

**Alzheimer's Disease-Related Dementias Workshop 2013:  
Research Challenges and Opportunities  
Natcher Auditorium, NIH Campus, Bethesda, MD  
May 1-2, 2013**

**May 1, 2013**

- 8:00 a.m. Welcoming Remarks**  
Story Landis, PhD  
Director, National Institute of Neurological Disorders and Stroke
- 8:05 a.m. Introduction**  
Ronald Petersen, MD, PhD  
Chair, Advisory Council on Alzheimer's Research, Care, and Services
- 8:25 a.m. Developing Research Recommendations and Timelines for the Alzheimer's Disease-Related Dementias**  
Thomas Montine, MD, PhD  
Scientific Chair, Alzheimer's Disease-Related Dementias Workshop

**Session 1: Alzheimer's Disease-Related Dementias (ADRD) and Multiple Etiology Dementias: The Public Health Problem and Improving Recognition across the Spectrum**

*Chairs:* David Knopman, MD and Bruce Miller, MD

- 8:30 a.m. Introduction: Differential Diagnosis and Epidemiology**  
David Knopman, MD
- 8:50 a.m. Panel Discussion of Recommendations**  
*Discussion Leader:* Bruce Miller, MD  
*Panelists:* David Bennett, MD; Brad Boeve, MD\*; Cynthia Carlsson, MD; Michael Geschwind, MD, PhD; Ted Huey, MD; Richard O'Brien, MD, PhD

**Session 2: Lewy Body Dementias**

*Chairs:* Dennis Dickson, MD and Karen Marder, MD, MPH

- 9:30 a.m. Introduction: The Lewy Body Dementias (DLB)**  
Ian McKeith, MD
- 9:40 a.m. Introduction: Parkinson's Disease with Dementia (PDD)**  
Dag Aarsland, MD, PhD
- 9:50 a.m. Session Overview and Discussion**  
*Discussion Leaders:* Dennis Dickson, MD and Carol Lippa, MD  
*Panelists:* Dag Aarsland, MD, PhD and Ian McKeith, MD
- 10:00 a.m. Break**

### ***Genetics of Lewy Body Dementias***

**10:15 a.m.    Genetics Overview and Opportunities**  
Ellen Sidransky, MD

**10:25 a.m.    Recommendations and Discussion**  
*Discussion Leader:* David Simon, MD, PhD  
*Panelists:* John Hardy, PhD and Ellen Sidransky, MD

### ***Diagnostics for and Biomarkers of Lewy Body Dementias***

**10:45 a.m.    Imaging Diagnostics**  
David Eidelberg, MD

**10:55 a.m.    Biofluid Biomarkers**  
Clemens Scherzer, MD

**11:05 a.m.    Recommendations and Discussion**  
*Discussion Leader:* Karen Marder, MD, MPH  
*Panelists:* Brad Boeve, MD\*; David Eidelberg, MD; and Clemens Scherzer, MD

### ***Therapeutic Strategies: Current Practice and Modeling Future Approaches***

**11:25 a.m.    Therapeutic Approaches for LBDs**  
Bernard Ravina, MD

**11:35 a.m.    Modeling Mechanisms of LBDs**  
Eliezer Masliah, MD

**11:45 a.m.    Recommendations and Discussion**  
*Discussion Leader:* Pamela McLean, PhD  
*Panelists:* James Galvin, MD, MPH; Carol Lippa, MD; Eliezer Masliah, MD; and Bernard Ravina, MD

