*, Professor, Wayne State University, USA**08:55-09:15** *Title: Early Detection of Tumor Relapse and Profiling of Tumor Resistance via a Universal CTC Capture System**Dr. Shulin Li*, Professor, The University of Texas MD Anderson Cancer Center, USA**09:15-09:35** *Title: Investigation of Genetic Determinants of Cervical Cancer**Dr. Dan Chen*, Professor, Shanghai Jiao Tong University School of Medicine, China**09:35-09:55** *Title: Molecular Evolution Models of Cancer**Dr. Chin-Kun Hu*, Research Fellow, Academia Sinica, Taiwan**09:55-10:15** *Title: Integrated Analysis of miRNA Profiling and Bioinformatics Reveals the Potential Key miRNAs in Gastric Cancer**Dr. Zhe Jin*, Professor, Shenzhen University, China**10:15-10:30 Coffee Break****10:30-10:50** *Title: Pathway Deregulation and Clinical Implications of Somatic Mutations in DNA and RNA of Lung Adenocarcinoma**Dr. Zhifu Sun*, Associate Director, Mayo Clinic, USA**10:50-11:10** *Title: Important Cytogenetic/Genetic Lesions Subgroups in Childhood Acute Myeloblastic Leukemia: Impact of Genomic Discoveries**Dr. Susana C. Raimondi*, Professor, St. Jude Children's Research Hospital, USA**11:10-11:30** *Title: Alteration of LINE-1 DNA Methylation and mRNA Expression in First- and Third-Trimester Placenta**Dr. Jennifer Li*, Assistant Professor, Mercer University, USA



11:30-11:50 *Title: Further Confirmation of Germline Glioma Risk Variant, rs78378222 in TP53 and Its Implication in Tumor Tissues via Integrative Analysis of TCGA Data*  
*Dr. Zhaoming Wang*, Bioinformatics Manager, National Cancer Institute, USA

#### WDD 05: Prenatal, Perinatal and Reproductive Genetics

Time: 10:50-11:35, April 26, 2015 (Sunday); Place: Room 703, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Pi-Hua Chen*, Director, Shuang Ho Hospital, Taiwan

#### 10:50-10:55 **Chair's Introduction**

10:55-11:15 *Title: Embryo Glue Increases IVF Pregnancy Rate*  
*Dr. Pi-Hua Chen*, Director, Shuang Ho Hospital, Taiwan

11:15-11:35 *Title: Use of the ES-D3 Cell Differentiation Assay, Combined with the BeWo Transport Model, to Predict Relative in Vivo Developmental Toxicity of Antifungal Compounds*  
*Ms. Hequn Li*, Wageningen University, The Netherlands

#### WDD 06: Microbial Genomics & Metagenomics

Time: 13:30 -16:50, April 26, 2015 (Sunday); Place: Room 703, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Gregory A. Buck*, Director, Virginia Commonwealth University, USA

**Co-Chair** *Dr. Sohan Jheeta*, Researcher, NoR HGT & LUCA, UK

#### 13:30-13:35 **Chair's Introduction**

13:35-13:55 *Title: The Integrative Genomics and Multi-omics of the Vaginal Microbiome with a focus on Pregnancy and Preterm Birth*

*Dr. Gregory A. Buck*, Director, Virginia Commonwealth University, USA

13:55-14:15 *Title: Hypothesis: Network of RNAs and Their Influence on Life*

*Dr. Sohan Jheeta*, Researcher, NoR HGT & LUCA, UK

14:15-14:35 *Title: Activating Supercoiling-sensitive Promoters by Transcription-coupled DNA Supercoiling in Escherichia Coli*

*Dr. Fenfei Leng*, Associate Professor, Florida International University, USA

14:35-14:55 *Title: Electrochemical Detection of Avian Influenza Virus Genotype Using ssDNA Probe Modified Gold Electrode*

*Dr. Jerzy Radecki*, Professor, Polish Academy of Sciences, Poland

14:55-15:15 *Title: Microbiology of the Built Environment: The Changing Microbiome of New York City College of Technology*

*Dr. Davida S. Smyth*, Assistant Professor, New York City College of Technology, USA

#### 15:15-15:30 **Coffee Break**

15:30-15:50 *Title: Genome Sequence, Structure and Phylogeography of the Circulatory Foot-and-Mouth Disease Viruses in Bangladesh*

*Dr. Md. Anwar Hossain*, Professor, University of Dhaka, Bangladesh

15:50-16:10 *Title: Primary Isolation and Identification of Helicobacter Pylori from Dyspeptic Patients in Hainan Island, China*

*Dr. Haiying Gu*, Professor, NingBo University, China

16:10-16:30 *Title: Evolutionary Relationships and Diversity among the Filamentous Bacteriophages that Infect the Phytopathogen Ralstonia Solanacearum*

*Dr. Ahmed Askora*, Assistant Professor, Zagazig University, Egypt

16:30-16:50 *Title: Whole-genome Sequence Comparison (ANI) as a Method for Improving Bacterial Species Definition*

*Dr. Wen Zhang*, Associate Researcher, Chinese Center for Disease Control and Prevention, China

**WDD 07: Cell Therapy and Stem Cell Genomics**

Time: 16:50-17:35, April 26, 2015 (Sunday); Place: Room 703, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Barry Merriman*, VP, Human Longevity, Inc., USA

**16:50-16:55 Chair's Introduction**

*Title: The Role of Stem Cell Genomics and Therapy in Precision Medicine and Human Longevity*

*Dr. Barry Merriman*, VP, Human Longevity, Inc., USA

**16:55-17:15** *Title: Sema3C Mediates the Communication within Cancer Stem Cell*

*Dr. Jianghong Man*, Research Associate, National Center of Biomedical Analysis, China

**WDD 08: Epigenomics, Sequencing and SNIps**

Time: 17:35 -18:40, April 26, 2015 (Sunday); Place: Room 703, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Frederique Magdinier*, Research Director, Laboratory of Medical Genetics & Functional Genomics, France

**17:35-17:40 Chair's Introduction**

*Keynote Speech: Genome-Wide Disease Association Through SNP Analysis*

*Dr. Yi Pan*, Distinguished University Professor, Georgia State University, USA

**17:40-18:00** *Title: Analysis of DNA Methylation Pattern at Repetitive DNA Sequences by Deep Sequencing in Rare Human Diseases*

*Dr. Frederique Magdinier*, Research Director, Laboratory of Medical Genetics & Functional Genomics, France

**18:00-18:20** *Title: Investigation of Proliferation and Cytotoxicity Capacity of Cytokine-Induced Killer Cells: OMICS Strategy*

*Dr. Wenju Wang*, Associate Professor, Kunming Yan'an Hospital, China

**WDD 09: Neurogenetics, Neurodegeneration and Psychiatric Genetics**

Time: 13:30-14:55, April 26, 2015 (Sunday); Place: Room 705, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Sanjay I. Bidichandani*, Professor, University of Oklahoma, USA

**13:30-13:35 Chair's Introduction**

*Title: Neuropsychiatric Aspects of Mitochondrial Cytopathies*

*Dr. Jean-Marc Burgunder*, Professor, University of Bern, Switzerland

**13:35-13:55** *Title: Epigenetic Promoter Silencing in Friedreich Ataxia*

*Dr. Sanjay I. Bidichandani*, Professor, University of Oklahoma, USA

**13:55-14:15** *Title: Long-Term Metabolic Gene Expression Changes in Rat Cerebral Cortex Following Recurrent Neonatal Seizures*

*Dr. Hong Ni*, Deputy Director, The Children Hospital Affiliated to Soochow University, China

**14:15-14:35** *Title: Association between Vitamin D Receptor Gene Polymorphisms and Susceptibility to Parkinson's Disease: A Meta-analysis*

*Mr. Zi-Teng Zhang*, Research Assistant, Second Military Medical University, China

**WDD 10: Animal Genetics/Genomics**

Time: 14:55 -16:00, April 26, 2015 (Sunday); Place: Room 705, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Marie Lipoldová*, Laboratory Head, Academy of Sciences of the Czech Republic, Czech Republic

**Co-Chair** *Dr. Yongming Sang*, Assistant Professor, Kansas State University, USA

**14:55-15:00 Chair's Introduction**

15:00-15:20 *Title: Epistasis in Susceptibility to Infectious Disease \* Model of Leishmaniasis*

*Dr. Marie Lipoldová*, Laboratory Head, Academy of Sciences of the Czech Republic, Czech Republic

15:20-15:40 *Title: Profiling Immune Response Genes in Obese Rats Induced by High-fat Diet and Adenovirus Infection*

*Dr. Yongming Sang*, Assistant Professor, Kansas State University, USA

15:40-16:00 *Title: Investigations of TNF-blocking Activity of VARV-CrmB Protein in Vitro and in Vivo*

*Dr. Irina Gileva*, Leading Scientist, SRC V & B VECTOR, Russia

**WDD 11: RNAi and microRNA Technologies**

Time: 16:00-17:45, April 26, 2015 (Sunday); Place: Room 705, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Harald Osmundsen*, Professor, University of Oslo, Norway

**16:00-16:05 Chair's Introduction**

16:05-16:25 *Title: miRNA Based Therapeutic Approaches in Chronic Diabetic Complications*

*Dr. Subrata Chakrabarti*, Chair, Western University, Canada

16:25-16:45 *Title: Application of MicroRNA Mimics and miRNA Profiling to Investigate Anti-proliferative Effects of Non-expressed Members of the miR-106a-363 Cluster Using Cultured Squamous Carcinoma Cells*

