

BrightFocus
ALZHEIMER'S FAST TRACK



November 9-11, 2022 | Bahia Resort, San Diego, CA

■ **Tuesday, November 8**

7:00pm – 9:00pm Registration and Welcome Reception

Ventana

■ **Wednesday, November 9**

7:00am – 8:00am BREAKFAST

Mission AB

8:00am – 8:15am GENERAL SESSION: Introduction to BrightFocus Alzheimer's Fast Track

Mission CD

Sharyn Rossi, PhD
BrightFocus Foundation

Harry Steinbusch, PhD
Maastricht University, The Netherlands

Frank LaFerla, PhD
University of California, Irvine

Cynthia Lemere, PhD
*Brigham and Women's Hospital,
Harvard Medical School*

SESSION I: STATE OF THE SCIENCE: CLINICAL TO MOLECULAR

Moderator: Cynthia Lemere, PhD

Mission CD

8:15am – 8:35am Alzheimer's Disease and Related Dementias:
Clinical and Pathologic Overview

Julie Schneider, MD
Rush University

8:35am – 8:55am Rewriting the Initial Stages of Alzheimer's
Disease: The Role of Neuromodulatory
Systems in Pre-Cognitive Symptoms
and Disease Pathogenesis

Lea Grinberg, MD, PhD
*University of California,
San Francisco*

8:55am – 9:15am Plasma Proteomics at Midlife to
Estimate Alzheimer's Disease Risk

Keenan Walker, PhD
National Institute on Aging

9:15am – 9:35am Spatial Biology of Atypical Alzheimer's

Melissa Murray, PhD

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9:35am – 10:05am Group Discussion

10:05am – 10:15am BREAK

SESSION II: PROFESSIONAL SKILLS FOR SCIENTISTS

Moderator: Frank M. LaFerla, PhD

10:15am – 10:30am How to Write a Successful Grant

10:30am – 10:45am Facilitating Success for Early-Career Investigators

10:45am – 11:45am Make an Impact With Your Speech and Style

11:45am – 12:15pm Group Discussion

12:15pm – 1:15pm LUNCH

SESSION III: ELEVATOR PITCH and MOCK GRANT PROPOSAL KICKOFF

Moderator: Harry Steinbusch, PhD

1:15pm – 3:15pm Individual Elevator Pitches

3:15pm – 3:30pm BREAK

3:30pm – 4:30pm Presentation Feedback

4:30pm – 6:30pm Mock Grant Proposal Workgroups: Modeling Alzheimer's disease | OMICS | Aging | Risk Factors | Immunity/Inflammation | Diagnostics | Drug Development/Repurposing
Mission CD (4 groups), **La Jolla** (1 group), **Pacific** (1 group), **Cabrillo Suite** (1 group)

7:00pm – 9:00pm DINNER

Mission A Foyer

Mission CD

Cynthia Lemere, PhD
*Brigham and Women's Hospital,
Harvard Medical School*

Frank LaFerla, PhD
University of California, Irvine

Bri McWhorter
Activate to Captivate, LLC

Café Patio (weather backup: Mission AB)

Mission CD

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■ Thursday, November 10

7:00am - 8:00 am BREAKFAST

Mission AB

MORNING SESSION I: AGING, (epi)GENETICS, and OMICS

Moderator: Harry Steinbusch, PhD

Mission CD

8:00am - 8:20am The Role of Epigenetics in the Progression of Alzheimer's Disease

Harry Steinbusch, PhD
Maastricht University, the Netherlands

8:20am - 8:40am Senescent-Like Human Primary Neurons Undergo Selective Human Immune NK Cell-Mediated Clearance

Julie Andersen, PhD
The Buck Institute for Research on Aging

8:40am - 9:00am What Do Reactive Astrocytes (Really) Do?

Shane Liddelow, PhD
New York University

9:00am - 9:20am Modeling and Characterizing Alzheimer's Disease With iPSCs and Transcriptomics

Li-Huei Tsai, PhD
Massachusetts Institute of Technology

9:20am - 9:50am Group Discussion

9:50am - 10:00am BREAK

Mission A Foyer

MORNING SESSION II: CLINICAL TRIALS

Moderator: Frank LaFerla, PhD

Mission CD

10:00am - 10:20am The Role of Repurposed Agents in Development of Alzheimer's Disease Therapeutics

Jeffrey Cummings, MD, ScD
Chambers-Grundy Center for Transformative Neuroscience, University of Nevada, Las Vegas

10:20am - 10:40am Targeting Pathogenic Pyroglutamate-3 Amyloid-beta for the Treatment of AD

Cynthia Lemere, PhD
Brigham and Women's Hospital, Harvard Medical School

10:40am - 11:00am Alzheimer's Disease Clinical Trials

Joshua Grill, PhD
University of California, Irvine

11:00am - 11:20am Sex Differences in Risk and Resilience to Alzheimer's Disease

Rachel Buckley, PhD
Brigham and Women's Hospital, Harvard Medical School

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**BrightFocus®
Foundation**
Cure in Mind. Cure in Sight.

