

CURRICULUM VITAE/Bibliography
Michelle M. Mielke, Ph.D.

PRESENT ACADEMIC RANK AND POSITION

Professor
 Division of Epidemiology
 Department of Health Sciences Research
 Mayo Clinic College of Medicine

Professor
 Department of Neurology
 Mayo Clinic College of Medicine

Consultant Epidemiology
 Department of Health Sciences Research
 Mayo Clinic College of Medicine

Contact Information:

Department of Health Sciences
 Mayo Clinic
 200 First Street SW
 Rochester, MN 55905
 E-mail: mielke.michelle@mayo.edu

EDUCATION AND TRAINING:

B.S. in Neuroscience University of Pittsburgh	1994-1999 Pittsburgh, PA
Ph.D. in Psychiatric Epidemiology Johns Hopkins University Bloomberg School of Public Health	2000-2004 Baltimore, MD
Post-doctoral Fellowship in Epidemiology of Aging Johns Hopkins University Bloomberg School of Public Health	2004-2005 Baltimore, MD
Lydia Gillespie Post-doctoral Fellowship in Psychiatry Johns Hopkins University School of Medicine	2005-2006 Baltimore, MD
Leadership & Organization Development Classes, Mayo Clinic	
The Leadership Effect	2/27-28/2014
Leading with Emotional Intelligence	10/23/2014
Professionalism II	2/3/2015
Mayo Leader 360	4/30/2015
Professionalism III	3/3/2017
Emotional Intelligence II	10/17/2017
Crucial Conversations Virtual Classroom, Vital Smarts	10/5-9/2015 Provo, UT
American Academy of Neurology Women in Leadership	4/22/2017

Association of American Medical Colleges (AAMC) 12/2-12/5/2017
 Mid-Career Women Faculty Leadership Development Seminar Scottsdale, AZ

HONORS/AWARDS

1997 University of Pittsburgh Travel Grant to attend and present at the Society for Neuroscience Conference
 1997-1999 Golden Key National Honor Society
 2000-2004 National Institute of Mental Health Pre-Doctoral Fellow in Psychiatric Epidemiology; Johns Hopkins University School of Public Health, Department of Mental Health Institutional Training Grant
 2005 Lydia Gillespie Fellow
 2005 Harold and Sylvia Halpert Endowment Award, Department of Mental Health, Johns Hopkins Bloomberg School of Public Health
 2005 Travel Fellowship to present at the 2nd International Vascular, Behavioural and Cognitive Disorders Conference, Florence, Italy, June 2005
 2006 Recipient, National Institutes of Health Clinical Loan Repayment Program
 2006 Alzheimer's Association Travel Fellowship to present at the 10th International Conference on Alzheimer's Disease and Related Disorders; Madrid, Spain, July 2006
 2007 International College of Geriatric Psychoneuropharmacology (ICGP) Junior Investigator Award
 2007 Fellow, 13th NIMH Summer Research Institute in Geriatric Psychiatry
 2008 Recipient, National Institutes of Health Clinical Loan Repayment Renewal
 2010 Scholar, NIMH Advanced Research Institute in Geriatric Psychiatry
 2016 John R. Raymond Mentor Award, Women Scholars Initiative, Medical University of South Carolina

PREVIOUS PROFESSIONAL POSITIONS AND MAJOR APPOINTMENTS

Research Assistant 1994-1999
 Nicotine Self-Administration in Rats, University of Pittsburgh Pittsburgh, PA

Study Coordinator 1999-2000
 Center for Biomedical Ethics, University of Pittsburgh Pittsburgh, PA

Data Manager
 National Collaborative Perinatal Project 2001-2002
 Johns Hopkins Bloomberg School of Public Health Baltimore, MD

Biostatistician
 Division of Geriatric Psychiatry and Neuropsychiatry 2003-2005
 Johns Hopkins University School of Medicine Baltimore, MD

Instructor, Department of Psychiatry, 2006-2007
 Division of Geriatric Psychiatry and Neuropsychiatry Baltimore, MD
 Johns Hopkins University School of Medicine