*Dr. Harald Osmundsen*, Professor, University of Oslo, Norway

16:45-17:05 *Title: MicroRNA-135a Contributes to the Development of Portal Vein Tumor Thrombus by Promoting Metastasis in Hepatocellular Carcinoma*

*Dr. Shanrong Liu*, Professor, Second Military Medical University, China

17:05-17:25 *Title: Serum Expression Level of MiR-382-3p, MiR-598-3p, MiR-1246 and MiR-184 in Breast Cancer Patients*

*Dr. Zhaoyun Li*, Chief Technician, Taizhou Central Hospital, China

17:25-17:45 *Title: tRNA-Derived Small RNAs (tsRNAs): New Player in Physiological and Disease Conditions*

*Dr. Qi Chen*, Assistant Professor, Chinese Academy of Sciences, China

**WDD 12: Pharmacogenomics, Personalized Medicine and Biomarkers**

Time: 08:30 -11:30, April 27, 2015 (Monday); Place: Room 703, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Guanghui Hu*, President, Admera Health, USA

**Co-Chair** *Dr. Zhiyang Zhang*, President, 3G Biotech, China

**08:30-08:35 Chair's Introduction**

08:35-08:55 *Keynote Speech: Elongation Factor 3 Functions as Ribosome Recycling Factor in Yeast: Inhibitors of This Factor and Comparison with Other Recycling Factor and the Elongation Activity of eEF3*

*Dr. Akira Kaji*, Professor, University of Pennsylvania, USA

08:55-09:15 *Title: Differential Expression of MicroRNA in Peripheral Blood Mononuclear cells as Specific Biomarker for Major Depressive Disorder Patients*

*Dr. Jim Lu*, President, GoPath Diagnostic Laboratories, USA

09:15-09:35 *Title: Non-Invasive Cancer Genomic Testing*

*Dr. Guanghui Hu*, President, Admera Health, USA



- 09:35-09:55 *Title: Health Technology Assessment and Reimbursement of Personalized Medicine Technologies*  
*Dr. Franz Hessel*, Professor, SRH University Berlin, Germany
- 09:55-10:15 *Title: Click Reactions for Deposition of Redox Active Monolayers on the Gold Support – The Base of A New Electrochemical Biosensors*  
*Dr. Hanna Radecka*, Professor, Polish Academy of Sciences, Poland
- 10:15-10:30 **Coffee Break**
- 10:30-10:50 *Title: New Business Model of Personalized Medicine in China*  
*Dr. Zhiyang Zhang*, President, 3G Biotech (China) Company, China
- 10:50-11:10 *Title: Genotyping Products, Using GoldMag Nanoparticles as Carriers*  
*Dr. Yali Cui*, Professor, Northwest University, China
- 11:10-11:30 *Title: Proteomic Heterogeneity in Clinically Nonfunctional Pituitary Adenomas*  
*Dr. Xianquan Zhan*, Professor, Central South University, China

**WDD 13: Metabolomics, Glycomics and Lipidomics**

*Time: 08:30 -09:35, April 27, 2015 (Monday); Place: Room 705, 7<sup>th</sup> Floor, NIYCH*

- Chair** *Dr. Saïd Rabbani*, Professor, The University of São Paulo, Brazil  
**Co-Chair** *Dr. Bennard van Ravenzwaay*, Senior Vice President, BASF SE, Germany

**08:30-08:35 Chair's Introduction**

- 08:35-08:55 *Title: Metabolomics in Vitro: A New Approach for Systemic Toxicity – First Applications for Chemical Grouping*  
*Dr. Bennard van Ravenzwaay*, Senior Vice President, BASF SE, Germany
- 08:55-09:15 *Title: Rotavirus Infections: Let the Sugars Do the Talking*  
*Dr. Thomas Haselhorst*, Senior Research Fellow, Griffith University, Australia
- 09:15-09:35 *Title: A Metabolomics Approach to Phenotype vs. Genotype Heterogeneity*  
*Dr. Saïd Rabbani*, Professor, The University of São Paulo, Brazil

**WDD 14: Forensic DNA Analysis**

*Time: 09:55-11:00, April 27, 2015 (Monday); Place: Room 705, 7<sup>th</sup> Floor, NIYCH*

- Chair** *Dr. Irina Perepechina*, Professor, Lomonosov Moscow State University, Russia

**09:55-10:00 Chair's Introduction**

- 10:00-10:20 *Title: Determination of Genetic Identity on the Basis of the Consensual Level of Reliability of DNA Identification*  
*Dr. Irina Perepechina*, Professor, Lomonosov Moscow State University, Russia
- 10:20-10:40 *Title: DNA Human Identification for the Family Rights: Agreement between UNESP/Laboratory of Paternity and Public Defender in São Paulo State*  
*Dr. Regina M. B. Cicarelli*, Professor, Universidade Estadual Paulista, Brazil
- 10:40-11:00 *Title: Fetal Paternal Lineage Determination by Y-chromosome Short Tandem Repeat Analysis in the Maternal Plasma: Analytical and Pre-analytical Considerations*  
*Dr. Gustavo Barcelos Barra*, Principal Investigator, Sabin Laboratory, Brazil

**WDD 15: Genetics of Immune & Autoimmune Disorders**

Time: 11:10-11:55, April 27, 2015 (Monday); Place: Room 705, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Weikuan Gu*, Professor, University of Tennessee, USA

**11:10-11:15 Chair's Introduction**

**11:15-11:35** *Title: Difference in Molecular Network of Collagen, Type III, Alpha \*1 between Mice and Humans-The Obstacle that Translational Research Must Overcome*

*Dr. Weikuan Gu*, Professor, University of Tennessee, USA

**11:35-11:55** *Title: Genetic Roles of Human IgG Fc Receptors in the Development of Sarcoidosis*

*Dr. Jianming Wu*, Associate Professor, University of Minnesota, USA

**WDD 16: Plant and Crop Genetics/Genomics**

Time: 08:30 -11:50, April 27, 2015 (Monday); Place: Room 707, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Chungui Lu*, Assistant Professor, University of Nottingham, UK

**Co-Chair** *Dr. Patrick Xuechun Zhao*, Associate Professor, The Samuel Roberts Noble Foundation, USA

**08:30-08:35 Chair's Introduction**

**08:35-08:55** *Title: Systematic Functional Analysis of Nitrogen/Phosphate Use Efficiency in Crops by Gene Regulatory Network*

*Dr. Chungui Lu*, Assistant Professor, University of Nottingham, UK

**08:55-09:15** *Title: LegumeIP \* An Integrative Platform to Study Gene Function and Genome Evolution in Legumes*

*Dr. Patrick Xuechun Zhao*, Associate Professor, The Samuel Roberts Noble Foundation, USA

**09:15-09:35** *Title: Molecular Genetic Mapping and Localization of Quantitative Trait Loci for Rice Aroma*

*Dr. Farahnaz Sadat Golestan Hashemi*, Researcher, Universit Putra Malaysia, Malaysia

**09:35-09:55** *Title: Xylem Sap in Cotton Contains Proteins that Contribute to Environmental Stress Response and Cell Wall Development*

*Dr. Zhi-Yong Zhang*, Head, Henan Institute of Science and Technology, China

**09:55-10:15** *Title: Genome-wide Identification and Analysis of the Growth-regulating Factor Family in Chinese Cabbage (*Brassica Rapa L. ssp. Pekinensis*)*

*Dr. Jianwei Gao*, Director, Shandong Academy of Agricultural Sciences, China

**10:15-10:30 Coffee Break**

**10:30-10:50** *Title: Biosafety Research in Transgenic White Clover (*Trifolium Repens L*)*

*Dr. Kevin Smith*, Professor, The University of Melbourne, Australia

**10:50-11:10** *Title: To Reveal the Molecular Pathway Associated with Lipid Biosynthesis of the Green Alga by Proteomics*

*Dr. Yujin Li*, Associate Professor, Xiangtan University, China

**11:10-11:30** *Title: Molecular Techniques Applied in Sugarcane Breeding in China*

*Dr. Yang-Rui Li*, Director, Chinese Academy of Agricultural Sciences-Guangxi Academy of Agricultural Sciences, China

**11:30-11:50** *Title: Expression of Peanut Iron Regulated Transporter 1 in Tobacco and Rice Plants Confers Improved Iron Nutrition*

*Dr. Yuanmei Zuo*, Professor, China Agriculture University, China



**WDD 17: Bioinformatics/Computational Tools, Big Data Analysis and Visualization**

Time: 13:30-16:10, April 27, 2015 (Monday); Place: Room 703, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Victor Solovyev*, Professor, King Abdullah University of Science and Technology, Saudi Arabia  
**Co-Chair** *Dr. Ming Li*, Assistant Professor, University of Arkansas for Medical Sciences, USA

**13:30-13:35 Chair's Introduction**

**13:35-13:55** *Keynote Speech: Integrated Systems Biology of Synaptic Plasticity: Modelling the Dynamics of CaMKII-NMDAR Complex Related to Memory Formation in Synapses to Understand the Possible Roles of Threonine 286 Autophosphorylation of CaMKII in Long Term Potentiation*  
*Dr. Don Kulasiri*, Professor, Lincoln University, New Zealand

**13:55-14:15** *Title: From Biological Network Reconstruction to Data Analysis and Visualization*  
*Dr. Mohamed Elati*, Associate Professor, University of Evry, France

