

INDUCTION AND RESOLUTION OF CNS NEUROINFLAMMATION AND NEUROTOXICITY—Satellite symposium to SFN

Friday, October 18, 2019

Loyola University Chicago (LUC) Water Tower Campus, Regents Hall, 111 E. Pearson

Organizers: Drs. Julie Andersen, Michael Collins and Jean Harry [[to register: harry@nih.gov](mailto:harry@nih.gov)]

SPONSORS: Neurotoxicity Society (NTS); GLENN Foundation for Medical Research; SENS Research Foundation; LUC Dept. Mol. Pharmacology & Neuroscience

8:30 am WELCOME and INTRODUCTION: Elaine Del-Bel, Ph.D. Universidade de Sao Paulo, NTS President

Session 1: Systemic /Central Interactions: Impact on Inflammation and Neurodegeneration

Chairs: Elaine Del-Bel, Ph.D; Michael A. Collins, Ph.D.

8:35 Immunopathogenic brain invasion in aging and Alzheimer's disease

Lennart Mucke, M.D., Gladstone Institute of Neurological Disease, UCSF, San Francisco, CA

9:15 Role of intestinal microbiota-derived neuroinflammation in Parkinson disease

Ali Keshavarzian, M.D., Rush University Medical Center, Chicago, IL

9:45 Transneuronal Propagation of Pathologic α -Synuclein from the Gut to the Brain Models Parkinson's Disease

Hanseok Ko, Ph.D., John Hopkins University Medical School, Baltimore, MD

10:15 BREAK

Session 2: Identifying Targets and Mechanisms of Propagation or Resolution

Chairs: Pablo Caviedes M.D., Ph.D., University of Chile; Jean Harry, Ph.D., NIEHS/NIH

10:25 Mechanisms and consequences of alpha-synuclein cell-to-cell spread in neuronal cells

Edward M. Campbell, Ph.D., Microbiology & Immunology, Loyola Univ. Medical School, Chicago

10:55 Novel GPCR signaling in neuroprotection derived from essential fatty acids

Hee-Yong Kim, Ph.D., National Institute of Alcohol Abuse & Alcoholism, NIH, Bethesda, MD

11:35 Omega-3 DHA and neuronal resolution in alcohol-induced neurotoxicity

Michael A. Collins, Ph.D. Molecular Pharmacology, Loyola Univ. Medical School, Chicago

12:05 Lunch Break (on own)

Session 3: Contribution of Senescence in Neurological and Neurodegenerative Disorders

Chair: Julie Andersen, Ph.D.

1:20 Role of cellular stress in priming cellular senescence

Viviana Perez, Ph.D., Linus Pauling Institute, Oregon State University

1:50 Cellular senescence and its interplay with the immune system

Armit Sharma, Ph.D., SENS Research Foundation

2:20 Linking cellular senescence to neurodegenerative disease

Darren Baker, Ph.D., Biochemistry and Molecular Biology, Mayo Clinic Rochester, NY

2:50 Cellular senescence and its potential contribution to Parkinson's disease

Julie Andersen, Ph.D., Buck Institute for Research in Aging

3:20 BREAK

3:30 Proteomic tools to decipher mechanisms of senescence in aging and age-related diseases

Birgit Schilling, Ph.D, Buck Institute for Research in Aging, Novato, CA

4:00 Senolytics alter brain structure and function in tauopathy mouse models

Miranda Orr, Ph.D., Barshop Institute, University of Texas, San Antonio, TX

4:30 Senolytics: a potential new therapeutic avenue for treating neuropsychiatric disorders?

Diana Jurk, Ph.D., Biol. Aging and Age-Related Disease Lab, Mayo Clinic Rochester, NY

5:00 Closing Questions and Wrap-Up – Jean Harry, Ph.D.