Assistant Professor, Department of Psychiatry, Division of Geriatric Psychiatry and Neuropsychiatry Johns Hopkins University School of Medicine	2007-2011 Baltimore, MD
Joint appointment in Department of Mental Health Johns Hopkins University Bloomberg School of Public Health	2007-2011 Baltimore, MD
Assistant Professor, Department of Health Sciences Research Division of Epidemiology Mayo Clinic College of Medicine	2011-2012 Rochester, MN
Adjunct Appointment in Department of Psychiatry, Johns Hopkins University School of Medicine	2012-2013 Baltimore, MD
Adjunct Appointment in Department of Mental Health Johns Hopkins University Bloomberg School of Public Health	
Associate Professor, Department of Health Sciences Research Division of Epidemiology Mayo Clinic College of Medicine	2012-2016 Rochester, MN
Associate Professor, Department of Neurology Mayo Clinic College of Medicine	2013-2016 Rochester, MN

CURRENT PROFESSIONAL POSITIONS AND MAJOR APPOINTMENTS

Professor, Department of Health Sciences Research Division of Epidemiology Mayo Clinic College of Medicine	2016-Present Rochester, MN
Professor, Department of Neurology Mayo Clinic College of Medicine	2016-Present Rochester, MN

PROFESSIONAL COMMITTEE AND SOCIETY MEMBERSHIPS AND EXTERNAL ACTIVITIES

Professional Committees

Geoffrey Beene Global NeuroDiscovery Challenge, 2013
 Alzheimer's Association Task Force on Gender Vulnerabilities, 2015-2016
 NIH Computerized/Remote Cognitive Assessment Committee, 2015-2016
 Alzheimer's Drug Discovery Foundation Scientific Review Board, 2015-Present
 Blood-Based Professional Interest Group AAIC/ISTAART
 (Vice Chair 2015-2017, Chair 2017-2019, Past-Chair 2019-Present)
 Co-Chair, Society for Women's Health Research, Alzheimer Disease Network, 2016-Present
 CARDIA Systems Biology Subcommittee, 2017-Present
 Alzheimer's Drug Discovery Scientific Review Board, 2018-Present

Food and Drug Administration

Peripheral and Central Nervous System Advisory Committee, 2012 – 2017

Department of Defense

Reviewer, Congressionally Directed Medical Research Program (CDMRP) Peer-Reviewed Medical Research Program Heart Disease, 2016
 Panel Member, Congressionally Directed Medical Research Program (CDMRP) Peer Reviewed Alzheimers Research Program (PRARP), 2017-Present

NIH Study Sections

Special Emphasis Panel for Challenge Grants, ZRG1 BDCN-T, June 2009
 Special Emphasis Panel for Challenge Grants, ZRG1 PSE-C, June 2009
 Special Emphasis Panel for Challenge Grants, ZRG1 PSE-J, June 2009
 NAME - Neurological, Aging and Musculoskeletal Epidemiology Study Section, June 2010
 ZAG1 ZIJ-3 – National Institute on Aging Special Emphasis Panel, June 2011
 NAME - Neurological, Aging and Musculoskeletal Epidemiology Study Section, June 2013
 ZRG1 PSE-T -- Human Disorder Epidemiology, R15 Study Section, April 2014
 Member, NAME - Neurological, Aging and Musculoskeletal Epidemiology Study Section, Oct 2014-June 2018
 ZRG1 BDCN-N – Special Emphasis Panel, March 2015
 ZAG1 ZIJ-6 –Special Emphasis Panel, Enhancing Target and Biomarker Discovery in AD, May 2017
 ZRG1 PSE-D – Epidemiology and Cohort Studies for Alzheimer’s Disease, Related Dementias, and Cognitive Resilience, February 2018
 ZRG1 ETTN-N – Epidemiology and cohort Studies for Alzheimer’s Disease, Related Dementias and Cognitive Resilience, February 2019
 ZRG1 EMNR-A – Specialized Center of Research Excellence on Sex Differences, July 2019

Other Grant Review Committees

Research into Ageing (U.K.), 2008
 JHU NIMH Center for NeuroAIDS, 2009
 Alzheimer’s Association, 2009-Present
 Estonia Medical Foundation, 2010
 Neurological Foundation of New Zealand, 2010
 Center on Women’s Health (Mayo Clinic), 2012
 Geoffrey Beene Global NeuroDiscovery Challenge, 2013
 CCaTS Scientific Review Group (Postdoctoral Full Committee), 2013-Present
 Michael Smith Foundation for Health Research, 2014
 Italian Ministry of Health, 2015
 EU Joint Program – Neurodegenerative Disease Research, 2015
 Weston Brain Institute, 2015-Present
 Canadian Institutes of Health Research (CIHR), 2016
 American Brain Foundation, 2017-Present
 Einstein Foundation, 2018