**14:15-14:35** *Title: Detecting Maternal-fetal Genotype Interactions Associated with Congenital Heart Defects*  
*Dr. Ming Li*, Assistant Professor, University of Arkansas for Medical Sciences, USA

**14:35-14:55** *Title: Using the SCD Domain as a Predictive Tool to Identify Putative DDR Targets*  
*Dr. Albert Ribes-Zamora*, Assistant Professor, University of St. Thomas, USA

**14:55-15:15** *Title: Advanced Algorithms for Next Generation Data Processing*  
*Dr. Victor Solovyev*, Professor, King Abdullah University of Science and Technology, Saudi Arabia

**15:15-15:30 Coffee Break**

**15:30-15:50** *Title: Using Data Mining Instead of Gene Set Analysis, Is It OK?*  
*Dr. Soheila Khodakarim*, Assistant Professor, Shahid Beheshti University of Medical Sciences, Iran

**15:50-16:10** *Title: Computational Prediction of Structural and Target Sites of Virulence Factors in Staphylococcus Aureus*  
*Dr. Subhashree Venugopal*, Associate Professor, VIT University, India

**WDD 18: Structural and Functional Genomics**

Time: 08:30-10:15, April 28, 2015 (Tuesday); Place: Room 703, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Xinghua Pan*, Research Scientist, Yale University, USA

**08:30-08:35 Chair's Introduction**

**08:35-08:55** *Title: Single Cell Sequencing Accelerates the Progress of Genomic Medicine*  
*Dr. Xinghua Pan*, Research Scientist, Yale University, USA

**08:55-09:15** *Title: CALR Gene Mutations in Primary Myeloproliferative Syndroms*  
*Dr. Jean Gabert*, Professor, AMU University, France

**09:15-09:35** *Title: Theoretical Analysis Indicates Human Genome is not a Blueprint and Human Oocytes Have the Instructions*  
*Dr. Koichi Itoh*, President, The Institute for Theoretical Molecular Biology, Japan

**09:35-09:55** *Title: Complexity of Genetics in Keratoconus*  
*Dr. Marzena Gajecka*, Associate Professor, Polish Academy of Sciences, Poland

**09:55-10:15** *Title: The MAOA Gene Predicts Happiness in Women*  
*Dr. Henian Chen*, Associate Professor, University of South Florida, USA

**BIT's 5<sup>th</sup> Annual World Congress of Molecular & Cell Biology-2015****Quest A: Peers' Opinions on Unsolved Mysteries in the Cell Biology****Panel A1: What Challenges Persist in Mechanisms of Endocytosis & Exocytosis?**

*Time: 08:30-09:55, April 26, 2015 (Sunday); Place: Room 738, 7<sup>th</sup> Floor, NIYCH*

**Chair** *Dr. Jianhua Xu*, Assistant Professor, Georgia Regents University, USA

**08:30-08:35 Chair's Introduction**

**08:35-08:55** *Title: Advances in Our Understanding of Fractional Release of Intra-Vesicular Contents from Cells*  
*Dr. Bhanu P. Jena*, Distinguished & George E. Palade University Professor, Wayne State University, USA

**08:55-09:15** *Title: The Intracellular Na<sup>+</sup>/H<sup>+</sup> Exchanger NHE7 Effects a Novel Na<sup>+</sup> Coupled Proton-Loading Mechanism that Accelerates Endocytosis*  
*Dr. Laurent Counillon*, Professor, Université Nice-Sophia Antipolis LP2M - CNRS-UMR 7370, France

**09:15-09:35** *Title: Transcytosis: Endocytosis and Exocytosis, New Electron-Microscopic Observations*  
*Dr. Theodore C. Iancu*, Professor Emeritus & Director, The Milman-David Biomedical Research Unit, Technion-Israel Institute of Technology, Israel

**09:35-09:55** *Title: The Exo-Endocytosis Coupling in Neuronal Synapses*  
*Dr. Jianhua Xu*, Assistant Professor, Georgia Regents University, USA

**Panel A2: How Cells Face Cell Injury, Cell Damage and Undergo Repair?**

*Time: 08:30-10:15, April 27, 2015 (Monday); Place: Room 733, 7<sup>th</sup> Floor, NIYCH*

**Chair** *Dr. Andrew CK Law*, Director, Neural Dysfunction Research Laboratory, The University of Hong Kong, Hong Kong, China

**08:30-08:35 Chair's Introduction**

**08:35-08:55** *Title: Na<sup>+</sup>/K<sup>+</sup> ATPase is a New Target to Treat Oxidative Stress Related Diseases*  
*Dr. Jinsong Bian*, Associate Professor, Department of Pharmacology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore

**08:55-09:15** *Title: Activated Protein C Inhibits \*-Cell Apoptosis, Induces Regulatory T Cells and Prevents Diabetes in NOD Mice*  
*Dr. Meilang Xue*, Senior Research Fellow, University of Sydney at Royal North Shore Hospital, Australia

**09:15-09:35** *Title: More than a Century of Alzheimer's Disease Research... Are We Barking up the Wrong Trees*  
*Dr. Andrew CK Law*, Director, Neural Dysfunction Research Laboratory, The University of Hong Kong, Hong Kong, China

**09:35-09:55** *Title: Investigating the Immune Response to Chromosomal Instability*  
*Mr. Dawei Liu*, The University of Adelaide, Australia

**09:55-10:15** *Title: The Convergence of Abscisic Acid and Nitric Oxide Determines the Outcome of Cell Defence Responses in Plants, Mammals and Insects*  
*Dr. Lorenzo Lamattina*, Director, Integrative & Molecular Physiology Lab, Argentina

**Quest B: Hot Stories of Cellular Structure, Events and Functions****Panel B1: Cytoskeleton and Organelle**

Time: 08:30-12:10, April 26, 2015 (Sunday); Place: Room 732, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Yassemi Capetanaki*, Vice-Director, Center of Basic Research, Biomedical Research Foundation, Academy of Athens, Greece

**Co-Chair** *Dr. Intaek Lee*, Principal Investigator, Shanghai Institute for Advanced Immunochemical Studies, ShanghaiTech University, China

**08:30-08:35 Chair's Introduction**

**08:35-09:00** *Title: Regulation of BBSome Trafficking to Cilia*

*Dr. William Y. Tsang*, Research Unit Director, Institut de recherches cliniques de Montréal, Canada

**09:00-09:25** *Title: Offsetting Gelsolin Degradation in a Transgene Amyloidosis Mouse Model by Means of Chaperone Nanobodies*

*Dr. Jan Gettemans*, Principal Investigator, Nanobody Lab, Ghent University, Belgium

**09:25-09:50** *Title: Unraveling the Mechanism of Mitoprotection and Cardioprotection by the Desmin Cytoskeleton*  
*Dr. Yassemi Capetanaki*, Vice-Director, Center of Basic Research, Biomedical Research Foundation, Academy of Athens, Greece

**09:50-10:15** *Title: Cortical Regulation of Cell Size by a Sizer cdr2p*

*Dr. Timothy E. Saunders*, Assistant Professor, National University of Singapore, Singapore

**10:15-10:30 Coffee Break**

**10:30-10:55** *Title: Tether-SNARE Interaction is Required for Golgi Stacking*

*Dr. Intaek Lee*, Principal Investigator, Shanghai Institute for Advanced Immunochemical Studies, ShanghaiTech University, China

**10:55-11:20** *Title: The Striated Organelle: A Motor for Inner Ear Hair Cells*

*Dr. Anna Lysakowski*, Professor, University of Illinois at Chicago, USA

**11:20-11:45** *Title: Talin Determines the Nanoscale Architecture of Focal Adhesions*

*Dr. Yilin Wang*, Research Fellow, Mechanobiology Institute, National University of Singapore, Singapore

**11:45-12:10** *Title: NF- $\kappa$ B Is Crucial for HURP-Dedicated Assembly of Golgi Ribbon Formation*

*Ms. Jo-Mei Maureen Chen*, Department of Applied Chemistry, National Chi Nan University, Taiwan

**Panel B2: Cell Polarity, Adhesion and Migration**

Time: 09:55-11:00, April 26, 2015 (Sunday); Place: Room 738, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Françoise Brochard-Wyart*, Group Leader, Institut Curie & UPMC University Paris 06, France

**09:55-10:00 Chair's Introduction**

**10:00-10:20** *Title: Novel Association between Vasoactive Intestinal Peptide and CRTH2 Receptor in Recruiting Human Eosinophils to the Allergic Upper Airway*

*Dr. Amr El-Shazly*, Professor of Rhinology, Liege University Hospital, Belgium

**10:20-10:40** *Title: Soft Matter Models of Tissue and Tumors "Wetting of Living Drops"*

*Dr. Françoise Brochard-Wyart*, Group Leader, Institut Curie & UPMC University Paris 06, France

**10:40-11:00** *Title: Proinflammatory, Procoagulant and Cytotoxic Properties of Extracellular Histones*

*Dr. Guozheng Wang*, Principal Clinical Scientist & Senior Lecturer, Institute of Infection and Global Health, University of Liverpool, UK

**Panel B3: Chromosome, Chromatin and Epigenetics**

Time: 13:30-17:10, April 26, 2015 (Sunday); Place: Room 738, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Elena Gaginskaya*, Professor, Saint-Petersburg State University, Russia  
**Co-Chair** *Dr. John M. Rosenfeld*, Platform Technology Manager, Merck-Millipore, USA

