3rd Border Biomedical Research Center Symposium
Health Disparities: From Molecules to Disease
September 17-19, 2017

PROGRAM

Sunday 17 September 2017

Location: Tomás Rivera Conference Room, Union East Bldg.,
500 W University Ave., The University of Texas at El Paso (UTEP)

4:30 – 7:00 pm  Registration Opens
6:00 – 6:20 pm  Welcome – Rosa A. Maldonado, D.Sc. (Associate Professor; Border Biomedical Research Center, Dept. of Biological Sciences – UTEP)

Inaugural session

Opening: Diana Natalicio (President of UTEP)
6:20 – 7:00 pm  25th BBRC anniversary celebration
Robert Kirken (Dean, College of Science, UTEP; BBRC grant PI)

7:00 – 8:30 pm  Dinner

Monday 18 September 2017

Location: Tomás Rivera Conference Room

MORNING SESSION

8:00 – 8:30 am  Breakfast and Poster Set-up for the Day

Infectious Diseases

Chair: Dr. Doug Watt (Director of the BBRC Community Engagement Core, UTEP)

8:30 – 9:20 am  Igor C. Almeida (Professor, Biological Sciences, UTEP; Director of the BBRC Biomolecules Analysis Core Facility)
“Glycan- and peptide-based vaccines protect nonhuman primates against Chagas disease”

Oral presentations selected from abstracts:

9:25 – 9:45 am  Sergei Nekhai (Professor, Director of the Center for Sickle Cell Disease and Dept.s of Medicine, Howard University)
“Protein Phosphatase-1 as a Target for Antiviral Small Molecules against Ebola and Marburg Infections”

9:45 – 10:05 am  Xiu Jun Li (Assistant Professor, Dept. of Physics, UTEP)
“Low-cost hybrid microfluidic biochips for instrument-free detection of meningitis”

10:05 – 10:25 am  Eva Iniguez (M.Sc., Ph.D. candidate, Dept. of Biological Sciences, UTEP)
“α-Gal-Containing Neoglycoprotein-Based Vaccine Protects Against Cutaneous Leishmaniasis”

10:25 – 10:45 am Johnathan Abou-Fadel (Ph.D. candidate, Dept. of Biological Sciences, UTEP)
“Roles Of M. Tuberculosis Fadd17 And Fadd19 In Cholesterol Catabolism”

10:45 – 10:55 am Coffee break

Metabolic diseases

Chair: Siddhartha Das and Charles Spencer (Professor and Assistant Professor, Biological Sciences, UTEP)

11:00 – 11:50 am Andrey E. Ryabinin (Professor, Dept. of Behavioral Neuroscience, Oregon Health Sciences University)
“Social Transfer of Pain: Insights from studies on Alcohol Drinking”

Oral presentations selected from abstracts:

11:50 – 12:10 pm David P. Cistola (Professor, Director of the Center of Emphasis in Diabetes & Metabolism, Paul L. Foster School of Medicine, Texas Tech University Health Sciences Center)
“Compact NMR for Diabetes Screening and Prevention”

12:10 – 12:30 pm Jorge Cervantes (Assistant Professor, Paul L. Foster School of Medicine, Texas Tech University Health Sciences Center)
“Effect of High Glucose on Human Alveolar Macrophages Phenotype and Phagocytosis of Mycobacteria”

12:50 - 1:50 pm Lunch will be provide (Tomás Rivera Conference Room)

AFTERNOON SESSION

1:50 - 3:30 pm Poster session 1
Infectious diseases (ID), Metabolic diseases (MD), Neurosciences-Neurological diseases (NS)

Exhibitor booths (sponsor companies)

Plenary session
3:30 – 4:20 pm Jesus Valenzuela (Chief, Vector Molecular Biology Section, NIH)
“Impact of Vector Derived Factors on Parasite Establishment and Transmission”

Tuesday 19 September 2017

Location: Tomás Rivera Conference Room, Union East Bldg., 500 W University Ave., UTEP

MORNING SESSIONS
8:00 – 8:30 am Breakfast and Poster set up for the Day
**Cancer Biology and Toxicology**

**Chairs:** Dr. Elizabeth Walsh (Co-director of the BBRC Toxicology & Cancer Biology Research Cluster, UTEP) and Dr. Giulio Francia (Assistant Professor Biology, UTEP)

8:30 – 9:20 am Robert Kerbel ((Professor, Sunnybrook Research Institute, University of Toronto)
“Clinical relevance and implications of therapeutic discoveries made in mice with early or late stage metastatic disease”