### ***Prioritized Recommendations and Panel Discussion***

**12:05 p.m.    Next Steps for LBD Research**  
*Discussion Leaders:* Dennis Dickson, MD and Karen Marder, MD, MPH

**12:15 p.m. - 1:15 p.m.            Lunch**

### **Session 3: Frontotemporal Dementia (FTD) and AD-Related Tauopathies**

*Chairs:* Michael Hutton, PhD and William Seeley, MD

**1:15 p.m.    Goals of the FTD Session**  
Michael Hutton, PhD and William Seeley, MD

**1:20 p.m.      Setting the Stage for FTD – Overview of the FTD spectrum**  
David Knopman, MD

***Tau-related FTD—Basic Science***

**1:25 p.m.      Tau Genetics and Pathogenic Mechanisms Associated with Mutations**  
Alison Goate, PhD

**1:35 p.m.      Mechanisms of Tau Neurotoxicity**  
Karen Ashe, MD, PhD

**1:45 p.m.      Tau Protein Misfolding and Propagation**  
Karen Duff, PhD

**1:55 p.m.      Panel Discussion: Next Steps for Tau-related FTD Research – Prioritized Recommendations**  
*Panelists:* Karen Ashe, MD, PhD; Marc Diamond, MD; Karen Duff, PhD; Alison Goate, PhD; John Hardy, PhD; Michael Hutton, PhD; David Knopman, MD; Erik Roberson, MD, PhD; and William Seeley, MD

***TDP43/FUS-related FTD Pathogenesis***

**2:25 p.m.      Genetics of TDP43 and FUS Pathologies**  
Bryan Traynor, MD, PhD

**2:35 p.m.      Mechanism of Neurodegeneration Linked to Progranulin Haplo-insufficiency**  
Stephen Strittmatter, MD, PhD

**2:45 p.m.      Mechanisms of Expanded Repeat Associated Neurotoxicities**  
Thomas Cooper, MD

**2:55 p.m.      TDP43 and FUS Biology**  
Leonard Petrucelli, PhD

**3:05 p.m.      Panel Discussion: Next Steps for TDP43/FUS-related FTD Research - Prioritized Recommendations**  
*Panelists:* Michael Hutton, PhD; William Seeley, MD; Nigel Cairns, PhD; Thomas Cooper, MD; John Hardy, PhD; Leonard Petrucelli, PhD; Erik Roberson, MD, PhD; Stephen Strittmatter, MD, PhD; Bryan Traynor, MD, PhD

**3:35 p.m.      Break**

***FTD Clinical and Translational Science***

**3:50 p.m.      Biomarkers for FTD**

William Seeley, MD

**4:00 p.m. Therapeutic Approaches for Tauopathies**

Michael Hutton, PhD

**4:15 p.m. Clinical Trial Design/Approaches for FTD**

Adam Boxer, MD, PhD

**4:30 p.m. Panel Discussion: Next Steps for Clinical and Translational FTD Research – Prioritized Recommendations**

*Panelists:* Brad Boeve, MD\*; Adam Boxer, MD, PhD; Michael Hutton, PhD; Howard Feldman, MD; David Knopman, MD; William Seeley, MD; and John Van Swieten, MD, PhD

**5:00 p.m. End of Day 1**

**May 2, 2013**

**Session 4: Vascular Contributions to ADRD**

*Chairs:* Steven Greenberg, MD, PhD and Berislav Zlokovic, MD, PhD

**8:30 a.m. Session Introduction**

Steven Greenberg, MD, PhD

***Basic Mechanisms and Experimental Models***

**8:40 a.m. Introduction – Basic Mechanisms and Experimental Models**

Berislav Zlokovic, MD, PhD

**8:50 a.m. Mechanisms and Models 1: Develop Next Generation Experimental Models of Vascular Cognitive Impairment and Vascular Dementia**

Costantino Iadecola, MD and Berislav Zlokovic, MD, PhD

**9:10 a.m. Mechanisms and Models 2: Encourage Basic Science that Investigates the Impact of Alzheimer's Disease Risk Factors on Cerebrovascular Function**

Sidney Strickland, PhD and Cheryl Wellington, PhD

**9:30 a.m. Mechanisms and Models 3: Encourage Basic Science that Investigates the Impact of Cerebrovascular Risk Factors on AD-Related Neurodegeneration**

