Alzheimer’s Fast Track

Co-chairs: Frank LaFerla, PhD & Harry Steinbusch, PhD

November 12-14, 2014
Hilton Alexandria Old Town, Alexandria, VA

www.brightfocus.org/alzworkshop

#AlzFastTrack
Workshop Schedule and Program

Workshop Goals:
The Alzheimer’s disease research field continues to grow in size and scope. For people entering such a prolific environment, acquiring an initial understanding of the disease becomes more difficult each year. The goal of this workshop is to offer graduate students and postdocs an immersive opportunity to learn and discuss some of the latest trends in Alzheimer’s disease research through close interaction with established leaders in the field. By the end of this workshop, participants will have:

• Connected with preeminent Alzheimer’s disease experts and fellow early-stage researchers based in the U.S. and around the world
• Participated in interactive workgroups and breakout sessions
• Engaged in scientific debates
• Competed with fellow participants in group “mock” grant proposal presentations

Workshop Coordinating Sponsor:

BrightFocus Foundation
Stacy Haller, President and CEO
Guy Eakin, PhD, Vice President of Scientific Affairs
Diane Bovenkamp, PhD, Scientific Program Officer
Kara Summers, Grants Program Officer

In Collaboration With:
Internationale Stichting Alzheimer Onderzoek
Alzheimer Forschung Initiative e.V.
LECMA

www.brightfocus.org/alzworkshop
Tuesday, November 11, 2014
7:00 – 10:00 PM
GRAND BALLROOM FOYER
Registration and Reception

Wednesday, November 12, 2014
Pathology of Alzheimer’s Disease

7:00 - 8:00 AM
GRAND BALLROOM FOYER
Breakfast

8:00 – 8:30 AM
SALON AB
Introductions
Guy Eakin, PhD, BrightFocus Foundation
Frank M. LaFerla, PhD, University of California, Irvine
Harry W. M. Steinbusch, PhD, Maastricht University, The Netherlands

MORNING SESSION CHAIR
Frank M. LaFerla, PhD, University of California, Irvine

8:30 – 9:30 AM
Neurological and Neuropathological Perspectives on Alzheimer’s Disease and Its Progression
Julie Schneider, MD, Rush University Medical Center

9:30 - 10:30 AM
Participant “Elevator Speech” Presentations (Session 1)
Ricardo Albay, Tiina Annus, Alaina Baker-Nigh, Paramita Chakrabarty, Resham Chhabra, Lisi Flores-Aguilar, Kristen Funk, Tai Gilbert, Amanda DiBattista

10:30 – 11:00 AM
GRAND BALLROOM FOYER
Coffee Break

11:00 AM – 12:00 PM
What Makes a Biomarker? Overview of Advances in Different Modalities
Howard J. Federoff, MD, PhD, Georgetown University

12:00 – 1:00 PM
Understanding Vascular Contributions to the Course of Alzheimer’s Disease
G. William Rebeck, PhD, Georgetown University
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<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>1:00 – 2:00 PM</td>
<td>Lunch</td>
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<td><strong>AFTERNOON SESSION CHAIR</strong></td>
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<td>Harry W. M. Steinbusch, PhD, Maastricht University, The Netherlands</td>
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<tr>
<td>2:00 – 3:00 PM</td>
<td>Participant “Elevator Speech” Presentations (Session 2)</td>
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<td>Helene Hall, Rachel Hendrix, Jane Hettinger, Sundaram Guruswami, Ahleah Gustina Gavin, Makoto Ishii, Dennis Janning, Taylor Jay, Helen Crehan</td>
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<td>3:00 – 4:00 PM</td>
<td>Interactions Between Neuroinflammation and Neurodegeneration</td>
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<td>Cynthia A. Lemere, PhD, Brigham and Women’s Hospital and Harvard Medical School</td>
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<td>4:00 – 6:30 PM</td>
<td>Workgroup “Mock” Grant Proposal Assignment Introduction and Initial Breakout Session</td>
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<td>Participants will be assigned to a group that will receive a defined topic to prepare an innovative “mock” grant research proposal, for presentation before the other participants and the workshop presenters on Friday afternoon. Two Breakout Sessions will be provided to kick-start group preparations. Participants will receive the topic, the names of the persons in their groups, project outline, and select background papers.</td>
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<td>7:00 PM</td>
<td>Dinner</td>
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**Thursday, November 13, 2014**