Alzheimer's Drug Discovery Foundation, 2018
 Medical Research Council (U.K.), 2018
 UK Alzheimer's Society, 2019

Society Memberships

Society for Epidemiological Research, 1998-2000, 2015-Present
 The Gerontological Society of America, 1998-Present
 International Society for Vascular, Behavioural and Cognitive Disorders, 2001-2011
 Student Representative for the Program Committee, 2003-2005
 Student Representative for the Nominating Committee, 2003-2007
 International College of Geriatric Psychoneuropharmacology, 2007-2013
 Member, Program Committee, 2008-2013
 The Alzheimer's Association International Society to Advance Alzheimer Research and Treatment (ISTAART), 2007-Present
 National Lipid Association, 2012-2015
 American Academy of Neurology, 2014-Present
 Movement Disorder Society, 2015-Present
 Organization for the Study of Sex Differences, 2015-Present
 American Association for the Advancement of Science (AAAS), 2017-Present
 North American Menopause Society (NAMS), 2018-Present

Editorial Activities

Senior Associate Editor:

Alzheimer's and Dementia: The Journal of the Alzheimer's Association (2018-Present)

Associate Editor, Journals:

Alzheimer's and Dementia: The Journal of the Alzheimer's Association (2012-2018)

Journal of Alzheimer's Disease (2011-Present)

Guest Associate Editor:

International Journal of Alzheimer's Disease

Journal of Aging Research

Academic Editor: *PLoS Medicine*, 2017

Alzheimer Award Committee for Best Paper

Journal of Alzheimer's Disease

Guest Peer Reviewer, Journals:

Age

Age and Aging

Aging Cell

Aging Research Reviews

Alzheimer's and Dementia: The Journal of the Alzheimer's Association

Alzheimer's and Dementia: Diagnosis, Assessment, and Disease Monitoring

Alzheimer's Research and Therapy
American Journal of Geriatric Psychiatry
American Journal of Epidemiology
Annals of Epidemiology
Annals of Medicine
Annals of Neurology
Archives of General Psychiatry
Bioanalysis
Biological Psychiatry
BMJ (British Medical Journal)
Brain
Brain Imaging and Behavior
Brain Research
Brain Structure and Function
British Journal of Psychiatry
Clinical Lipidology
CNS and Neurological Disorders – Drug Targets
Current Alzheimer's Research
Dementia and Geriatric Cognitive Disorders
European Journal of Clinical Nutrition
European Journal of Neurology
European Psychiatry
Experimental Neurology
Frontiers in Neurology
Hypertension in Pregnancy
International Journal of Geriatric Psychiatry
International Psychogeriatrics
International Review of Psychiatry
JAMA
JAMA Neurology
Journal of Alzheimer's Disease
Journal of the American Geriatric Society
Journal of Cerebral Blood Flow and Metabolism
Journal of Clinical Psychiatry
Journal of Gerontology: Medical Sciences
Journal of Internal Medicine
Journal of Neurochemistry
Journal of Neurology, Neurosurgery, and Psychiatry
Journal of Neuropsychiatry and Clinical Neurosciences
Journal of Women's Health
Lancet Psychiatry
Molecules
Molecular Neurodegeneration
Movement Disorders
Nature Neurology Reviews
Neurobiology of Aging
NeuroImage
Neurology

Parkinson's Disease and Related Disorders
PLoS Medicine
PLoS One
Proceedings of the National Academy of Sciences
Psychiatry Research Neuroimaging

