4th Annual NIA-AA Symposium: Enabling Precision Medicine for AD Through Open Science

Oct. 27-28, 2021 Virtual Conference Eastern Time (North America)

Summary

Supported by the Alzheimer's Association and the National Institute on Aging (NIA), this virtual symposium will feature an array of NIA-supported translational research programs that employ precision medicine principles and open-science practices to:

- 1. Understand the complex and heterogeneous etiology of Alzheimer's.
- 2. Identify new disease-relevant targets and biomarkers.
- 3. Develop the next generation animal models for late onset AD.
- 4. Advance novel targets into drug discovery by developing target enabling research tools.

The symposium program will feature scientific advances and enabling translational infrastructure resources developed by the Accelerating Medicines Partnership® Alzheimer's Disease (AMP AD®), Alzheimer's Gut Microbiome Project (AGMP), MODEL-AD Consortium, TREAT-AD Centers, Alzheimer's Biomarkers Consortium — Down Syndrome (ABC-DS) and other consortia.

Audience

Academic, biotech and pharmaceutical industry researchers with interests in target and biomarker discovery, personalized medicine, preclinical and clinical drug development; computational biologists; data scientists; and open science advocates.

Wednesday, Oct. 27, 2021

10 – 11:10 a.m. Session 1: AMP AD – Precision Medicine Approach to Novel Target and Biomarker Discovery

Co-chairs:

Nilüfer Ertekin-Taner, Mayo Clinic Matthias Arnold, Helmholtz University

Speakers:

Bin Zhang, Icahn School of Medicine at Mount Sinai Laura Heath, Sage Bionetworks Phil De Jager, Columbia University Lenora Ann Higginbotham, Emory University 11:10 - 11:30 a.m. Session 1 Q&A

11:30 – 11:45 a.m. Break

Session 2: MODEL-AD Consortium – A Precision 11:45 a.m. – 12:55 p.m.

> Medicine Approach to the Development of Animal Models of Late Onset AD and Preclinical Efficacy

Testing

Co-chairs:

Bruce Lamb, Indiana University

Andrea Tenner, University of California, Irvine

Speakers:

Greg Carter, The Jackson Laboratory Gareth Howell, The Jackson Laboratory

Adrian Oblak, Indiana University Paul Territo, Indiana University

Stacey Rizzo, University of Pittsburgh

Ali Mortazavi, University of California, Irvine Kim Green, University of California, Irvine

12:55 – 1:15 p.m. Session 2 Q&A

1:15 – 1:30 p.m. Break

1:30 – 2:40 p.m. Session 3: TREAT-AD Centers – Expanding the AD

Target Landscape and Accelerating Drug Discovery for

Novel Targets

Co-chairs:

Alan Palkowitz, Indiana University

Lara Mangravite, Sage Bionetworks

Speakers:

Timothy Richardson, Indiana University Andrew Mesecar, Indian University Lara Mangravite, Sage Bionetworks

Nick Seyfried Emory University Haian Fu, Emory University

2:40 - 3 p.m.Session 3 Q&A

Thursday, Oct. 28, 2021

10 – 11:10 a.m. **Session 4: Alzheimer's Gut Microbiome Project**

Co-chairs:

Rima Kaddurah-Daouk, Duke University

Sarkis Mazmanian, California Institute of Technology

Speakers:

Rob Knight, University of California, San Diego

Sarkis Mazmanian, California Institute of Technology

Gabi Kastenmuller, Helmholtz University

11:10 – 11:30 a.m. **Session 4 Q&A**

11:30 – 11:45 a.m. **Break**

11:45 a.m. – 12:55 p.m. Session 5: Impact of Sex Differences on the Molecular

Determinants of AD Risk and Resilience and

Responsiveness to Treatment

Co-chairs:

Catherine Kaczorowski, The Jackson Laboratory

Susan Catalano, Cognition Therapeutics

Speakers:

Carol Colton, Duke University Ivan Nalvarte, Karolinska

Institute

Dena Dubal, University of California San Francisco Marina Sirota, University of California San Francisco

12:55 – 1:15 p.m. **Session 5 Q&A**

1:15 – 1:30 p.m. **Break**

1:30 – 2:40 p.m. Session 6: Precision Medicine Cohorts and Consortia –

ABC-DS, HABS-HD, LEADS

Co-chairs:

Sid O'Bryant, University of North Texas Health Science

Center

Liana Apostolova, Indiana University

Speakers:

ABC-DS:

Liz Head, University of California, Irvine

Annie Cohen, University of Pittsburgh Mark Mapstone, University of California, Irvine

HABS-HD:

Sid O'Bryant, University of North Texas Health Science Center

LEADS:

Liana Apostolova, Indiana University

2:40 – 3 p.m. **Session 6 Q&A**