Oral presentations selected from abstracts:
9:20 – 9:35 am Brad A. Bryan (Assistant Professor, Center of Emphasis in Cancer, Texas Tech University Health Sciences center-El Paso)
“A Novel Protein Expression Signature Differentiates Benign Lipomas From Well-Differentiated Liposarcomas”

9:35 – 9:50 am Qin Gao (Ph.D. candidate, Dept. Of Chemistry, UTEP)
“Volatile Organic Compounds, a Powerful Tool in Prostate Cancer Diagnosis”

9:50 – 10:05 am Y.M. Ayala-Marín (Ph.D. candidate, Dept. Of Biological Sciences, UTEP)
“A Role For Mek3 In Oncogenesis Of Lymphoid And Myeloid Tumors”

10:05 – 10:20 am John M. Basgen ((Professor, Life Sciences Institute, Charles R. Drew University)
“Low Lead Exposure Results In Glomerular Hypertrophy In Mice”

10:20 am – 10:30 am Coffee break

**Neurosciences and Neurological diseases**

**Chair:** Dr. K Han (Director of the BBRC Neuromodulation Disorders Research Cluster, UTEP) and Manuel Miranda (Associate Professor, UTEP)

10:30 – 11:20 am Manzoor A. Bhat, M.S., Ph.D. ((Professor, Dept. of Cellular and Integrative Physiology, UT Health San Antonio)
“Organizing Principles of Nerve Conduction Along Myelinated Axons: Implications for Demyelinating Diseases”

Oral presentations selected from abstracts:
11:20 – 11:40 am Anita M. Quintana (Assistant Professor, Dept. Of Biological Sciences, UTEP)
“Deciphering the functions of the cholesterol synthesis pathway during erythropoiesis”

11:40 – 12:00 am Paul Rafael Sabandal (Ph.D., Dept. Of Biological Sciences, UTEP)
“Cellular and molecular correlates of impulsivity in Drosophila”

12:00 – 12:20 pm Cynthia Carreon ((M.SC. student, Dept. Of Biological Sciences, UTEP)
“Endocrine disrupting compound 4-Nonylphenol induces neurodegeneration by altering cytoskeleton”

12:20 – 1:30 pm Networking Lunch (Tomás Rivera Conference Room)
12:45 – 1:05 pm  Sponsor Platinum Category - short talk

**Health Disparities and community engagement**

1:30 – 2:05 pm  Manuel L. Penichet (Professor, Dept. Microbiology, Immunology & Molecular Genetics, UCLA)
“Ending Cancer Health Disparities: A Multidimensional Challenge”

2:05 – 2:40 pm  Fernando Riosmena (Associate Professor, Geography Dept., University of Colorado at Boulder)
"Substantive and methodological challenges in the study of Mexican American health and immigrant health assimilation"

2:40 – 2:55 pm  Panel discussion

Oral presentations selected from abstracts:

2:55 – 3:15 pm  Gabrielle Mendoza (undergraduate, BUILDing Scholar, Pharmacy School, Experiential Education / Clinical Assistant, UTEP)
“Cultural Barriers to HPV Vaccination Adherence within a Hispanic-Majority, Young Adult Population”

3:15 – 3:35 pm  J.R. Adame-Gallegos (Assistant Professor, Universidad Autónoma de Chihuahua. Facultad de Ciencias Químicas)
“Evaluation Of The Prevalence Of Brown Dog Ticks In Chihuahua”

3:35 – 5:30 pm  Poster session 2

Cancer Biology (CB), Toxicology (T)
Community Engagement (CE)

Exhibitor booths (sponsor companies)

**Clinical Approaches to Border Related Diseases**

5:30 – 5:55 pm  Benjamin Carcamo (Assistant Professor, Dept. of Pediatrics Division of Pediatric Hematology Oncology, Texas Tech University Health Science Center Paul L. Foster School of Medicine)
“Clinical response to metronomic chemotherapy in refractory childhood cancer”

5:55 – 6:20 pm  Dr. Rhonda Fleming (Infectious Diseases Consultant, El Paso, TX/Texas Tech University)
“Challenges in infectious disease in a US/MX border city”

6:25 – 7:10 pm  Rolf Brekken (Professor, Surgery, Hamon Center for therapeutic Oncology, Pharmacology, UT Southwestern)
“Pathways that drive resistance to anti-VEGF therapy and strategies to overcome them”

7:10 – 7:20 pm  Concluding remarks Robert Kirken (PI of the BBRC, Dean of the College of Science– University of Texas at El Paso)

7:30 – 9:00 pm  Dinner (Tomás Rivera Conference Room)

9:00 pm  Meeting Adjourned