Conference Organizer, Session Chair

International College of Geriatric Psychoneuropharmacology, 2008, “New Research in Alzheimer Biomarker Development,” Sydney, Australia – Session Chair.
 International College of Geriatric Psychoneuropharmacology, 2009, “The role of lipids in the development of Alzheimer’s disease: new therapeutic approaches?” Baltimore, MD – Session Chair.
 International College of Geriatric Psychoneuropharmacology, 2010, “Neuroimaging Biomarkers in Geriatric Psychiatry: identifying biological correlates of disease state and treatment response,” Athens, Greece – Session Co-Chair.
 Human Amyloid Imaging Conference, 2013, “Amyloidosis, Neuro-Degeneration, White Matter Integrity,” Miami, Florida – Session Co-Chair
 Eighth Congress of the International Society for Gender Medicine (IGM Congress 2017), “Epidemiology and Geriatric Medicine,” Sendai, Japan - Session Chair
 Eighth Congress of the International Society for Gender Medicine (IGM Congress 2017), “Sex, Aging and Cognitive Decline,” Sendai, Japan - Plenary Session 4 Co-Chair
 Organizing Committee, *Educational Workshop: The Basics of Fluid Biomarkers in Alzheimer’s Disease, Alzheimer’s Association International Conference*, Chicago, IL; July 2018
 AD/PD 2019. The 14th International Conference on Alzheimer’s & Parkinson’s Disease, Symposium 05: Imaging and CSF Biomarkers – Lisbon, Portugal – Session Co-Chair

MAYO CLINIC INTRAMURAL COMMITTEE ACTIVITIES

Women’s Health Research Center Executive Committee, 2012-Present
 Grant Reviewer, 2012
 Academic Rank Task Force for Allied Health, 2013-2015
 CCaTS Scientific Review Group, 2013-Present
 Department of Health Sciences Research, Research Committee, 2014-Present
 Department of Health Sciences Research, Mentoring Expectations Task Force, 2015-2016
 Department of Health Sciences Research, Cores Subcommittee, 2019-Present
 Department of Health Sciences Research, Faculty Recruitment Handbook Task Force, 2019
 Kern Scholar Application Review Panel, 2019
 Search Committee Chair, Epidemiology of Aging faculty position, 2019

EDUCATIONAL ACTIVITIES

Educational Publications

Lawlor, J.P., Mielke, M.M., Hardy, J.B., Eaton, W.W., & Duggan, A.K. National Collaborative Perinatal Project 1959-1973: Modernization and enhancement of public use data and

documentation for analytic and training purposes on a personal computer. Johns Hopkins University, Baltimore, MD. 2002. Limited Distribution Evaluation Version.

Teaching Activities

English Teacher for Hubert H. Humphrey Fellows, Johns Hopkins Bloomberg School of Public Health (01/2000-05/2000)

Teaching Assistant, Department of Mental Health, Johns Hopkins Bloomberg School of Public Health, Neuropsychology of Mental Disorders, 03/2004-04/2004

Lecturer, Department of Mental Health, Johns Hopkins Bloomberg School of Public Health Neuropsychology of Mental Disorders, 04/2004, 04/2005, 05/2007, 05/2010

Instructor, Division of Geriatric Psychiatry, Johns Hopkins School of Medicine
Taught geriatric psychiatrists, fellows and medical students statistical methods and study design methodology, 07/2006-05/2011

Director, "Biomarkers of Neurodegeneration" Monthly Seminar, Johns Hopkins School of Medicine, 09/2008-05/2011

Faculty, Second Annual Summer Course for Clinical and Translational Investigators in Neurology and Neuroscience, sponsored by the American Neurological Association (08/2009, 05/2011)

Co-Director, CTSC 5390 Advanced Applied Epidemiologic Methods, Mayo Graduate School of Biomedical Sciences (01-02/2012, 01-02/2013, 01-02/2014, 01-02/2015, 01-02/2016)

Teaching Privileges, Mayo Graduate School, Clinical and Translational Science Track (04/2012-Present)

Lipidomic Predictors of Cognitive Progression, Karolinska Institute-Mayo Meeting (09/21/2012)

Mayo Olmsted Study of Aging, Rochester Senior Center (1/24/2013)

Faculty, Second Neuroscience Maastricht Master Class. Maastricht University. Maastricht, the Netherlands (5/2013)

Design and Conduct of a Case-Control Study, Presentation to General Surgery Residents and Fellows, Mayo Clinic (8/26/2013)

Design and Conduct of a Cohort Study, Presentation to General Surgery Residents and Fellows, Mayo Clinic (10/21/2013)

Moving Younger: Experiences and Preliminary Results of Extending the Mayo Olmsted Study of Aging to Younger Age Groups, Department of Health Sciences Research Grand Rounds, Mayo Clinic (1/27/2014)

Sphingolipids -- Common Pathway for Multiple Pathologies? Department of Health Sciences Research Grand Rounds, Mayo Clinic (5/29/2014)

