

# DRUG DISCOVERY FOR NEURODEGENERATION

Presented by the Alzheimer's Drug Discovery Foundation

February 5-6, 2007

The Westin @ Times Square, New York City

## *Program*

### DAY 1 – MONDAY, FEBRUARY 5<sup>TH</sup>

- 7:45 – 8:30 am      **REGISTRATION & CONTINENTAL BREAKFAST**  
8:30 – 8:40 am      **WELCOME & OPENING REMARKS**  
*Howard Fillit, MD, Executive Director, ADDF*  
8:40 – 9:10 am      **PLENARY SPEAKER**  
*An Overview of Drug Discovery for Neurodegenerative Disease*  
Barry D. Greenberg, PhD – Neurochem, Inc.

#### I. TARGET IDENTIFICATION & VALIDATION:

HOW OUR UNDERSTANDING OF THE BIOLOGY OF NEURODEGENERATION CAN BE EMPLOYED

*Chair: Linda Van Eldik, PhD, Northwestern University*

- 9:10 – 9:30 am      1. Risk in CNS Drug Discovery  
*J. Fred Pritchard, PhD, MDS - Pharma Services*  
9:30 – 9:50 am      2. Mechanism of Neurodegeneration  
*Steven Paul, MD - Eli Lilly and Company*  
9:50 – 10:10 am      3. How to Decide if a Target Should be Advanced for Discovery  
*Dale B. Schenk, PhD - Elan Pharmaceuticals*  
10:10 – 10:30 am      4. Target Validation in CNS Drug Discovery  
*Barbara Sahagan, PhD - Pfizer, Inc.*  
10:30 – 10:50 am      **PANEL DISCUSSION**  
10:50 – 11:10 am      **BREAK**

#### II. LEAD DISCOVERY:

IN-VITRO MODELS OF NEURODEGENERATIVE DISEASE

*Chair: Ross Stein, PhD, Harvard Medical School & Brigham and Women's Hospital*

- 11:10 – 11:30 am      1. Developing Relevant High-Throughput Assays for the Identification of  
Potential Drug Candidates  
*Richard K. Harrison, PhD - Vitae Pharmaceuticals*  
11:30 – 11:50 am      2. Identification of Hits and Leads for Neurodegenerative Diseases:  
Case Studies  
*Marcie Glicksman, PhD - Harvard Medical School*  
11:50 – 12:10 pm      3. Laboratory for Drug Discovery in Neurodegeneration: A Model for Leads  
Discovery in Academia  
*Ross Stein, PhD- Session Chair*  
12:10 – 12:30 pm      **PANEL DISCUSSION**  
12:30 – 1:30 pm      **LUNCH**

**III. LEAD IDENTIFICATION & OPTIMIZATION:  
UNIQUE ASPECTS OF CHEMISTRY IN NEURODEGENERATIVE DISEASE**

*Chair: D. Martin Watterson, PhD, Northwestern University*

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| 1:30 – 1:50 pm | 1. Hits to Leads to Drugs: What Makes a Chemical a Drug<br><i>Christopher A. Lipinski, PhD – Melior Discovery</i>  |
| 1:50 – 2:10 pm | 2. Principles of Medicinal Chemistry Refinement for CNS Drug Discovery–<br><i>Camille G. Wermuth, PharmD, PhD -Universite Pasteuri Strasbourg &amp; Prestwick Chemical, Inc.</i> |
| 2:10 – 2:30 pm | 3. Design of Chemical Libraries: Focus, Diversity & Size<br><i>F. Raymond Salemme, PhD, Linguagen Corp.</i>  |
| 2:30– 2:50 pm  | <b>PANEL DISCUSSION</b>  |
| 2:50 – 3:10 pm | <b>BREAK</b>   |