11:20am - 11:50am Group Discussion

11:50am - 12:50pm LUNCH

Café Patio (weather backup: Mission AB)

AFTERNOON SESSION I: CELLULAR INTERACTIONS

Moderator: Cynthia Lemere, PhD

Mission CD

12:50pm - 1:10pm A Gene Editing Therapeutic Strategy for Alzheimer's Disease

Subhojit Roy, MD, PhD
*University of California,
San Diego*

1:10pm - 1:30pm The Influence of the Gut Microbiome on Alzheimer's Disease

Laura Cox, PhD
*Brigham and Women's Hospital,
Harvard Medical School*

1:30pm - 1:50pm Astrocyte Targeting With Optogenetics Slows Alzheimer's Disease in a Mouse Model

Ksenia Kastanenka, PhD
Massachusetts General Hospital

1:50pm - 2:10pm The Two-Edged Sword of Reactive Gliosis in Alzheimer's Disease and Other Types of Neurodegeneration

**Milos Pekny, MD, PhD, and
Marcela Pekna, MD, PhD**
*University of Gothenburg,
Sweden*

2:10pm - 2:40pm Group Discussion

2:40pm - 2:50pm BREAK

Mission A Foyer

AFTERNOON SESSION II: MODELING ALZHEIMER'S DISEASE

Moderator: Frank LaFerla, PhD

Mission CD

2:50pm - 3:10pm Harnessing iPSC-Microglia to Deliver Therapeutic Proteins to the Brain

Mathew Blurton-Jones, PhD
University of California, Irvine

3:10pm - 3:30pm Mouse Models for Studying Alzheimer's Disease

Joanna Jankowsky, PhD
Baylor College of Medicine

3:30pm - 3:50pm The Benefits of Studying Eyes and Brains to Uncover Common Mechanisms of Neurodegenerative Diseases

Gareth Howell, PhD
The Jackson Laboratory

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3:50pm - 4:10pm Improving the Rigor, Reproducibility and Predictive Validity of Preclinical Research for Alzheimer's Disease: Alzheimer's Disease Preclinical Efficacy Testing Database (AlzPED)

Jayalakshmi Viswanathan, PhD
National Institute on Aging

4:10pm - 4:40pm Group Discussion

4:40pm - 5:00pm BREAK

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5:00pm - 7:00pm Mock Grant Proposal Workgroups

Mission CD (4 groups)
La Jolla (1 group)
Pacific (1 group)
Cabrillo Suite (1 group)

7:00pm - 9:00pm DINNER

Beach (Weather backup: Mission AB)

■ Friday, November 11

7:30am - 8:30am BREAKFAST

Mission AB

MORNING SESSION I: RISK FACTORS and INTERVENTIONS FOR ADRD
Moderator: Cynthia Lemere, PhD

Mission CD

8:30am - 8:50am Targeting Soluble TNF-Dependent Chronic Inflammation to Reduce Neurodegeneration

Malú Tansey, PhD
University of Florida

8:50am - 9:10am Alzheimer's Disease in Down Syndrome

Elizabeth Head, PhD
University of California, Irvine

9:10am - 9:30am Vascular Contributions to Alzheimer's Disease and Implications of COVID

Cheryl Wellington, PhD
University of British Columbia, Canada

9:30am - 9:50am Sleep and Alzheimer's Disease

Brendan Lucey, MD
Washington University in St. Louis

9:50am - 10:10am Unquiet Genes and Their Invisible Ancestry

Kenneth Kosik, MD
University of California, Santa Barbara

10:10am - 10:40am Group Discussion

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10:40am – 11:00am BREAK

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SESSION II: MOCK GRANT PROPOSALS

Moderator: Harry Steinbusch, PhD

Mission CD

11:00am – 11:15am Modeling Alzheimer's disease

11:15am – 11:30am Critique

11:30am – 11:45am OMICS

11:45am – 12:00pm Critique

12:00pm – 12:15pm Aging

12:15pm – 12:30pm Critique

12:30pm – 1:30pm LUNCH

Café Patio (weather backup: Mission AB)

1:30pm – 1:45pm Risk Factors

1:45pm – 2:00pm Critique

2:00pm – 2:15pm Immunity/Inflammation

2:15pm – 2:30pm Critique

2:30pm – 2:45pm Diagnostics

2:45pm – 3:00pm Critique

3:00pm – 3:15pm Drug Development/Repurposing

3:15pm – 3:30pm Critique

3:30pm – 4:00pm BREAK | SCIENTIFIC REVIEW

Mission A Foyer

4:00pm – 4:30pm Award Announcements

Mission CD

4:30pm – 5:00pm Adjourn | Closing Remarks