**13:30-13:35 Chair's Introduction**

**13:35-14:00** *Title: DNA Methylation an Important Epigenetic Signal with Impact on Many Mechanisms in Molecular Biology*

*Dr. Walter Doerfler*, Professor Emeritus, Cologne University; Guest Professor, Institute for Virology, Erlangen University Medical School, Germany

**14:00-14:25** *Title: Epigenomic Landscape and Therestrictive Position Effectsat Retrovirusintegration Sites*

*Dr. Jiri Hejnar*, Head, Institute of Molecular Genetics, Academy of Sciences of the Czech Republic, Czech Republic

**14:25-14:50** *Title: Functioning of Ribosomal Genes in Avian Oogenesis*

*Dr. Elena Gaginskaya*, Professor, Saint-Petersburg State University, Russia

**14:50-15:15** *Title: Chromatin States and Replication Patterns in Polytene Chromosomes of Drosophila Melanogaster*

*Dr. Tatyana D. Kolesnikova*, Research Fellow, Institute of Molecular and Cellular Biology, Novosibirsk, Russia

**15:15-15:30 Coffee Break**

**15:30-15:55** *Title: New Models for Structures and Functions in the Cell Nucleus*

*Dr. Ronald Hancock*, Professor & Research Scientist, Laval University Cancer Research Centre-CHUQ Oncology, Canada

**15:55-16:20** *Title: Methods for Chromatin Analysis — Precipitating Protein, RNA & DNA from Chromatin*

*Dr. John M. Rosenfeld*, Platform Technology Manager, Merck-Millipore, USA

**16:20-16:45** *Title: The Human DEK Oncoprotein: An Abundant Non-Histone Factor Vital for Global Chromatin Integrity*

*Dr. Ferdinand Kappes*, Associate Professor, Xi'an Jiaotong-Liverpool University, China

**16:45-17:10** *Title: Plant Homeodomain Finger Protein 2: A Novel Runx2 Regulator to Facilitate Bone Formation*

*Dr. Yang-Sook Chun*, Professor, Seoul National University, South Korea

**Panel B4: Biomembrane Structure, Transmembrane Transport**

Time: 15:30-16:50, April 26, 2015 (Sunday); Place: Room 732, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Sheng Ye*, Professor, Life Sciences Institute, Zhejiang University, China

**15:30-15:35 Chair's Introduction**

**15:35-16:00** *Title: Dissecting the Transport Mechanism of the Light-Driven Ion Channel: Channelrhodopsin*

*Dr. Peter Hegemann*, Professor, Humboldt-Universitaet zu Berlin, Germany

**16:00-16:25** *Title: The Principle of Cooperative Gating in a Calcium-Gated Potassium Channel*

*Dr. Sheng Ye*, Professor, Life Sciences Institute, Zhejiang University, China

**16:25-16:50** *Title: The Physiology Role of CO in the Cardiovascular System*

*Dr. Yuchun Gu*, Professor, Peking University, China

**Panel B5: Emerging Signaling and Regulation**

Time: 08:30-12:10, April 27, 2015 (Monday); Place: Room 737, 7<sup>th</sup> Floor, NIYCH

- Chair** *Dr. Hameeda Sultana*, Assistant Professor, Old Dominion University, USA  
**Co-chair** *Dr. Quanguang Zhang*, Assistant Professor, Department of Neuroscience and Regenerative Medicine, Medical College of Georgia at Georgia Regents, USA
- 08:30-08:35 **Chair's Introduction**  
08:35-09:00 *Title: Protein Knockdown in vitro and in Mice Mediated by Endoplasmic Reticulum Retained Intrabodies*  
*Dr. Thomas Böldicke*, Scientist, Helmholtz Centre for Infection Research, Germany
- 09:00-09:25 *Title: Novel Cyclic AMP Signaling Pathways in Cardiac Diseases*  
*Dr. Frank Lezoualc'h*, Research Director, Inserm UMR-1048, Institute of Metabolic and Cardiovascular Diseases, University Toulouse III Paul Sabatier, France
- 09:25-09:50 *Title: Degradation Mechanisms of the Tumor Suppressor PDCD4 in Hepatocellular Carcinoma*  
*Dr. Jinghe Xia*, Researcher, Saga University, Japan
- 09:50-10:15 *Title: Single Particular Analysis on the Plant Blue Light Receptor Phototropin 1 and Its Signal Transducer NPH3*  
*Dr. Yinglang Wan*, Associate Professor, Beijing Forestry University, China
- 10:15-10:30 **Coffee Break**
- 10:30-10:55 *Title: Atmin Mediates Kidney Morphogenesis by Modulating Wnt Signalling*  
*Dr. Paraskevi Goggolidou*, Lecturer, Genetics and Molecular Biology, Kingston University London, UK
- 10:55-11:20 *Title: Semaphorins as Potential Therapeutics against Arthropod-Borne Diseases*  
*Dr. Hameeda Sultana*, Assistant Professor, Old Dominion University, USA
- 11:20-11:45 *Title: Attenuation of Mitochondrial and Nuclear p38\* Signaling: A Novel Mechanism of Estrogen Neuroprotection in Cerebral Ischemia*  
*Dr. Quanguang Zhang*, Assistant Professor, Department of Neuroscience and Regenerative Medicine, Medical College of Georgia at Georgia Regents, USA
- 11:45-12:10 *Title: A Janus Kinase from *Litopenaeus Vannamei* is the JAK/STAT Signalling Pathway Target Gene and Involved in Antiviral Immunity Response*  
*Ms. Xuan Song*, Sun Yat-sen University, China

**Panel B6: Autophagy, Necroptosis and Apoptosis**

Time: 08:30-11:20, April 27, 2015 (Monday); Place: Room 732, 7<sup>th</sup> Floor, NIYCH

- Chair** *Dr. Cécile Vindis*, Research Director, INSERM UMR 1048, Toulouse University, France
- 08:30-08:35 **Chair's Introduction**  
08:35-09:00 *Title: AKT/mTOR and c-JunN-terminal Kinase Signaling Pathways are Required for Chrysotile Asbestos-Induced autophagy*  
*Dr. Gang Liu*, Director, Clinical Medical Research Center, Guangdong Medical Collage, China
- 09:00-09:25 *Title: Terazosin Activated Pgk1 and Hsp90 to Promote Stress Resistance*  
*Dr. Lei Liu*, Professor, Capital Medical University, China
- 09:25-09:50 *Title: Mitophagy and Apoptosis Connexion, Role in Cardiovascular Diseases*  
*Dr. Cécile Vindis*, Research Director, INSERM UMR 1048, Toulouse University, France
- 09:50-10:15 *Title: Mathematical Modeling of Anti-Apoptotic Signaling Pathways in Prostate Cancer*  
*Dr. Xiaoqiang Sun*, Instructor, Sun Yat-sen University, China
- 10:15-10:30 **Coffee Break**



- 10:30-10:55 *Title: Autophagy Suppresses HCC Tumorigenesis through Selective Degradation of Oncogenic Factors*  
*Dr. Hsiao-Sheng Liu*, Distinguished Professor, National Cheng Kung University, Taiwan
- 10:55-11:20 *Title: Huwe1 and Hausp Regulate the Function of the Tumor Suppressor Tip60*  
*Dr. Siqing Zhang*, Professor, State Key Laboratory of Cellular Stress Biology and School of Life Sciences, Xiamen University, China

**Panel B7: Cell Mechanics**

*Time: 11:20-12:25, April 27, 2015 (Monday); Place: Room 735, 7<sup>th</sup> Floor, NIYCH*

- Chair** *Dr. Anasuya Roychowdhury*, Assistant Professor, Indian Institute of Technology Bhubaneswar, India  
**Co-Chair** *Dr. Takuma Sugi*, Assistant Professor, Kyoto University, Japan

**Chair's Introduction**

- 11:20-11:25 *Title: Cytomechanical Aspects of Energy Metabolism*  
*Dr. Jürgen Bereiter-Hahn*, Professor, Kinematic Cell Research Group, Biocenter, Goethe-University Frankfurt am Main, Germany
- 11:25-11:45 *Title: ATPases: Smart Mechanics to Work Diverse*  
*Dr. Anasuya Roychowdhury*, Assistant Professor, Indian Institute of Technology Bhubaneswar, India
- 11:45-12:05 *Title: Neural Circuit Encoding Mechanosensory Habituation in C. elegans*  
*Dr. Takuma Sugi*, Assistant Professor, Kyoto University, Japan

**Panel B8: Gene Expression and Regulation**

*Time: 13:30-15:15, April 27, 2015 (Monday); Place: Room 737, 7<sup>th</sup> Floor, NIYCH*

- Chair** *Dr. Patrick Xuechun Zhao*, Associate Professor, Plant Biology Division, The Samuel Roberts Noble Foundation, USA  
**Co-Chair** *Dr. Maryam Eslami*, Research Vice President, Tehran Paramedical School, Islamic Azad University, Iran