Case-control vs. Cohort Study, Presentation to General Surgery Residents and Fellows, Mayo Clinic (9/8/2014)

Navigating the Current Findings in Alzheimer's Disease Research, St. Benedicts Senior Community, St. Cloud, MN (9/19/2014)

Ceramide and Glucosylceramide Metabolism in Parkinson's Disease and Lewy Body Dementia, Metabolomics Interest Group Presentation at Endocrine Research Seminar (2/14/2017)

Sex, Gender, and Dementia. 7th International Course of Neuroepidemiology: Methods and Clinical Applications, Erice, Italy (3/8/2017)

Are women really at greater risk of Alzheimer's disease? Understanding the Impact of Sex and Gender Differences on the Development, Progression and Treatment of Alzheimer's Disease, Department of Health Sciences Research Grand Rounds, Mayo Clinic (5/8/2017)

Sphingolipids: Common Pathway for Multiple Neurodegenerative Diseases

Neurology Grand Rounds, Mayo Clinic (8/7/2017)
 Cutting Edge Techniques Including Blood Based Biomarkers, *Educational Workshop: The Basics of Fluid Biomarkers in Alzheimer's Disease*, Alzheimer's Association International Conference, Chicago, IL (7/20/2018)
 Sex as a Biological Variable workshop, Office of Women's Health (8/29/2018)
 Highlighting Mayo Clinic's New Specialized Center of Research Excellent on Sex Differences (SCORE): Sex-Specific Effects of Endocrine Disruption on Aging and Alzheimer's Disease, Women's Health Grand Rounds (10/18/2018)
 Sex as a Biological Variable workshop, Office of Women's Health (12/13/2018)
 Sex as a Biological Variable workshop, Office of Women's Health (04/30/2019)
 Cutting Edge Techniques Including Blood Based Biomarkers, *Educational Workshop: The Basics of Fluid Biomarkers in Alzheimer's Disease*, Alzheimer's Association International Conference, Los Angeles, CA (7/12/2019)

Mentoring

Melissa Morgan, B.S. (Medical student at Johns Hopkins School of Medicine) 09/2006 –05/2007.
 Article: **Morgan MD**, Mielke MM, O'Brien R, Troncoso JC, Zonderman AB, Lyketsos CG (2007). Rates of depression in individuals with pathologic but not clinical Alzheimer disease are lower than those in individuals without the disease: findings from the Baltimore Longitudinal Study of Aging (BLSA). *Alzheimers Disease and Associated Disorders* 21:199-204. PMID: PMC2607061

Richard Carrick (Undergraduate student at Johns Hopkins University) 05/2008 – 05/2009.
 Article: Mielke MM, Haughey N, Bandaru VVR, Schech S, **Carrick R**, Carlson MC, Mori S, Miller MI, Ceritoglu C, Brown T, Albert M, Lyketsos CG (2010). Plasma ceramides are altered in MCI and predict cognitive decline and hippocampal volume loss. *Alzheimers Dement* 6(5): 378-385. PMID: PMC2933928

Patricia Gracia-Garcia, M.D. (Visiting psychiatry resident from Spain) 01/2009 – 05/2009.
 Article: **Gracia-Garcia P**, Rao V, Haughey NJ, Bandaru VVR, Smith G, Rosenberg PB, Lobo A, Lyketsos CG, Mielke MM (2011). Plasma ceramides are elevated in depression. Elevated plasma ceramides in depression. *J Neuropsychiatry Clin Neurosci* 2011 Spring;23(2):215-8. PMID: PMC3121176

Sara Tighe, M.D. (Psychiatry Fellow at Johns Hopkins School of Medicine) 01/2010 – 05/2011.
 Article: **Tighe SK**, Oishi K, Mori S, Smith GS, Albert M, Lyketsos CG, Mielke MM. Diffusion tensor imaging of neuropsychiatric symptoms in mild cognitive impairment and Alzheimer's dementia. *J Neuropsychiatry Clin Neurosci* 2012 Sept;24(4):484-8. PMID: PMC3533244

Chelsie Hollas, B.S., M.P.H. (Medical Student, Texas Tech University, Paul L. Foster School of Medicine; Medical Student Sustained Training and Research Experience in Aging and Mental Health [M-STREAM]). 06/2013 – 08/2013. Visiting summer medical student.
 Presentation of Research: *Does Exercise in Early Adulthood Affect Cognition in Mid-Adult Life*

