**WEDNESDAY, AUGUST 21, 2019**

8:00 am  Welcome and introduction of keynote speaker

8:10 am  Jay Van Andel Award for Outstanding Achievement in Parkinson’s Disease Research lecture

Ellen Sidransky, M.D. – National Human Genome Research Institute
The magic in the web of it — How a rare disorder is helping to untangle the mysteries of Parkinson’s disease

9:00 am  Discussion

9:25 am  Break

**SESSION 1: FROM MENDELIAN TO COMPLEX DISEASE**

**SESSION CHAIR:** Patrik Brundin, M.D., Ph.D. – Van Andel Institute

9:40 am  Connie Marras, M.D., Ph.D. – University of Toronto
Review of Mendelian PD: Genes and phenotypes

10:10 am  Codrin Lungu, M.D. – National Institute of Neurological Disorders and Stroke
Mendelian and sporadic PD — are they the same disease?

10:40 am  Caroline Tanner, M.D., Ph.D. – University of California, San Francisco
What’s typical about typical PD?

11:10 am  Abstract selected talk: Ziv Gan-Or, M.D., Ph.D. – McGill University
In-depth analysis of coding and noncoding SNCA variants in REM sleep behavior disorder and overt synucleinopathies

11:25 am  Discussion

11:40 am  Lunch

**SESSION 2: POLYGENIC RISK SCORES — CAN WE PREDICT PD?**

**SESSION CHAIR:** A. Cecile J.W. Janssens, Ph.D. – Emory University

1:00 pm  Beate Ritz, M.D., Ph.D. – University of California, Los Angeles
Polygenic risk scores to predict cognitive decline, motor and non-motor progression in Parkinson’s disease

1:30 pm  Faraz Faghri, Ph.D. – National Institutes of Health/University of Illinois at Urbana-Champaign
Multi-modal and longitudinal prediction of Parkinson’s disease: A machine learning perspective

2:00 pm  A. Cecile J.W. Janssens, Ph.D. – Emory University
Fifteen years of polygenic risk research: What have we learned that’s relevant for Parkinson disease?

2:30 pm  Discussion

2:45 pm  Break

**SESSION 3: FROM GWAS HITS TO GENES, TO PATHWAYS, TO TARGETS**

**SESSION CHAIR:** Darren Moore, Ph.D. – Van Andel Institute

3:00 pm  Joshua Shulman, M.D., Ph.D. – Baylor College of Medicine
Functional genomics of the lysosome in Parkinson’s disease

3:30 pm  Kendall van Keuren-Jensen, Ph.D. – TGEn
A transcriptomic profile of PD

4:00 pm  Michael Schlossmacher, M.D., DABPN, FRCPC – University of Ottawa
Brain & Mind Research Institute
Validation of the PREDIGT model for the incidence of Parkinson's in cohort studies

4:30 pm  Steven Finkbeiner, M.D., Ph.D. – University of California, San Francisco
Using high-throughput screening to understand GWAS hits

5:00 pm  Discussion

5:15 – 7:30 pm  Poster session and dinner
(Dinner tickets must have been purchased during registration)

**THURSDAY, AUGUST 22, 2019**

**SESSION 4: GENETICS TO CLINICAL TRIALS AND THERAPIES**

**SESSION CHAIR:** Brian Fiske, Ph.D. – The Michael J. Fox Foundation

8:00 am  Hampton Leonard, M.S. – National Institutes of Health
Implementation of clinical trials using genomic data: Advantages and limitations

8:30 am  Joseph Lewcock, Ph.D. – Denali Therapeutics
Precision medicine in PD: A drug developer’s perspective

9:00 am  Michelle Penny, Ph.D. – Biogen
Genetically guided clinical trials: LRRK2 and Parkinson’s disease

9:30 am  Brian Fiske, Ph.D. – The Michael J. Fox Foundation
Enabling genetic discovery and translation in the Parkinson’s therapeutic pipeline: A strategic funder’s perspective

9:45 am  Discussion

10:00 am  Break

**SESSION 5: NON-CODING VARIABILITY AND MOSAICISM IN PD**

**SESSION CHAIR:** Jiyan Ma, Ph.D. – Van Andel Institute

10:15 am  Christos Proukakis, Ph.D., FRCP – University College London
Prevalence of somatic genetic variants in the human brain in synucleinopathies

10:45 am  Clemens Scherzer, M.D. – Brigham & Women's Hospital
Can non-coding RNAs and gene regulation shed light on PD GWAS hit mechanisms?

11:15 am  Sarah McClymont, B.Sc. (hons) – Johns Hopkins University School of Medicine
Enhancer variants at SNCA confer Parkinson disease risk

11:45 am  Abstract selected talk: Sara Bandres-Ciga, Ph.D. – National Institutes of Health
Large-scale pathway specific polygenic risk, cell types and functional inferences in Parkinson’s disease

12:00 pm  Discussion

12:15 pm  Lunch

1:30 pm  Tom Isaacs Award presentation

1:45 pm  Report from Rallying to the Challenge meeting

**SESSION 6: ROLE OF EPIGENETICS IN PD**

**SESSION CHAIR:** Gerry Coetzee, Ph.D. – Van Andel Institute

2:15 pm  Abstract selected talk: Jordan Prahl, B.S. – Van Andel Institute
Global effects of Parkinson’s disease risk-snp rs356182 at the SNCA locus

2:30 pm  Viviane Labrie, Ph.D. – Van Andel Institute
Epigenetic abnormalities in the PD gut and brain

3:00 pm  Rudolf Jaenisch, M.D. – Whitehead Institute
Genomic and cellular approaches to study Parkinson’s disease

3:30 pm  Discussion

3:45 pm  Closing remarks