**Chair's Introduction**

- 13:30-13:35 *Title: Large-Scale Gene Association Network Inference and Functional Module Discovery in Plants*  
*Dr. Patrick Xuechun Zhao*, Associate Professor, Plant Biology Division, The Samuel Roberts Noble Foundation, USA
- 13:35-14:00 *Title: Separation of a Functional Sgf73-DUBm from the SAGA Complex by the Proteasome Regulatory Particle*  
*Dr. Sungsu Lim*, Center for Neuro-Medicine, Korea Institute of Science and Technology Korea, South Korea
- 14:00-14:25 *Title: Collagen 1 and Elastin Genes Expression of Mitral Valvular Interstitial Cells in MicroFiber Reinforced Hydrogel*  
*Dr. Maryam Eslami*, Research Vice President, Tehran Paramedical School, Islamic Azad University, Iran
- 14:25-14:50 *Title: The Anti-Inflammatory Activity of Rice Bran Functional Components*  
*Dr. Kinmu Lee*, Professor & Director, Central Taiwan University of Science & Technology, Taiwan

**Panel B9: Cell Cycle and Cell Division**

Time: 13:30-17:10, April 27, 2015 (Monday); Place: Room 735, 7<sup>th</sup> Floor, NIYCH

- Chair** *Dr. Ernest Y.C. Lee*, Professor, New York Medical College, USA
- 13:30-13:35 **Chair's Introduction**
- 13:35-14:00 *Title: Cell Cycle Regulation of DNA Polymerase  $\epsilon$  by CRL4<sup>Cdt2</sup> which Targets the p12 Subunit for Degradation during G1/S*  
*Dr. Ernest Y.C. Lee*, Professor, New York Medical College, USA
- 14:00-14:25 *Title: Targeting Chromosomal Instability*  
*Dr. Stephen Gregory*, Senior Postdoctoral Fellow & Head, Department of Genetics, University of Adelaide, Australia
- 14:25-14:50 *Title: yciB Encoding an Inner Membrane Protein of Unknown Function is Involved in Cell Elongation and Division in Escherichia Coli*  
*Ms. Noor Afiza Badaluddin*, Research Scientist, Kobe University, Japan
- 14:50-15:15 *Title: Spindle Assembly Checkpoint and Aurora-A Kinase Activity*  
*Dr. Claude Prigent*, Director, Institute of Genetics and Development of Rennes, UMR 6290 CNRS University of Rennes 1, France
- 15:15-15:30 **Coffee Break**
- 15:30-15:55 *Title: Functional Characterization of Spindle Assembly Checkpoint in Oocytes*  
*Dr. Martin Anger*, Research Group Leader, Central European Institute of Technology – CEITEC, Veterinary Research Institute, Czech Republic
- 15:55-16:20 *Title: Emerging Roles of the Mediator Complex in the Control of the Cell Cycle and Periodic Transcription*  
*Dr. Zsolt Szilagyi*, Research Scientist, Department of Medical Biochemistry and Cell Biology, University of Gothenburg, Sweden
- 16:20-16:45 *Title: Inhibition of Cortical Myosin Recruitment by Astral Microtubules*  
*Dr. Yu Chung Tse*, Associate Professor, Shenzhen Key Laboratory of Cell Microenvironment & Department of Biology, South University of Science and Technology of China, China
- 16:45-17:10 *Title: PDIP46 - A Potent Activator of DNA Polymerase Activity and a Novel Component of the Human DNA Replication Machinery*  
*Dr. Marietta Y.W.T. Lee*, Professor, New York Medical College, USA

**Panel B10: Plant & Bacteria Cell Walls**

Time: 10:30-11:50, April 28, 2015 (Tuesday); Place: Room 738, 7<sup>th</sup> Floor, NIYCH

- Chair** *Dr. Chandrashekhar P. Joshi*, Professor & Chairman, Department of Biological Sciences, Michigan Technological University, USA
- 10:30-10:35 **Chair's Introduction**
- 10:35-11:00 *Title: Genetic Improvement of Plant Cell Walls for Better Bioenergy Production*  
*Dr. Chandrashekhar P. Joshi*, Professor & Chairman, Department of Biological Sciences, Michigan Technological University, USA
- 11:00-11:25 *Title: Changes in Cell Wall Properties Coincide with Overexpression of Extensin Fusion Proteins in Suspension Cultured Tobacco Cell*  
*Dr. Li Tan*, Principal Investigator, Complex Carbohydrate Research Center, University of Georgia, USA
- 11:25-11:50 *Title: Super-Resolution Microscopy in Visualizing the 3D Polymer Structure of Cell Walls and Related Protein Complexes*  
*Dr. Christian A. Voigt*, Assistant Professor, University of Hamburg, Germany



## Quest C: Advances in RNA Biology

### Panel C1: Non-coding RNAs

Time: 08:30-10:15, April 26, 2015 (Sunday); Place: Room 737, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Ge Shan*, Professor, University of Science and Technology of China, China

08:30-08:35 **Chair's Introduction**

08:35-08:55 *Title: A New Species of ncRNA Regulates Gene Expression with a Novel Mechanism*

*Dr. Ge Shan*, Professor, University of Science and Technology of China, China

08:55-09:15 *Title: Long Noncoding RNAs in Cancer Drug Resistance*

*Dr. Xiangting Wang*, Professor, University of Science and Technology of China, China

09:15-09:35 *Title: Functional Long Non-coding RNAs Connect Nuclear RNA Surveillance with Epigenetic Regulation*

*Dr. Huiming Zhang*, Principle Investigator, Shanghai Center of Plant Stress Biology, China

09:35-09:55 *Title: The Regulatory Role of Bacterial 5' Untranslated Regions in Sensing Metal Ions*

*Dr. Yixin Shi*, Assistant Professor, Arizona State University, USA

09:55-10:15 *Title: Three-dimensional Regulation of Transcription in Brain Aging*

*Dr. Xiaoyuan Song*, Professor, University of Science & Technology of China, China

### Panel C2: Mechanisms of RNAi and MicroRNAs

Time: 13:30-14:50, April 26, 2015 (Sunday); Place: Room 737, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Joanna Rzeszowska-Wolny*, Professor, Silesian University of Technology, Poland

13:30-13:35 **Chair's Introduction**

13:35-14:00 *Title: Mechanisms Modulating RNA Transcript Levels in Stressed Cells*

*Dr. Joanna Rzeszowska-Wolny*, Professor, Silesian University of Technology, Poland

14:00-14:25 *Title: MicroRNA-122 Mediated Regulatory Networks*

*Dr. Ann-Ping Tsou*, Professor, National Yang-Ming University, Taiwan

14:25-14:50 *Title: \*-Blocker Carvedilol Protects Cardiomyocytes against Oxidative Stress-Induced Apoptosis by Up-Regulating miR-133 Expression*

*Dr. Yong Zhang*, Professor, Harbin Medical University, China

### Panel C3: RNA and Disease & Therapeutics

Time: 15:30-16:25, April 26, 2015 (Sunday); Place: Room 737, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Jingfang Ju*, Co-Director & Associate Professor, Translational Research Laboratory, Stony Brook University, USA

15:30-15:35 **Chair's Introduction**

15:35-16:00 *Title: MicroRNA-26a Prevents Endothelial Cell Apoptosis by Directly Targeting TRPC6 in the Setting of Atherosclerosis*

*Dr. Wei Qin*, Lecturer, Harbin Medical University, China

16:00-16:25 *Title: Non-coding RNAs as the Next Frontier in Clinical Cancer Management*

*Dr. Jingfang Ju*, Co-Director & Associate Professor, Translational Research Laboratory, Stony Brook University, USA



**Panel C4: RNA Processing & Regulation**

Time: 10:30-11:50, April 27, 2015 (Monday); Place: Room 733, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Ruth Sperling*, Head of Research Group, The Hebrew University of Jerusalem, Israel

**10:30-10:35 Chair's Introduction**

10:35-11:00 *Title: Suppression of Splicing (SOS) – A Quality Control Mechanism Affecting Alternative Splicing within the Supraspliceosome*

*Dr. Ruth Sperling*, Head of Research Group, The Hebrew University of Jerusalem, Israel

11:00-11:25 *Title: Biogenesis and Function of Mammalian Pachytene PiRNAs*

*Dr. Ke Zheng*, Professor, State Key Laboratory of Reproductive Medicine, Nanjing Medical University, China

11:25-11:50 *Title: Eggplant miR395 is Involved in Plant Response to Verticillium Dahliae Infection*

*Dr. Qing Yang*, Professor, College of Life Sciences, Nanjing Agricultural University, China

**Quest D: Fascinating Stem Cells****Panel D1: Frontier of Mesenchymal Stem Cells**

Time: 13:30-15:15, April 26, 2015 (Sunday); Place: Room 733, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Raphael Gorodetsky*, Head, Biotechnology & Radiobiology Lab; Sharett Institute of Oncology, Hadassah - Hebrew University Medical Center, Israel

**13:30-13:35 Chair's Introduction**

13:35-13:55 *Title: Placental Cells Therapy Induce Regeneration of Compromised Bone Marrow, Mitigation of Acute Radiation Syndrome and Tissue Regeneration in Different Inflammatory Conditions*

*Dr. Raphael Gorodetsky*, Head, Biotechnology & Radiobiology Lab, Sharett Institute of Oncology, Hadassah - Hebrew University Medical Center, Israel

13:55-14:15 *Title: Biological Characteristics and Gene Expression Pattern of Bone Marrow Mesenchymal Stem Cells in Patients with Psoriasis*

*Mrs. Ruixia Hou*, Researcher, Taiyuan City Central Hospital, China

14:15-14:35 *Title: Bone Marrow Mesenchymal Stem and Progenitor Cells are Altered in Sip1 Deficient Mice before Initiation of Myeloproliferative Neoplasm*