Angela Boeve (Undergraduate Student, St. Olaf College) 06/2013 – 08/2013. Summer internship to gain research experience. Presentation of Research at AAIC: *Sleep-related features and performance on a computerized cognitive battery: the Mayo Clinic Study of Aging*. Also: Boeve A, Ferman TJ, Aakre J, St Louis E, Silber M, Machulda M, Fields J, Graff-Radford N, **Mielke M**, Geda Y, Jones D, Graff-Radford J, Knopman D, Petersen R, Boeve B. Excessive daytime sleepiness in major dementia syndromes. *Am J Alzheimers Dis Other Dement* 2019 June;34(4):261-4. PMID: PMC6709580

Anne Weston (Undergraduate Student, University of Minnesota) 05/2015 – 08/2015. Student internship to gain research experience.

Anupama Aryal-Khanal, M.B., B.Ch. (Masters Student) 05/2015 – 09/2015. Completed her MPH internship at the Mayo Clinic.

Alexandra Wennberg, Ph.D. (Postdoctoral Fellow) 07/2015 – 12/2017. Primary Mentor, Postdoctoral Fellow in Epidemiology at the Mayo Clinic.

Ahmed T. Ahmed, M.B., B.Ch. (Master's Student) 03/2016 – 12/2018. Research Fellow in Preventive Medicine, Mayo Clinic. Primary Mentor for Master's degree in Clinical and Translational Research at the Mayo Clinic.

Andreana Benitez, Ph.D. (Fellowship Mentor) 04/2016 – 09/2017. Assistant Professor, Medical University of South Carolina, Department of Neurology and Radiology. *Recipient, J.R. Raymond Fellowship*

Thomas Hum-Hyder (Undergraduate Student, Trinity College, Hartford, CT) 05/2016 – 09/2017. Student internship to gain research experience.

Hanna Lawler (Undergraduate Student, Marquette University) 05/2016 – 08/2018. Summer Student Internship to gain research experience.

Rachel Sobiesk (Undergraduate Student, Marquette University) 05/2016 – 03/2017. Summer Student Internship to gain research experience.

Shemonti Hasan, B.S. (Mayo Clinic Medical Student) 06/2016 – 07/2019. Primary Mentor for Master's degree in Clinical and Translational Research at the Mayo Clinic.

Francesco Multinu (Visiting Research Fellow) 07/2016 – 05/2017. Primary Mentor for Master's degree in Clinical and Translational Research at the Mayo Clinic. Master's Thesis: Proportion of Leiomyosarcoma at the Time of Surgery for Presumed Benign Fibroids: A Population-Based Study.

Britta Bureau (Undergraduate Student, Marquette University) 08/2016 – 09/2017. Student Internship to gain research experience.

Pierpaolo Turcano, M.D. (Research Trainee) 08/2016 – 09/2017; (Research Fellow) 09/2017 – 07/2019. Trainee/Fellow mentor.

Wendy White, M.D. (Junior Faculty, Mayo Clinic) 09/2016 – 10/2017. Mentoring Committee.

Bjorg Thorsteinsdottir, M.D. (Assistant Professor, Primary Care Internal Medicine, Mayo Clinic). 09/2016 – Present. K-Award Mentor: “*Evidence Based Encounter Decision Aid for Elderly Patients to Promote Shared Decision Making on Treatment Choice in End Stage Renal Disease*”

Maria Vassilaki, M.D., Ph.D. (Junior Faculty, Mayo Clinic) 04/2017 – Present. Mentoring Committee.

Luis Montes Chinea, B.S. (Medical Student at University of Puerto Rico) 05/2017 – 07/2017. Visiting Summer Medical Student.

Hector Quinones, B.S. (Medical Student, University of Puerto Rico) 05/2017 – 07/2019. Primary Mentor for his Master’s degree in Clinical and Translational Research at the Mayo Clinic.

Zachary Erickson (Undergraduate Student, Iowa State University) 05/2017 – 09/2019. Summer Student Internship to gain research experience.

Silke M. Kern, M.D., Ph.D. (Consultant Neurologist and Psychiatrist, University of Gothenburg) 08/2017 – 01/2019. Visiting Research Collaborator.

