

# 2015

## SPRING RESEARCH FESTIVAL

<http://ncifrederick.cancer.gov/Events/Srf/>

### NICBR Scientific Symposium

Monday, May 4, 2015

NCI at Frederick, Building 549 Auditorium

8:30 – 8:45 AM Introductory Remarks  
8:45 – 9:45 AM Keynote Speaker, Dr. James Crowe

#### **Molecular Characterization of Cancer – session chair Dr. Defne Bayik**

9:45 – 9:55 AM **Dr. Defne Bayik, NCI.** Cytokine combinations Selectively Drive the Differentiation of Human Monocytic Myeloid Derived Suppressor Cells into M1- or M2-like Macrophages.  
9:55 – 10:05 AM **Dr. Balamurugan Kuppasamy, NCI.** The CEBPD Transcription Factor: A Signaling Hub for Promotion of Cancer Cell Stemness.  
10:05 – 10:15 AM **Dr. Sinnie Ng, NCI.** Early Apoptotic Effect of Heterodimeric IL-15 on CD8+ T and NK Cells in Vivo.  
10:15 – 10:25 AM **Dr. Devikala Gurusamy, NCI.** Understanding T Cell Metabolism and Tolerization in the Context of Tumor Immunity.

10:25 – 10:35 AM Break

#### **Cancer Treatment and Target Discovery – session chair Dr. Xiang Chen**

10:35 – 10:45 AM **Dr. Fahu He, NCI.** A Novel Ubiquitin-binding Domain in Myosin VI with Specificity for Lys63 Linked Ubiquitin Chain.  
10:45 – 10:55 AM **Dr. Nadia P. Castro, NCI.** Cripto-1 as a Novel Therapeutic Target for Triple Negative Breast Cancer.  
10:55 – 11:05 AM **Dr. Xiang Chen, NCI.** Rpn13 as a Novel Therapeutic Target for Cancer.  
11:05 – 11:15 AM **Dr. Leah Randles, NCI.** E2 Ubiquitin-Conjugating Enzyme Interacts with Ubiquitin Receptor Rpn13.

#### **Viral/Fungal/Prion Biology – session chair Dr. Mitchell Ellison**

11:15 – 11:25 AM **Dr. Mitchell Ellison, USDA-ARS.** In Planta Detection of Puccinia Horiaria Infection by in Situ Hybridization.  
11:25 – 11:35 AM **Dr. Brett Shelley, USDA-ARS.** Temperature Effects on the Germination of Sporangia and Zoospores and Colony Establishment of Phytophthora Kernoviae.  
11:35 – 11:45 AM **Dr. Ruoting Yang, NCI.** Functional Progression Analysis and Modular Network Construction: Application on Multiple Mouse Models for Prion Disease.  
11:45 – 11:55 AM **Dr. Avijit Roy, USDA-ARS.** Identification of Flat Mite (Brevipalpus yothersi) as Vector And Possible Primary Host of Citrus Leprosis Viruses.

11:55 – 12:55 PM Lunch

#### **Bacterial Pathogenesis and Characterization - session chair Dr. Robert Cory Bernhards**

1:00 – 1:10 PM **Dr. Robert Cory Bernhards, USAMRIID.** Characterization of Burkholderia LPS and Elucidating its Role in Acute and Chronic Infections.  
1:10 – 1:20 PM **Dr. Christine Fennessey, USDA-ARS.** Protein Expression Profiling of Rathayibacter Toxicus Using Mass spectrometry.  
1:20 – 1:30 PM **Dr. Jonas King, USDA-ARS.** Genomic and Transcriptomic Analyses of the Interaction between Rathayibacter Toxicus and Phage CS14F.

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William F. Discher after  
Alphonse Mucha

**19<sup>th</sup>**  
**Annual Spring  
Research Festival  
and the**

**3<sup>rd</sup>**  
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**NICBR NATIONAL INTERAGENCY CONFEDERATION FOR BIOLOGICAL RESEARCH**



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### NICBR Scientific Symposium (Continued)

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#### **Viral Characterization and Method Development - session chair Dr. David Harbour**

1:30 – 1:40 PM **Dr. Candace Blancett, USAMRIID.** Using Scanning Electron Microscopy (STEM) for Accurate Virus Dosing Quantification.

1:40 – 1:50 PM **Dr. David Harbour, USAMRIID.** Aerosol Monitoring of ABSL-4 Suites Housing Non-Human Primates Challenged with Ebola Virus

1:50 – 2:00 PM **Dr. Lisa Hoover, USAMRIID.** Standard Methods to Evaluate Immune Correlates in Cynomolgus Macaques.

#### **Diagnostics: Discovery and Development - session chair Dr. Christopher Stefan**

2:00 – 2:10 PM **Dr. Janice Duy, USAMRIID.** Longitudinal Plasma microRNA Profiling of Rhesus Macaques Infected with Aerosolized Ebola Virus.

2:10 – 2:20 PM **Dr. Valerie Huse, USAMRIID.** Targeted Next-Generation Sequencing for Identification and Phylogenetic Characterization of Chikungunya Virus.

2:20 – 2:30 PM **Dr. Christopher Stefan, USAMRIID.** Targeted Next-generation Sequencing for the Detection of Ciprofloxacin Resistance Markers Using Sequence Capture Probes.

2:30 – 2:45 Break

#### **Viruses as a Bacterial Countermeasure – session chair Dr. Luis Estrella**

2:45 – 2:55 PM **Dr. Luis Estrella, NMRC.** Isolation and Characterization of Broad Spectrum Bacteriophages with Lytic Activity in Staphylococcus Aureus Methicillin Resistant.

2:55 – 3:05 PM **Dr. Jordan Jensen, NCI.** Bactericidal Virus Engineering.

#### **New Therapeutic Tools – session chair Dr. Fen Liu**

3:05 – 3:15 PM **Dr. Dionysios Watson, NCI.** Scalable Production of Bioactive Exosomes for Therapeutic Applications.

3:15 – 3:25 PM **Dr. Fen Liu, NCI.** Artificial Targeting of Misfolded Cytosolic Proteins to Endoplasmic Reticulum as a Mechanism for Clearance.

3:25 – 3:35 PM **Dr. Thomas T. Zenggeya, NCI.** Modular Synthesis of Cell Permeating 2-ketoglutarate Esters: Chemical Tools for Oncometabolite Antagonism and Detection.

3:35 – 3:45 PM Concluding Remarks

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