*Dr. Hong Qian*, Leader, Karolinska Institute, Sweden

14:35-14:55 *Title: Evaluation of Umbilical Cord Mesenchymal Stem Cell-Mediated Induction of Cytotoxicity and Apoptosis in Cancer Cell Lines – K562, A549 - After Activation with IFN\* and in Combination with Doxorubicin*

*Dr. Hojjat Sadeghi-Aliabadi*, Director of Cell Culture Lab, Isfahan University of Medical Sciences, Iran

14:55-15:15 *Title: Role of High-Density Lipoproteins in the Regulation of Hematopoietic Stem/Progenitor Cells in Atherosclerosis*

*Dr. Yingmei Feng*, Vice Director, Capital Medical University, China; Group Leader, Leuven University, Belgium

**Panel D2: Regulation of Stem Cell**

Time: 08:30-09:25, April 27, 2015 (Monday); Place: Room 738, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Yingli Sun*, Director, Beijing Institute of Genomics, Chinese Academy of Sciences, China

**08:30-08:35 Chair's Introduction**

**08:35-09:00** *Title: Induced Pluripotent Stem Cells are Sensitive to DNA Damage*

*Dr. Yingli Sun*, Director, Beijing Institute of Genomics, Chinese Academy of Sciences, China

**09:00-09:25** *Title: NFI-X Promotes the Commitment of Radial Glial Cells to Neuron Production during Hippocampal Morphogenesis*

*Mr. Lachlan Harris*, The School of Biomedical Sciences, Queensland Brain Institute, University of Queensland, Australia

**Panel D3: Reprogramming and Direct Reprogramming or Transdifferentiation**

Time: 13:30-14:25, April 27, 2015 (Monday); Place: Room 738, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Mui-Teck Teh*, Senior Lecturer in Head & Neck Cancer, Queen Mary University of London, UK

**13:30-13:35 Chair's Introduction**

**13:35-14:00** *Title: Intercellular Reprogramming by Cancer Exosomes*

*Dr. Mui-Teck Teh*, Senior Lecturer in Head & Neck Cancer, Queen Mary University of London, UK

**14:00-14:25** *Title: Genes and Environmental Risk Factors in Keratoconus*

*Dr. Jenny Parameshvara Deva*, Clinical Professor Ophthalmology, University Tunku Abdul Rahman(UTAR), Malaysia

**Quest E: Cell Energy and Metabolism****Panel E1: Metabolic Pathways and Networks**

Time: 08:30-10:35, April 26, 2015 (Sunday); Place: Room 733, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Shunlin Ren*, Professor & Research Career Scientist, McGuire VA Medical Center & Virginia Commonwealth University, USA

**08:30-08:35 Chair's Introduction**

**08:35-08:55** *Title: Redox-Driven Proton Pumps: Complex I and Complex IV of the Respiratory Chain. Insights from Computer Simulations*

*Dr. Alexei A. Stuchebrukhov*, Professor, Department of Chemistry, University of California at Davis, USA

**08:55-09:15** *Title: Metabolic Cross-Talk between Nitrogenase and Hydrogenase in Rhodospirillum rubrum during Photofermentation and Hydrogen Production*

*Dr. Armen Trchounian*, Head of Department & Principal, Yerevan State University, Armenia

**09:15-09:35** *Title: Production of Omega-3 Eicosapentaenoic Acid by Metabolic Engineering of an Oleaginous Yeast, Yarrowia Lipolytica*

*Dr. Quinn Zhu*, Technical Lead & Senior Fellow, DuPont Company, USA

**09:35-09:55** *Title: Structural and Functional Peculiarities of Bacterial Hydrogenases during Mixed-Acid Fermentation*

*Dr. Karen Trchounian*, Researcher, Department of Biophysics, Faculty of Biology, Yerevan State University, Armenia



- 09:55-10:15 *Title: Kinin B1 Receptors: A Novel Therapeutic Target in Pulmonary Inflammation*  
*Dr. Dongmei Wu*, Professor, Chonbuk National University, South Korea
- 10:15-10:35 *Title: Novel Cholesterol Metabolite for Therapy of Fatty Liver Diseases*  
*Dr. Shunlin Ren*, Professor & Research Career Scientist, McGuire VA Medical Center & Virginia Commonwealth University, USA

**Panel E2: Free Radicals**

*Time: 10:35-12:20, April 26, 2015 (Sunday); Place: Room 733, 7<sup>th</sup> Floor, NIYCH*

**Chair** *Dr. Steven Y Qian*, Associate Professor, North Dakota State University, USA

**Chair's Introduction**

- 10:35-10:40 *Title: Molecular Mechanisms and Redox Signaling in Cigarette Smoke Associated Breakdown of Muscle Proteins*  
*Dr. Abraham Z. Reznick*, Past Director, Department of Anatomy and Cell Biology, Faculty of Medicine, Technion-Israel Institute of Technology, Israel
- 10:40-11:00 *Title: Effects of Redox Status on Cellular Function Using G6PD-deficient Cells as Model*  
*Dr. Daniel Tsun-Yee Chiu*, Director, Healthy Aging Research Center, Chang Gung University, Taiwan
- 11:00-11:20 *Title: New Paradigm for Targeting COX-Catalyzed Free Radical Peroxidation in Colon Cancer*  
*Dr. Steven Y Qian*, Associate Professor, North Dakota State University, USA
- 11:20-11:40 *Title: Melatonin, Nitric Oxide and the Warburg Effect*  
*Dr. Maria Chiara Magnifico*, Sapienza University of Rome, Italy
- 11:40-12:00 *Title: Exercise Improves Endothelial Function: A Local Analysis of Production of Nitric Oxide and Reactive Oxygen Species*  
*Dr. Leonardo Yujji Tanaka*, Fellow, Heart Institute, University of Sao Paulo, Brazil

**Panel E3: Cancer Cell Metabolism**

*Time: 13:30-15:15, April 26, 2015 (Sunday); Place: Room 732, 7<sup>th</sup> Floor, NIYCH*

**Chair** *Dr. Ping Gao*, Professor, School of Life Sciences, University of Science and Technology of China, China

**Chair's Introduction**

- 13:30-13:35 *Title: Proline and Metabolic Epigenetics in Cancer*  
*Dr. James M. Phang*, Senior Investigator, Basic Research Laboratory, National Cancer Institute at Frederick, USA
- 13:35-14:00 *Title: Targeting Na-K AtPase and Oxidative Damage in Cancer Therapy*  
*Dr. Chia-chi Liu*, Research Fellow, University of Sydney, Australia
- 14:00-14:25 *Title: The Ribosomal Protein-Mdm2-p53 Pathway Links Nutrient Stress to Lipid Metabolism, Obesity and Cancer*  
*Dr. Yanping Zhang*, Professor, The University of North Carolina at Chapel Hill, USA
- 14:25-14:50 *Title: miRNAs in Regulation of Cellular Metabolism*  
*Dr. Ping Gao*, Professor, School of Life Sciences, University of Science and Technology of China, China
- 14:50-15:15

**Panel E4: Mitochondria**

Time: 08:30-11:20, April 27, 2015 (Monday); Place: Room 735, 7<sup>th</sup> Floor, NIYCH

- Chair** *Dr. Katsuyoshi Mihara*, Professor Emeritus, Department of Molecular Biology, Graduate School of Medical Science, Kyushu University, Japan
- 08:30-08:35 **Chair's Introduction**
- 08:35-09:00 *Title: Oxidative Folding and Redox Regulation of Protein Biogenesis in the Mitochondrial Intermembrane Space*  
*Dr. Kostas Tokatlidis*, Cathcart Chair of Biochemistry, University of Glasgow, UK
- 09:00-09:25 *Title: The Deficiency of Histidine Enhances the Delay of Wound Healing Caused by Indomethacin through the Mitochondrial Dysfunction*  
*Dr. Hiroshi Ichikawa*, Professor, Doshisha University, Kyoto Prefectural University, Kyoto Prefectural University of Medicine, Japan
- 09:25-09:50 *Title: Functional Significance of Mitochondrial Fission Factor Drp1*  
*Dr. Katsuyoshi Mihara*, Professor Emeritus, Department of Molecular Biology, Graduate School of Medical Science, Kyushu University, Japan
- 09:50-10:15 *Title: Multiple Facets of Mitochondrial Fatty Acid Synthesis*  
*Dr. J. Kalervo Hiltunen*, Professor of Biochemistry, Faculty of Biochemistry and Molecular Medicine and Biocenter Oulu, University of Oulu, Finland
- 10:15-10:30 **Coffee Break**
- 10:30-10:55 *Title: Mitochondrial Function and Regulation of Macrophage Cholesterol Homeostasis*  
*Dr. Annette Graham*, Professor, Vascular Cell Biology, Glasgow Caledonian University, UK
- 10:55-11:20 *Title: Influenza a Viral Protein PB1-F2 and Mitochondria*  
*Dr. Takumi Koshiba*, Associate Professor, Kyushu University, Japan

**Panel E5: Photosynthesis and Chloroplasts**

Time: 15:30-17:40, April 27, 2015 (Monday); Place: Room 738, 7<sup>th</sup> Floor, NIYCH