Danni Li, Ph.D. (Junior Faculty, Clinical Chemistry, University of Minnesota) (10/2017-Present). Outside Mentor.

Nikki Stricker, Ph.D., L.P. (Consultant Psychologist, Mayo Clinic) 01/2018 – Present. Mentoring Committee and K-award submission Primary Mentor.

Phillip Schulte, Ph.D. (Junior Faculty, BSI, Mayo Clinic) 06/2018 – Present. Mentoring Committee.

Marissa Schafer, Ph.D. (Junior Faculty, PMR, Mayo Clinic) 09/2018 – Present. K-award Mentor.

Ashley Fett (Undergraduate Student, Florida State University) 06/2018-Present. Summer Student Internship to gain research experience.

Angel L. Ortiz Rodriguez (MD/MS student) 07/2018-Present. MS Mentoring Committee.

Aoife M. Egan, M.B., B.Ch., Ph.D. (Junior Faculty, Endocrinology/Diabetes, Mayo Clinic). 12/2018-Present. Mentoring Committee.

Olivia Matzke (Undergraduate Student, St. Katherines University) 05/2019-08/2019. Summer Student Internship to gain research experience.

Chandrasager (Sagar) Dugani, M.D., Ph.D. (Junior Faculty, Hospital Internal Medicine, Mayo Clinic). 06/2019-Present. Mentoring Committee Member and K-grant Submission Mentor.

Shahar Shelly, MD (Resident/Fellow) 08/2019-Present. Trainee/Fellow mentor.

Thesis Committees

Eric Schneider, Ph.D., Department of Mental Health, Johns Hopkins Bloomberg School of Public Health; Departmental Exam Committee, June, 2007.

Kwun Chuen Gary Chan, Ph.D., Department of Biostatistics, Johns Hopkins Bloomberg School of Public Health; Dissertation Final Defense Committee, 08/2008.

“Recurrent Marker Process Before Failure Event: A Backward Process Approach”

Mahwesh Saleem, M.S., Department of Pharmacology, University of Toronto. Ph.D. Supervisory Committee, 08/2011 – 05/2017.

Balwinder Singh, M.B.B.S., Neurology Research, Mayo Clinic, 2012 – 2013.

“Association of Chronic Obstructive Pulmonary Disease with Mild Cognitive Impairment”

Tracey Weissgerber, Ph.D., Nephrology Research, Mayo Clinic, 01/2015 - 10/2015.

Post-doctoral Fellow and CCaTs Masters Student at the Mayo Clinic. Assistant Professor, Department of Nephrology, Mayo Clinic

“Vascular Health and Hypertensive Pregnancy Disorders: Linking Pregnancy Complications with Future Disease”

PRESENTATIONS AT REGIONAL, NATIONAL AND INTERNATIONAL MEETINGS**Visiting Professorships**

Ceramides: A Blood-based Biomarker of Alzheimer Disease Progression? *Department of Psychiatry, Athens University Medical School. Athens, Greece; October 2008.*

Utility of Blood Lipid Sphingolipids as a Biomarker for Alzheimer’s Disease: Current Evidence, Validation, and Limitations. *Geriatric Grand Rounds, University of Wisconsin School of Medicine & Public Health. Madison, WI; July 2009.*

Sphingolipids, Alzheimer’s Disease, and Alzheimer’s Disease Pathology. *Second Neuroscience Maastricht Master Class. Maastricht University. Maastricht, the Netherlands; May 2013.*

Sphingolipids and Neurodegenerative Diseases: A Common Pathway for Multiple Pathologies? *Neurology Grand Rounds, University of Minnesota. Minneapolis, MN; September 2013.*

Sphingolipids-Common Pathway for Alzheimer’s disease, Parkinson’s disease, and Lewy Body Dementia? *Hertie Institute, Tübingen, Germany; December 2013.*

Sphingolipids and Neurodegenerative Diseases: A Common Pathway for Multiple Pathologies? *Psychiatry Research Grand Rounds, Johns Hopkins University, Baltimore, MD; April 2014.*

Sphingolipids in Neurodegenerative Disease and Depression: A common Pathway for Multiple Diseases and Disorders? *Florey Institute of Neuroscience and Mental Health. Melbourne, Australia; September 2015*

Utility of Plasma Tau as a Biomarker for Alzheimer's disease: Results from the Mayo Clinic Study of Aging. *National Institute of Mental Health and Neuro Sciences (NIMHANS) T.S. Srinivasan -NIMHANS Knowledge Conclave 2016*. Bangalore, India; February 2016.

