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
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

Introduction – Advancing Treatment and Prevention Strategies among Diverse Populations
Maria Glymour, ScD

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

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

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

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

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

Break

Open Discussion and Concluding Remarks
Discussion Leader: Thomas Montine, MD, PhD
Panelists: Session Chairs

End of Day 2

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