- Chair** *Dr. Su Lin*, Associate Research Professor, Arizona State University, USA
- 15:30-15:35 **Chair's Introduction**
- 15:35-16:00 *Title: Coherence and Population Dynamics in Photosynthetic Pigment-Proteins as Follows from Two-Dimensional Spectroscopy Studies*  
*Dr. Leonas Valkunas*, Head of the Department of Theoretical Physics, Faculty of Physics, Vilnius University, Lithuania
- 16:00-16:25 *Title: The Architecture and Function of the Light-Harvesting Network in Photosynthetic Membranes*  
*Dr. Su Lin*, Associate Research Professor, Arizona State University, USA
- 16:25-16:50 *Title: Electron, Proton and Water Transfer along the Catalytic Cycle of the Photosystem II*  
*Dr. Daniele Narzi*, Research Fellow, University of L'Aquila, Italy
- 16:50-17:15 *Title: Complex Interplay among DNA Modification, Noncoding RNA Expression and Protein-Coding RNA Expression in Salvia Miltiorrhiza Chloroplast Genome*  
*Dr. Chang Liu*, Professor, Chinese Academy of Medical Sciences & Peking Union Medical College, China
- 17:15-17:40 *Title: Mediator Assisted Charge Transport in Thylakoids*  
*Dr. Fulin Zuo*, Professor, Department of Physics, University of Miami, USA

**Panel E6: Aging**

Time: 10:15-11:20, April 28, 2015 (Tuesday); Place: Room 703, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Juergen Suehnel*, Group Leader, Leibniz Institute for Age Research – Fritz Lipmann Institute, Germany

**10:15-10:20 Chair's Introduction**

10:20-10:40 *Title: Exercise Induces Tumor Resistance in Aging Stromal Cells*  
*Dr. Warren Ladiges*, Professor, University of Washington, USA

10:40-11:00 *Title: Towards Data Integration in Ageing Research*  
*Dr. Juergen Suehnel*, Group Leader, Leibniz Institute for Age Research – Fritz Lipmann Institute, Germany

11:00-11:20 *Title: Oligosaccharide Improves Aberrant Immune Response in Brain Aging and Neurodegeneration*  
*Dr. Xu Xu*, Associate Professor, Shenzhen University, China

**Quest F: Emerging Cell Technologies****Panel F1: Cell and Sub-cell Imaging and Visualization**

Time: 10:30-12:15, April 26, 2015 (Sunday); Place: Room 737, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Lixin Liu*, Associate Professor, Department of Pharmacology, University of Saskatchewan, Canada

**10:30-10:35 Chair's Introduction**

10:35-11:00 *Title: Endothelial Cell Intracellular Molecule LSP1 Regulates Neutrophil Recruitment: An Intravital Microscopy Study*

*Dr. Lixin Liu*, Associate Professor, Department of Pharmacology, University of Saskatchewan, Canada

11:00-11:25 *Title: The Role of Sterols on the Effects Induced by the Pore-Forming Agent Nystatin in Giant Phospholipid Vesicles*

*Dr. Gregor Gomiscek*, Researcher, Institute of Biophysics, Faculty of Medicine & Faculty of Health Sciences, University of Ljubljana, Slovenia

11:25-11:50 *Title: Identification of Prion-like Tau Species Triggering Endogenous Tau Aggregation and Phosphorylation*

*Ms. Dohee Kim*, Center for Neuro-Medicine, Korea Institute of Science and Technology, South Korea

11:50-12:15 *Title: Microcapillary Flow Cytometry, Not Hydrodynamic Focusing, For Investigating Symbiosis between an Eukaryotic Host and Eukaryotic Symbionts*

*Dr. Toshiyuki Takahashi*, Associate Professor, National Institute of Technology, Miyakonojo College, Japan

**Panel F2: Single Cell Technologies and Nanotechnologies**

Time: 13:30-15:15, April 26, 2015 (Sunday); Place: Room 735, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Richard E. Palmer*, Head, Nanoscale Physics Research Laboratory; Professor, University of Birmingham, UK

**13:30-13:35 Chair's Introduction**

13:35-14:00 *Title: Single Cell Genomics Accelerates Next Generation of in vitro Diagnosis and Drug Discovery*  
*Dr. Xinghua Pan*, Research Scientist, Yale University, USA



- 14:00-14:25 *Title: Genome-Wide Digital mRNA Counting Using "Molecular Barcoding" and Its Application for Differentiation Study*  
*Dr. Katsuyuki Shiroguchi*, Lab Leader, Laboratory for Quantitative Omics, RIKEN Center for Integrative Medical Sciences, Japan
- 14:25-14:50 *Title: Aberration-Corrected Electron Microscopy for Bio-Imaging*  
*Dr. Richard E. Palmer*, Head, Nanoscale Physics Research Laboratory; Professor, University of Birmingham, UK
- 14:50-15:15 *Title: Fibroblasts as a Bio-Cellular Model for Studying Amino Acids Transport in Schizophrenia, Bipolar and Related CNS Disorders*  
*Dr. Nikolaos Venizelos*, Director, Örebro University, Sweden

### Panel F3: CRISPR/Cas Systems

Time: 08:30-10:15, April 28, 2015 (Tuesday); Place: Room 738, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Bo Yu*, Co-Founder & CSO, Larix Bioscience, LLC, USA

#### 08:30-08:35 **Chair's Introduction**

08:35-09:00 *Title: CRISPR-Mediated Double Allele Knock Out (DAKO) Technology in Mammalian Cells*

*Dr. Bo Yu*, Co-Founder & CSO, Larix Bioscience, LLC, USA

09:00-09:25 *Title: Computer-Assisted Choice of Cas9 Nuclease Target Sites for Efficient and Precise Genome Editing*

*Dr. Sangsu Bae*, Assistant Professor, Department of Chemistry, Hanyang University, South Korea

09:25-09:50 *Title: An Efficient Pipeline for Genome Editing by Combining FACS Enrichment of CRISPR/Cas9 Expressing Cells with a Novel Indel Mutation Assay*

*Dr. Morten Frødin*, Associate Professor, Biotech Research and Innovation Centre, University of Copenhagen, Denmark

09:50-10:15 *Title: Efficient Production of Genome-Edited Cell Lines and Animals Using RNA-Guided Engineered Nucleases (RGEN)*

*Dr. Seokjoong Kim*, Research Scientist Director, ToolGen, INC., South Korea

## Quest G: Translational Molecular & Cell Biology

### Panel G1: Role of Molecular & Cell Biology in Translational Medicine

Time: 08:30-12:35, April 26, 2015 (Sunday); Place: Room 735, 7<sup>th</sup> Floor, NIYCH

**Chair** *Dr. Ya-Gang Xie*, Professor, Faculty of Medicine, Memorial University of Newfoundland, Canada

**Co-Chair** *Dr. Dwijendra Gupta*, Vice Chancellor, Jai Prakash University; Former Chairman of Biochemistry and Bioinformatics, University of Allahabad, India

#### 08:30-08:35 **Chair's Introduction**

08:35-09:00 *Title: Immunological Reactivity of Drug Abusers*

*Dr. Bogdan Petrunov*, Professor, National Center of Infectious and Parasitic Diseases and Emergency Hospital "Pirogov"<sup>21</sup>, Bulgaria

09:00-09:25 *Title: RASL-seq for Breast Cancer PAM50 Intrinsic Subtypes*

*Dr. Zhiyuan Hu*, Director, Rapid Adoption Molecular Laboratory, University of North Carolina at Chapel Hill, USA

09:25-09:50 *Title: Replication of GWAS Candidate Genes for Cardiovascular Diseases in Ethnic Different Populations*

*Dr. Ya-Gang Xie*, Professor, Faculty of Medicine, Memorial University of Newfoundland, Canada



- 09:50-10:15 *Title: Necrotic Inflammation: A Novel Class of Necrosis Inhibitor NecroX-7 with Therapeutic Potential for Necrosis-Related Diseases against Ischemic Reperfusion Injury*  
*Dr. Soon Ha Kim*, NecroX Program Director, LG Life Sciences, Ltd., South Korea
- 10:15-10:30 **Coffee Break**
- 10:30-10:55 *Title: Extracellular Vesicles in Cancer and Potential for Therapy — Studies on Exosomes from Human Sera*  
*Dr. Dwijendra Gupta*, Vice Chancellor, Jai Prakash University; Former Chairman, Biochemistry and Bioinformatics, University of Allahabad, India
- 10:55-11:20 *Title: Antiviral Regulation in Porcine Monocytic Cells at Different Activation States*  
*Dr. Yongming Sang*, Assistant Professor & Principle Investigator, Kansas State University, USA
- 11:20-11:45 *Title: IL-17: The Potential Therapeutic Target in Chronic Obstructive Pulmonary Diseases*  
*Dr. Ying Chang*, Group Leader, Xi'an Jiaotong University, China
- 11:45-12:10 *Title: Monocytes as Target Cells for Identification of Novel Biomarkers and Targets of Intervention in Metabolic Diseases*  
*Dr. Paul Holvoet*, Head, Katholieke Universiteit Leuven, Belgium
- 12:10-12:35 *Title: New Insights into Targeting Cyclin-Dependent Kinases for Cancer Therapy*  
*Dr. Shudong Wang*, Head, Centre for Drug Discovery and Development, University of South Australia, Australia

**Panel G2: Tissue Repair & Regeneration**

*Time: 11:00-12:25, April 26, 2015 (Sunday); Place: Room 738, 7<sup>th</sup> Floor, NIYCH*

