Oklahoma Center for Respiratory and Infectious Diseases

6th Annual Research Symposium

Stillwater
Tulsa
OKC
Norman

Tuesday,
April 9th, 2019
8:30AM–5:00PM

The ConocoPhillips OSU Alumni Center
201 South Hester Street, Stillwater, OK 74078

Sponsors
NIH Centers of Biomedical Research Excellence P20GM103648
Oklahoma State University Center for Veterinary Health Sciences
Oklahoma State University College of Arts & Sciences
University of Oklahoma Health Science Center College of Pharmacy

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**Map of the Venue**

**Coming from Highway 51:**
- Turn Left on to Western Ave.
- Turn Right on to University Ave.
- Turn Left on to Hester Ave.
- The Conoco Phillips Alumni Center is on your right, you may park in the Student Union Parking Garage on your left
Tuesday, April 9, 2019

07:30-08:30 Registration and Breakfast; Please drop off posters at the registration table.

Session I (Session Chair: Jordan Metcalf, M.D., Medicine, University of Oklahoma Health Sciences Center)
08:30-08:50 Opening Remarks
Kenneth Sewell, Ph.D., Vice President of Research, Oklahoma State University
Jeanette M. Mendez, Ph.D., Interim Dean, College of Arts and Sciences, Oklahoma State University
Director’s Report
Lin Liu, Ph.D., Physiological Sciences, Center for Veterinary Health Sciences, Oklahoma State University
My Road to Success in Obtaining R01
Heather Fahlenkamp, Ph.D., Chemical Engineering, College of Engineering and Architecture Technology, Oklahoma State University
08:50-09:00 Heather Fahlenkamp, Ph.D., Chemical Engineering, College of Engineering and Architecture Technology, Oklahoma State University
09:00-09:10 Shitao Li, Ph.D., Physiological Sciences, Center for Veterinary and Health Sciences, Oklahoma State University

Session II (Session Chair: Tom Oomens, Ph.D., Veterinary Pathobiology, Center for Veterinary and Health Sciences, Oklahoma State University)
09:10-09:45 Keynote Address #1
Bruce A. Stanton, Ph.D, Professor of Microbiology and Immunology, Andrew C. Vail Professor, Director of the Lung Biology Center, Director of the Center for Environmental Health Sciences, Geisel School of the Medicine, Dartmouth College
Host-Pathogen Interactions in Cystic Fibrosis Lung Infections: Role of Extracellular Vesicles and siRNA
09:45-10:10 Phase II Project Presentation #1
Marianna Patrauchan, Ph.D., Microbiology and Molecular Genetics, College of Arts and Sciences, Oklahoma State University
Calcium as a second messenger in Pseudomonas aeruginosa
10:10-10:25 Pilot Project Presentation #2
Lucila Garcia-Contreras, Ph.D., Pharmaceutical Sciences, College of Pharmacy, The University of Oklahoma Health Sciences Center
OHet72: A potential new drug in the armamentarium against TB and MDR-TB
10:25-10:35 Core Report #1: Animal Models Core
Myron Hinsdale, DVM, Ph.D., Physiological Sciences, Center for Veterinary and Health Sciences, Oklahoma State University
10:35-11:00 Coffee Break
Session III (Session Chair: Shanjana Awasthi, Ph.D. Pharmaceutical Sciences, College of Pharmacy, University of Oklahoma Health Sciences Center)

11:00-11:25    Phase II Project Presentation #2
Shitao Li, Ph.D., Physiological Sciences, Center for Veterinary and Health Sciences, Oklahoma State University
ZFC3H1 Regulation of Host Defense and Influenza A Virus Pathogenesis

11:25-11:40    Pilot Project Presentation #2
Yu Feng, Ph.D., Chemical Engineering, College of Engineering and Architecture Technology, Oklahoma State University
Computational Modeling of inhaled IAV-laden droplets in the Respiratory Tracts of Rat and Human

11:40-11:55    Pilot Project Presentation #3
Karen Wozniak, Ph.D., Microbiology and Molecular Genetics, College of Arts and Sciences, Oklahoma State University
Interactions of Murine Pulmonary Macrophage Subsets with Cryptococcus neoformans

11:55-12:05    Abstract #1
Hang Zhao, Department of Chemistry and Biochemistry, University of Oklahoma
Small molecule condensin inhibitors

12:05-12:15    Core Report #2: Immunopathology Core
Jerry Ritchey, DVM, Ph.D., Veterinary Pathobiology, Center for Veterinary and Health Sciences, Oklahoma State University

12:15-1:30    Group Photo and Lunch

Session IV (Session Chair: Heather Fahlenkamp, Ph.D., Chemical Engineering, College of Engineering and Architecture Technology, Oklahoma State University)

01:30-02:05    Keynote Address #2
Rodney Tweten, Ph.D., OU Presidential Professor, George Lynn Cross Research Professor, Microbiology and Immunology, The University of Oklahoma Health Sciences Center
Structure, Function and Evolution of the Cholesterol-Dependent Cytolysins

02:05-02:30    Phase II Project Presentation #3
William Michael McShan, Ph.D., Pharmaceutical Sciences, College of Pharmacy, University of Oklahoma Health Sciences Center
Streptococcus pneumoniae Chromosomal Islands: Insights into Virulence and Horizontal Gene Transfer

02:30-02:55    Phase II Project Presentation #4
Veronique Lacombe, Ph.D., Physiological Sciences, Center for Veterinary and Health Sciences, University of Oklahoma Health Sciences Center

Sciences, Oklahoma State University

Glucose Transport in the Diabetic Lung: Novel Therapeutic Targets

02:55-03:10 Pilot Project Presentation #4
Susan Schroeder, Ph.D., Chemistry and Biochemistry, Microbiology and Plant Biology, College of Arts and Sciences, The University of Oklahoma-Norman
The challenges of Predicting Human Endogenous Retroviral RNA structure and Function

03:10-03:25 Pilot Project Presentation #5
Michael Davis, Ph.D., Physiological Sciences, Center for Veterinary and Health Sciences, Oklahoma State University
Effect of airway mucosal cooling and hyperosmolarity on innate immune function

03:25-03:35 Abstract #2
Amal H. Yahya., Microbiology and Molecular Genetics, College of Arts and Sciences, Oklahoma State University
Identifying Proteins with Novel Roles in Pseudomonas aeruginosa Biofilm Formation

03:35-03:45 Core Report #3: Molecular Biology Core
Lin Liu, Ph.D., Physiological Sciences, Center for Veterinary and Health Sciences, Oklahoma State University

03:45-04:00 Refreshment Break

04:00-04:50 Poster Session

04:50-05:00 Announcement of Poster Competition Winners
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