**IV. PRE-CLINICAL PROOF-OF-CONCEPT & DEVELOPMENT:  
NEURODEGENERATIVE DISEASE**

*Chair: Jordan Tang, PhD, Oklahoma Medical Research Foundation*

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| 3:10 – 3:30 pm | 1. What is Pre-Clinical Proof-of-Concept<br><i>Manfred Windisch, PhD - JSW-Research</i>  |
| 3:30 – 3:50 pm | 2. ADME, Pre-clinical Toxicology & Preparing for Clinical Development –<br>Phase 1, GMP, GLP<br><i>Edward Spack, PhD - SRI International</i>     |
| 3:50 – 4:10 pm | 3. Neuroimaging, Biomarkers and Surrogates in CNS Clinical Development<br><i>Michael W. Weiner, MD - University of California, San Francisco</i> |
| 4:10 – 4:30 pm | <b>PANEL DISCUSSION</b>  |
| 4:30 – 4:40 pm | <b>CLOSING REMARKS</b><br><i>Howard Fillit, MD, Executive Director, ADDF &amp; ISOA</i>  |
| 4:40 – 6:30 pm | <b>OPEN NETWORKING RECEPTION</b>   |

**DAY 2 – TUESDAY, FEBRUARY 6<sup>TH</sup>**

8:00 – 8:30 am     **CONTINENTAL BREAKFAST**

**V. DRUG DELIVERY TECHNOLOGIES TO THE CNS**

**Chair: Illana Gozes, PhD, Allon Therapeutics & Tel Aviv University**

- 8:30 – 8:50 am     1. Characteristics of Compounds that Cross the Blood Brain Barrier (BBB)  
*William A. Banks, MD - Saint Louis University School of Medicine*
- 8:50 – 9:10 am     2. Analytical Methods: Measuring Diffusion into Brain  
*Illana Gozes, PhD – Session Chair*
- 9:10 – 9:30 am     3. Nanotech and the BBB  
*Gabriel A. Silva, MSc, PhD, University of California, San Diego*
- 9:30 – 9:50 am     4. Intranasal Delivery Bypasses the BBB to Target Therapeutic Agents to the CNS  
*William H. Frey II, PhD - University of Minnesota & Regions Hospital*
- 9:50 – 10:10 am    5. Transport Based Delivery Approaches  
*Henry R. Costantino, PhD - Natestch Pharmaceutical Company Inc.*
- 10:10 – 10:30 am   **PANEL DISCUSSION**
- 10:30 – 10:50 am   **BREAK**

**VI. PARTNERING & OTHER MODELS FOR ADVANCING DRUG DISCOVERY:  
FINDING RESOURCES TO ADVANCE NEURODEGENERATIVE DISEASE DRUG DISCOVERY**

**Chair: Elias Michaelis, MD, PhD, University of Kansas**

- 10:50 – 11:10 am   1. The Role of Contract Research Organizations (CROs) in Advancing Pre-Clinical  
CNS Development  
*Oppel Greeff, MD, Quintiles International*
- 11:10 – 11:30 am   2. Contract Research Organizations  
*Peter Schöler, MD, MPM - PRA International*
- 11:30 – 11:50 am   3. Center-based Models in Academia  
*Elias Michaelis, MD, PhD – Session Chair*
- 11:50 – 12:10 pm   4. Resources at the National Institute of Health  
*Neil Buckholtz, PhD - National Institute on Aging and  
Lorenzo Refolo, PhD - National Institute of Neurological Disorders and Stroke*
- 12:10 – 12:30 pm   **PANEL DISCUSSION**
- 12:30 – 1:30 pm    **LUNCH**

**VII. BUSINESS DEVELOPMENT & TECHNOLOGY TRANSFER IN  
NEURODEGENERATION**

**Chair: Richard DiRocco, PhD, Secant Pharma**

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| 1:30– 1:50 pm  | 1. Licensing, Contracts, and Intellectual Property<br><i>Dale Lombardi, PhD, Secant Pharma</i>  |
| 1:50 – 2:10 pm | 2. The Role of Your Technology Transfer Office<br><i>John Zawad, University of Pennsylvania</i>   |
| 2:10 – 2:30 pm | 3. Developing Your Technologies to the Point of Interest & Pros and Cons of<br>Starting Your Own Biotech in Neurodegenerative Disease<br><i>Richard DiRocco, PhD- Session Chair</i> |
| 2:30 – 2:50pm  | 4. Partnering With Pharma & Biotech: What Do They Look For?<br><i>Lawrence M. Zaccaro, Pfizer, Inc.</i>   |
| 2:50 – 3:10 pm | <b>PANEL DISCUSSION</b>   |
| 3:10 – 3:15 pm | <b>CLOSING REMARKS</b><br><i>Howard Fillit, MD, Executive Director, ADDF</i>  |