- Chair** *Dr. Raphael Gorodetsky*, Head, Biotechnology & Radiobiology Lab; Sharett Institute of Oncology, Hadassah - Hebrew University Medical Center, Israel
- 11:00-11:05 **Chair's Introduction**
- 11:05-11:25 *Title: Fibrin Microbeads (FMB) Cell Carriers for Isolation and Implantation of Adult Progenitor Cells*  
*Dr. Raphael Gorodetsky*, Head, Biotechnology & Radiobiology Lab, Sharett Institute of Oncology, Hadassah - Hebrew University Medical Center, Israel
- 11:25-11:45 *Title: Proposal of Cooperative Medical and Clinical Epigenetic Studies*  
*Dr. Shigetaka Asano*, Guest Research Professor, Waseda University, Japan
- 11:45-12:05 *Title: Targeting Biomechanical Signaling in Lung Fibrosis*  
*Dr. Yong Zhou*, Associate Professor, University of Alabama at Birmingham, USA
- 12:05-12:25 *Title: The Biomechanical Study of Surface Modified PEEK Artificial Intervertebral Disc*  
*Dr. Peng Shang*, Professor, Shenzhen Institutes of Advanced Technology (SIAT), Chinese Academy of Sciences (CAS), China

**Panel G3: Translation of Animal Models to the Clinic**

*Time: 15:30-17:35, April 26, 2015 (Sunday); Place: Room 733, 7<sup>th</sup> Floor, NIYCH*

- Chair** *Dr. Yufeng Pan*, Principal Investigator, Institute of Life Sciences, Southeast University, China
- 15:30-15:35 **Chair's Introduction**
- 15:35-15:55 *Title: GPCR Antibodies for Different Therapeutic Indications*  
*Dr. Cheng Zhang*, CSO, Gmax Biopharm, China
- 15:55-16:15 *Title: Mechanisms of Innate and Learned Sexual Behaviors in Drosophila*  
*Dr. Yufeng Pan*, Principal Investigator, Institute of Life Sciences, Southeast University, China
- 16:15-16:35 *Title: Structure, Biology and Therapeutic Potential of CDNF/MANF Family of Neurotrophic Factors*  
*Dr. Mikko Airavaara*, Team Leader, Institute of Biotechnology, University of Helsinki, Finland



- 16:35-16:55 *Title: Revealing Mechanisms of Selective Vulnerability through Studies of Huntington's Disease, Fatal Familial Insomnia, And Creutzfeldt-Jakob Disease*  
*Dr. Walker S. Jackson*, Group Leader, German Center for Neurodegenerative Diseases (DZNE), Germany
- 16:55-17:15 *Title: Liver Specific Over-Expressed NG37 Leads to Diet-Dependent Hepatic Enlargement Accompanying Cardiac Dysfunction*  
*Dr. Xuehong Xu*, Professor, Shaanxi Normal University, China
- 17:15-17:35 *Title: The Zebrafish as a Model for Human Genetic Diseases and Drug Discovery*  
*Dr. Yann Gibert*, Head, The Metabolic Genetic Diseases Laboratory, Deakin School of Medicine, Australia

**Panel G4: Neurodegeneration**

*Time: 15:30-17:15, April 26, 2015 (Sunday); Place: Room 735, 7<sup>th</sup> Floor, NIYCH*

**Chair** *Dr. Rosita Gabbianelli*, Associate Professor, University of Camerino, Italy

**15:30-15:35 Chair's Introduction**

15:35-15:55 *Title: Huntington's Disease a Paradigmatic Neurodegenerative Disorder. On the Way to Neuroprotection*  
*Dr. Jean-Marc Burgunder*, Professor, University of Bern, Switzerland; Visiting Professor, West China Hospital, University of Sichuan, China; Adjunct Professor, The First Affiliated Hospital, Sun Yat-sen University, China

15:55-16:15 *Title: Early Biomarkers of Parkinson-Like Disease*

*Dr. Rosita Gabbianelli*, Associate Professor, University of Camerino, Italy

16:15-16:35 *Title: Towards Perfect Anticancer Drug: And the Road Unknown*

*Dr. Roman Zubarev*, Division Head, Karolinska Institute, Sweden

16:35-16:55 *Title: Glioma-Induced Neuronal Degeneration via Activating Tau Pathology*

*Dr. Yun Kyung Kim*, Senior Research Scientist, Center for Neuro-Medicine, Korea Institute of Science and Technology, South Korea

16:55-17:15 *Title: Failure of Redox Homeostasis during Prion Infection*

*Dr. Cathryn Haigh*, Senior Research Fellow, Department of Pathology, The University of Melbourne, Australia

**Panel G5: Tumor Invasion and Metastasis, Angiogenesis, Cancer Stem Cells**

*Time: 09:25-12:10, April 27, 2015 (Monday); Place: Room 738, 7<sup>th</sup> Floor, NIYCH*

**Chair** *Dr. Lei Zheng*, Assistant Professor, Johns Hopkins University School of Medicine, USA

**09:25-09:30 Chair's Introduction**

09:30-09:55 *Title: STAT3 Activates  $\beta$ -catenin Signaling to Drive Initiation of Peripheral Nerve Tumors*

*Dr. Jianqiang Wu*, Assistant Professor, Cincinnati Children's Hospital Research Foundation, Cincinnati Children's Hospital, University of Cincinnati, USA

09:55-10:20 *Title: A Tumor Suppressor Network in Guarding the Genome*

*Dr. Wen H. Shen*, Assistant Professor, Department of Radiation Oncology, Cornell University Weill Medical College, USA

**10:20-10:30 Coffee Break**

10:30-10:55 *Title: Dissect Tumor Microenvironment of Pancreatic Cancer*

*Dr. Lei Zheng*, Assistant Professor, Johns Hopkins University School of Medicine, USA

10:55-11:20 *Title: Mitochondrial STAT3 in Ras-Driven Tumours*

*Dr. Daniel Gough*, Head, STAT Cancer Biology Laboratory, MIMR-PHI Institute of Medical Research, Australia





- 11:20-11:45 *Title: Detection of Circulating Tumour DNA (ctDNA) as a Biomarker for Childhood Solid Tumours*  
*Dr. Ping Wu*, Senior Scientist, Institute of Child Health, University College of London, UK
- 11:45-12:10 *Title: Independent Oncogenic and Therapeutic Significance of Phosphatase PRL-3 in FLT3-ITD-Negative Acute Myeloid Leukemia*  
*Dr. Haihe Wang*, Professor, Sun Yat-sen University, China

**Panel G6: Glia & Neurons**

*Time: 13:30-16:45, April 27, 2015 (Monday); Place: Room 733, 7<sup>th</sup> Floor, NIYCH*

**Chair** *Dr. Chang Y. Chung*, Associate Professor, Vanderbilt University School of Medicine, USA  
**Co-Chair** *Dr. Lian Li*, Professor & Vice Chair, Emory University, USA

**13:30-13:35 Chair's Introduction**

13:35-14:00 *Title: Biochemical and Ultrastructural Analyses of Postsynaptic Density and Associated Structures in the Mammalian Brain*

*Dr. Tatsuo Suzuki*, Professor, Shinshu University, Japan

14:00-14:25 *Title: Sortilin Regulates Transport and Degradation of Amyloid Precursor Protein*

*Dr. Xin-Fu Zhou*, Research Chair in Neuroscience, University of South Australia, Australia

14:25-14:50 *Title: Role of Microglia in the Hippocampus of Chronic Stressed Mice*

*Dr. Chang Y. Chung*, Associate Professor, Vanderbilt University School of Medicine, USA

14:50-15:15 *Title: The Acute Responses of Glial Cells to Ischemia*

*Dr. Robert Fern*, Professor, Peninsular School of Medicine and Dentistry, Plymouth University, UK

**15:15-15:30 Coffee Break**

15:30-15:55 *Title: Peripheral Neuropathy due to Myelin Infolding and Paranodal Damage in a Mouse Model of Charcot-Marie-Tooth Disease Type 1C*

*Dr. Lian Li*, Professor & Vice Chair, Emory University, USA

15:55-16:20 *Title: The AMPA Receptors in a Synapse*

*Dr. Yun Shi*, Professor, MOE Key Laboratory of Model Animal for Disease Study, Nanjing University, China

16:20-16:45 *Title: The Crystal Structure of Netrin-1 in Complex with DCC Reveals the Bi-functionality of Netrin-1 as a Guidance Cue*

*Dr. Lorenzo I. Finci*, Postdoctoral Scientist, Peking University, China; Harvard Medical School, USA

**Panel G7: Anemia and Red Blood Cells**

*Time: 11:20-12:25, April 28, 2015 (Tuesday); Place: Room 703, 7<sup>th</sup> Floor, NIYCH*

**Chair** *Dr. Lin Yang*, Professor, The Cyrus Tang Hematology Center, Soochow University, China

**11:20-11:25 Chair's Introduction**

11:25-11:45 *Title: Targeting Leukemic Stem Cells in Fanconi Anemia*

*Dr. Qishen Pang*, Professor of Pediatrics, Scholar, Leukemia and Lymphoma Society, Cincinnati Children's Hospital Medical Center, USA

11:45-12:05 *Title: Tight Junction Protein 1 is a Modulator and Biomarker of Proteasome Inhibitor Sensitivity in Multiple Myeloma through EGFR/JAK1/STAT3 Signaling*

*Dr. Lin Yang*, Professor, The Cyrus Tang Hematology Center, Soochow University, China

12:05-12:25 *Title: ADAMTS13 Variants in Atypical Hemolytic Uremic Syndrome*

*Dr. Shuju Feng*, Assistant Professor, University of Texas M.D. Anderson Cancer Center & University of Iowa, USA