**Basic Biology and Etiology of Alzheimer’s Disease**

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<td>7:00 - 8:00 AM</td>
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<td><strong>MORNING SESSION CHAIR</strong></td>
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<td>Frank M. LaFerla, PhD, University of California, Irvine</td>
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<tr>
<td>8:00 – 9:00 AM</td>
<td>Participant “Elevator Speech” Presentations (Session 3)</td>
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<td>Alifiya Kapasi, Briana Kille, Aaron Koenig, Roy Lardenoije, Artemis Iatrou, Stephanie Leal, Siddhita Mhatre, Pawel Muszynski, Jacki Rorabaugh</td>
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<td>Time</td>
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| 9:00 – 10:00 AM | Conformational Diversity of Amyloid in Alzheimer’s Disease, Including Oligomers  
  *Charles Glabe, PhD, University of California, Irvine* |
| 10:00 – 10:45 AM | Participant “Elevator Speech” Presentations (Session 4)  
  *Aurelie Nsongo, Tal Nuriel, Smita Paranjape, Paul Parcon  
  Melanie Pleiss, Theresa Pohlkamp, Zachariah Reagh, Jared B. Roberts* |
| 10:45 – 11:00 AM | Coffee Break  
  GRAND BALLROOM FOYER |
| 11:00 AM - 12:00 PM | Translational Challenges of Mouse Models in Alzheimer’s Disease  
  *Frank M. LaFerla, PhD, University of California, Irvine* |
| 12:00 – 1:00 PM | Participant “Elevator Speech” Presentations (Session 5)  
  *Maha Saber, Dov Shamir, Qiaoqiao Shi, Jo Stevens, Jared B. Vasquez, Marvin Webb, Liam Wilson, Yunlu Xue, Ye Yan* |
| 1:00 – 2:00 PM | Lunch  
  SALON C |
| AFTERNOON SESSION CHAIR | *Cynthia A. Lemere, PhD, Brigham and Women’s Hospital and Harvard Medical School* |
| 2:00 – 3:00 PM | Brainstem Dysfunction in Alzheimer’s Disease  
  *Harry W. M. Steinbusch, PhD, Maastricht University, The Netherlands* |
| 3:00 – 4:00 PM | Seeding and Spreading of Tau Protein  
  *Karen Duff, PhD, Columbia University* |
| 4:00 – 4:15 PM | Coffee Break  
  GRAND BALLROOM FOYER |
| 4:15 – 6:30 PM | Second Workgroup Breakout Session  
  SALON AB, SALON C, & POTOMAC ROOM |
| 7:00 PM | Social Event – Dinner  
  MEET IN LOBBY AT 6:45 |
**Friday, November 14, 2014**  
**Translating To Therapies for Alzheimer’s Disease**

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<td><strong>GRAND BALLROOM FOYER</strong></td>
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<td><strong>SESSION CHAIR SALON AB</strong></td>
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<td>Harry W. M. Steinbusch, PhD, Maastricht University, The Netherlands</td>
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| 8:00 – 9:00 AM| Novel Immunotherapies  
Einar M Sigurdsson, PhD, NYU Langone Medical Center and School of Medicine |
| 9:00 – 9:30 AM| ImmunoPET in the 5xFAD model using bapineuzumab.  
Mario Losen, PhD, Maastricht University, The Netherlands |
| 9:30 – 10:00 AM| Epigenetic dysregulation in aging and Alzheimer’s disease.  
Daniël van den Hove, PhD Maastricht University, The Netherlands |
| 10:00 – 10:15 AM| Coffee Break                                                            |
| 10:00 – 10:15 AM| **GRAND BALLROOM FOYER**                                               |
| 10:15 AM – 11:15 PM| Synapses in Alzheimer’s Disease – Why They Dysfunction and Disappear  
William Klein, PhD, Northwestern University |
| 11:15 – 12:15 PM| Designing Experiments with Therapy in Mind: Biotech Perspectives on Disease Modifying Therapies  
D. Martin Watterson, PhD, Northwestern University |
<p>| 12:15 – 1:15 PM| Lunch                                                                   |
|               | <strong>SALON C</strong>                                                             |</p>
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<td>1:15 – 4:45 PM</td>
<td>The participant workgroups will present their innovative “mock” grant proposals to the group, for discussion, and feedback on the viability of their research ideas in today’s funding climate. The proposals will be scored and the best proposal will receive “mock” funding support.</td>
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<td>4:45 – 5:00 PM</td>
<td>Closing Remarks</td>
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*Meeting Co-Chairs and Sponsors*
Participant Elevator Speech: Guidelines

All participants will give their brief presentations at the times designated in the program schedule. Your presentation time will be provided to you ahead of the meeting.

Each student is requested to prepare a PowerPoint presentation. You will have 5 minutes to give your presentation and should be limited to 5 slides.

Please include the following information in your presentation:
- Introduce yourself, and your organization/institute
- Describe your current research project
- What compels you to pursue Alzheimer’s disease research?
- Who is your role model in science?

Social Media | #AlzFastTrack
Help generate some buzz around Alzheimer’s Fast Track by telling us about your research projects. Please prepare one or two descriptions of your work in 140 characters or less using the #AlzFastTrack hashtag. Think outside the box: we’ll announce some of our favorite messages at the start of the workshop.

Example:
John Doe is speaking about creating new animal models at #AlzFastTrack

Please post your messages directly to Twitter, or email them to eganelin@brightfocus.org

Participant Group Assignments:
“Mock” Grant Proposal Presentation

Design of an innovative research proposal (six or seven groups /one proposal per group)
- Briefly describe the background, and the relevance to the field
- Describe research question and hypothesis
- Methodologies
- Expected results
- Impact on the field

Present your group’s proposal with a maximum of 10 slides in a 15-minute presentation, followed by 10 minutes of discussion.
Your proposal will be evaluated by all other students and the workshop presenters.

Only one of the six proposals will receive “mock” funding, after deliberation and decision by workshop presenters.

Assignment “Request For Proposals”
Grant proposals for innovative projects in the field of translational neuroscience in particular related to Alzheimer Research Budget $500,000, for a term of 3 years.

Research Topics
*One topic per group, to be assigned at the workshop*

1. Gene expression regulation in AD
2. Metabolism and AD
3. The role of the immune system in AD
4. Vascular Contributions to AD
5. Synaptic Biology and Neuroplasticity Mechanisms in AD
6. Role of protein seeding and spreading in AD
7. Biomarkers and AD

Tips:
- Kick-start your background literature search by reviewing the materials provided by the speakers
- Identify and clarify an urgent problem or issue in basic, translational, and/or clinical research—feel free to discuss options with workshop speakers
- Design an innovative study (do not copy the research presented by the speakers)
- Identify a clear research question and formulate a clear and testable hypothesis
- Describe the methodology, time planning, budget, etc.
- Show/describe the feasibility of the study
- Describe the relevance for the field (e.g., how does it help patients in the near future?)