Bringing the Microscope to Clinic: "Crossing the Translational Divide in Neurodegenerative Disease Research"

8:30-9:00 AM - Check-in/Registration

9:00-9:05 AM - David Irwin - Introduction

9:05-9:15 AM - Robert Torres (PA Secretary of Aging) - “Year One Updates on the Pennsylvania State Plan on Aging 2020-2024 - November 2021”

AM SESSION- MECHANISTIC STUDIES OF NEURODEGENERATION IN AGING

9:15-10:15 AM - KEYNOTE #1 (45 min+15 min Q&A) Leonard Petrucci - Mechanisms of Tau and TDP-43 mediated neurodegeneration and therapeutic target strategies

10:15-10:30 AM - MORNING BREAK

10:30-11:30 AM - BASIC SCIENCE SHORT TALKS- MECHANISMS OF PROTEIN AGGREGATION IN AGING

   10:30-10:45 James Shorter - Disagggregases in ND
   10:45-11:00 Silvia Porta - Transmission of TDP-43
   11:00-11:15 Aivi Nguyen - Single cell transcriptome of AD/TDP
   11:15-11:30 Melike Lakadamyali - High resolution microscopy of normal and pathogenic tau species

11:30-11:35 AM – David Wolk, MD - Alzheimer’s Disease Research Center Training and Funding Opportunities

11:35AM-1:00 PM LUNCH BREAK & VIRTUAL POSTER VIEWING (QR code and link will be provided)

PM SESSION- TRANSLATIONAL HUMAN STUDIES OF NEURODEGENERATIVE DISEASE

1:00-1:45 PM- TRANSLATIONAL SHORT TALKS- ANTEMORTEM DETECTION OF NEURODEGENERATIVE PROTEINOPATHIES

   1:00-1:15 Paul Yushkevich - histopathological guided imaging of ND proteins
   1:15-1:30 Fanny Yuk Yee Leung - Identification of small RNA signatures for ADRD via high-throughput sequencing
   1:30-1:45 Katheryn Cousins - Biofluid Biomarkers in ADRD

1:45-2:45 PM - KEYNOTE #2 (45 min+15 min Q&A) David A. Bennett - Heterogeneity of age-related pathologies in community dementia

2:45- 3:00 AFTERNOON BREAK

3:00- 3:15 Emily Largent - Autonomy on the Precipice of Cognitive Decline

3:15- 4:00 PM MULTIDISCIPLINARY PANEL DISCUSSION- “Speaking the same language: how to translate basic science discoveries and apply them to human patients” (Participants: Leonard Petrucci, David A. Bennett, Virginia Lee, Lauren Elman, Emily Largent, David Wolk; Moderator: David Irwin)

4:00 PM POSTER AWARDS AND ADJOURN