



26th Annual Kentucky Spinal Cord & Head Injury Research Trust (KSCHIRT) Symposium

May 28-29, 2020

Program Summary

Thursday, May 28

7:00 - 8:00

Registration and Breakfast

8:00 – 8:10

Opening Remarks

Joe Springer, Ph.D., Interim Director, SCoBIRC

Session One

Innovative Approaches for Diagnosis, Prognosis and Treatment of TBI

8:10 – 8:15

Introduction of Keynote Speaker

Chair: *Kathryn Saatman, Ph.D.*

8:15 – 9:15

Keynote Lecture: Brain-derived exosomes as a prognostic tool for traumatic brain injury

David Meaney, Ph.D. University of Pennsylvania

9:15 – 9:55

Extracellular vesicle biomarkers for Alzheimer's and traumatic brain injury

Dimitrios Kapogiannis, M.D. National Institute of Aging

9:55 – 10:35

Preclinical studies on the use of targeted antibody-antioxidant enzyme conjugates for vascular protection in TBI-associated neuroinflammation

Servio Ramirez, Ph.D. Temple University

10:35 – 11:00

Poster Session and Coffee Break



**Kentucky
Spinal Cord &
Head Injury
Research
Trust**



**UK College of
Medicine**

Session Two

SCI Pathophysiology – Influences of Gut Microbiome and Spinal Learning

Chair: *Sasha Rabchevsky, Ph.D.*

11:00 – 11:40

Gut microbiome is a disease-modifying factor after spinal cord injury

Kristina Kigerl, Ph.D. Ohio State University

11:40 – 12:20

The pain of polytrauma: How pain input after SCI can increase tissue loss and undermine long-term recovery

James Grau, Ph.D. Texas A&M University

12:20 – 1:20

Lunch, sponsored by the Craig H. Neilsen Foundation

Session Three

Neuroinflammation in TBI and SCI

Chair: *Edward Hall, Ph.D.*

1:20 – 2:00

Cell-specific control of TBI-induced neuroinflammation by Eph signaling

Michelle Theus, Ph.D., Virginia-Maryland College of Veterinary Medicine

2:00 – 2:40

Targeting neuroinflammation in SCI

John Gensel, Ph.D., University of Kentucky

2:40 – 3:40

Poster Session and Refreshments

Session Four

Emerging Topics

Chair: *James Shaughnessy, DMD*

3:40 – 3:55

University of Kentucky trainee, TBA

3:55-4:10

University of Louisville trainee, TBA

4:10-4:25

University of Kentucky trainee, TBA

4:25-4:40

University of Louisville trainee, TBA

4:40 – 4:50

Comments from the Chairman of Kentucky Spinal Cord and Head Injury Research Trust

4:50 – 5:40

Featured Speaker

Advocacy: Setting the family table to talk politics


Matthew Rodreick, Unite 2 Fight Paralysis

5:45 – 6:45

Poster Viewing and Cocktail Hour



Friday, May 29



7:00 - 8:00

Registration and Breakfast

Session Five

Multidisciplinary approaches for SCI therapeutics

Chair: *Samir Patel, Ph.D.*

8:00 – 8:40

Neural precursor cell transplantation for cervical spinal cord repair

Michael Lane, Ph.D. Drexel University

8:40 – 9:20

Sensory cortical control of movement in health and disease

Kajana Satkunendrarajah, Ph.D. Medical College of Wisconsin

9:20 – 10:00

Synthetic materials and stem cell-based multimodal approaches to investigating recovery neurobiology of injured spinal cord

Ted Teng, Ph.D. Harvard University, Spaulding Rehabilitation Hospital Network, and Brigham & Women's Hospital

10:00 – 10:30

Coffee Break

Session Six

Vascular damage/repair following TBI

Chair: *Lei Chen, M.D., Ph.D.*

10:30 – 11:10

Impairments in cerebral blood flow regulation following mild traumatic brain injury

Sushmita Purkayastha, Ph.D. Southern Methodist University

11:10 – 11:50

Vascular damage and repair in TBI

Andre Obenaus, Ph.D. University of California, Irvine

11:50 – 12:30

Immunological mechanisms underlying damage and repair of the injured brain

Dorian McGavern, Ph.D., National Institute of Neurological Disorders and Stroke

12:30 – 12:40

Closing Remarks

James Geddes, Ph.D., Vice Dean of Research, College of Medicine

Boxed lunches will be available for pick up at the close of the meeting