Donna Wilcock, PhD

**9:50 a.m. Break**

***Human-Based Studies: A Path toward Intervention***

- 10:05 a.m. Introduction – Human-Based Studies: The Scope of VaD/VCI Disease Burden**  
Monique Breteler, MD, PhD and Steven Greenberg, MD, PhD
- 10:15 a.m. Human-Based Studies 1: Establish Noninvasive Markers of Key Vascular Processes Related to Cognitive and Neurologic Impairment**  
Julie Schneider, MD and Geert Jan Biessels, MD, PhD
- 10:35 a.m. Human-Based Studies 2: Identify Interrelationships among Cerebrovascular Risk Factors, Beta-Amyloid, and Neurodegeneration**  
Suzanne Craft, PhD and Helena Chui, MD
- 10:55 a.m. Human-Based Studies 3: Identify Vascular Interventions to Treat or Prevent VCI**  
Michael Tymianski, MD, PhD and Monique Breteler, MD, PhD
- 11:15 a.m. Final Panel Discussion and Questions**  
*Discussion Leaders:* Steven Greenberg, MD, PhD and Berislav Zlokovic, MD, PhD  
*Panelists:* Geert Jan Biessels, MD, PhD; Monique Breteler, MD, PhD; Helena Chui, MD; Suzanne Craft, PhD; Costantino Iadecola, MD; Eng Lo, PhD\*; Julie Schneider, MD; Sidney Strickland, PhD; Michael Tymianski, MD, PhD; Cheryl Wellington, PhD; Donna Wilcock, PhD

**11:30 a.m. – 12:30 p.m. Lunch**

**Session 5: Health Disparities in ADRD**

*Chairs:* Maria Glymour, ScD and Jennifer Manly, PhD

- 12:30 p.m. Session Introduction**  
Maria Glymour, ScD and Jennifer Manly, PhD

***Recruitment***

- 12:35 p.m. Introduction – Recruitment**  
Jennifer Manly, PhD
- 12:40 p.m. Recruitment 1: Initiate and Leverage Ongoing Longitudinal Community-based Cohort Studies of Incident Dementia in Diverse Populations Incorporating Imaging, Biomarkers, and Autopsy**  
Lisa Barnes, PhD and David Bennett, MD
- 12:55 p.m. Recruitment 2: Mixed Methodology Studies to Improve Assessment Tools for Disparities Populations**  
Lori Jervis, PhD and Sid O’Bryant, PhD
- 1:10 p.m. Recruitment 3: Use Community Outreach Methods to Facilitate Recruiting Disparities Populations into FTD and DLB Clinical Studies**  
James Galvin, MD, MPH and Chiadi Onyike, MD, MHS

**1:25 p.m. Recruitment 4: Implement Surveillance for Non-AD dementias Permitting Detection of Incidence and Trends in Disparities Populations**  
Tom Mosley, PhD

***Advancing Treatment and Prevention Strategies among Diverse Populations***

**1:40 p.m. Introduction – Advancing Treatment and Prevention Strategies among Diverse Populations**  
Maria Glymour, ScD

**1:45 p.m. Treatment and Prevention 1: Enhance the Design of all Trials of Vascular Health Interventions to Improve Their Application to Diverse Populations**  
Ralph Sacco, MD

**2:00 p.m. Treatment and Prevention 2: Assess Lifecourse Risk Factors for Cognitive Decline and Non-AD Dementias among Disparities Populations**  
Virginia Howard, PhD

**2:15 p.m. Treatment and Prevention 3: Estimate Disparities in Health Burden of Non-AD Dementias and Risk Factors among Disparities Populations**  
Lon White, MD, MPH

**2:30 p.m. Treatment and Prevention 4: Identify Environmental and Genetic Factors that Modify Incidence, Presentation, and Long-term Outcomes of Non-AD Dementias in Disparities Populations**  
Keith Whitfield, PhD

**2:45 p.m. Final Panel Discussion and Questions**  
*Discussion Leaders:* Maria Glymour, ScD and Jennifer Manly, PhD  
*Panelists:* Lisa Barnes, PhD; David Bennett, MD; James Galvin, MD, MPH; Virginia Howard, PhD; Lori Jervis, PhD; Tom Mosley, PhD; Sid O’Bryant, PhD; Chiadi Onyike, MD, MHS; Ralph Sacco, MD; Lon White, MD, MPH; Keith Whitfield, PhD

**3:00 p.m. Break**

**3:15 p.m. Open Discussion and Concluding Remarks**  
*Discussion Leader:* Thomas Montine, MD, PhD  
*Panelists:* Session Chairs

**4:00 p.m. End of Day 2**

\* Participated in recommendation development but was not able to attend the workshop.