Sphingolipids-Common Pathway for Alzheimer's disease, Parkinson's disease and Lewy Body Dementia? *National Institute of Mental Health and Neuro Sciences (NIMHANS) T.S. Srinivasan -NIMHANS Knowledge Conclave 2016*. Bangalore, India; February 2016.

Understanding the Role of Sphingolipids in Neurodegeneration Diseases and Depression: From Basic Science to Epidemiology. *Michigan State's Department of Epidemiology and Biostatistics Seminar Series*. Lansing, MI; March 2016.

Sphingolipids in Alzheimer's Disease, Parkinson's Disease, and Lewy Body Dementia. *Centre for Healthy Brain Ageing Seminar, University of New South Wales*. Sydney, Australia; November 2016.

Sphingolipids: Common Pathway for Multiple Neurodegenerative Diseases? Neurology Grand Rounds, *Medical University of South Carolina*. Charleston, SC; January 2017.

Sex and Gender Differences in Alzheimer's Disease – Do They Exist and Why Does It Matter? *Sahlgrenska Academy, University of Gothenburg*, Gothenburg, Sweden; September 2018.

Developing Biofluid-Based Biomarkers for Operationalizing the new Alzheimer's Disease Research Framework. Department of Clinical Chemistry, University of Minnesota. Minneapolis, MN; December 2018.

Sex and Gender Differences in Alzheimer's Disease: Do They Exist and Why Does It Matter? *Women's Brain Initiative Speaker Series*, Brigham and Women's Hospital, Boston, MA; January 2019.

Invited Talks

The Role of Potassium in the Pathology of Dementia and Biomarkers of Dementia. *Annual NIMH and NIDA training grant meeting*. Baltimore, Maryland; April 2003.

Serum Risk Factors of Vascular Disease and Their Relation to Dementia and Biomarkers of Dementia. *Johns Hopkins Alzheimer Disease Research Center Dementia Consortium*. Baltimore, Maryland; June 2004.

Review of Risk Factors for Major Depression in Children and Adolescents. *National Institute of Mental Health Workshop on Prevention of Depression in Children and Adolescents*. Rockville, Maryland; June 2004.

Importance of Biomarkers for Alzheimer's Disease and Psychiatric Disorders. *Johns Hopkins Department of Mental Health Seminar*. Baltimore, Maryland; September 2006.

- The Effects of Vascular Conditions and Therapies on the Progression of Established Alzheimer's Disease. *Johns Hopkins Alzheimer Disease Research Center Dementia Consortium*. Baltimore, Maryland; February 2007.
- Membrane Lipids and Metabolites – Potential Biomarkers of Neurodegeneration and Alzheimer's Disease Progression. *Mayo Clinic Health Sciences Research Seminar*. Rochester, Minnesota; September 2007.
- Lipid Biomarkers as Predictors of Alzheimer Diagnosis. *Annual Meeting of the American Association for Geriatric Psychiatry (AAGP)*. Orlando, FL; March 2008.
- Blood-Based Lipid Biomarkers and DTI as Indicators of Alzheimer's Disease Progression. *Annual Meeting of the International College of Geriatric Psychoneuropharmacology (ICGP)*. Sydney, Australia; September 2008.
- Blood Sphingomyelins and Ceramides as Biomarkers of Alzheimer's Disease Progression. *Controversies on Neurology (CONY) Consortium*. Athens, Greece; October 2008.
- Plasma Ceramides: Relationship to MRI and Clinical Measures of AD Severity. *Johns Hopkins ADRC Dementia Consortium Retreat on Novel Approaches to Treatment and Assessment of Alzheimer's Disease*. Baltimore, MD; May 2009.
- Bioactive Sphingolipids – A Dynamic Biomarker of Neurodegeneration? *Epidemiology Seminar, Vanderbilt University*. Nashville, TN; November 2010.
- Mayo Clinic Study of Aging: Current Results and Future Expansion. *Minneapolis VA and Geriatric Research, Education & Clinical Center (GRECC)*. Minneapolis, MN; September 2011.
- Predictors of Amyloid Accumulation in a Population-based Study of Cognitively Normal Elderly Controls. *Human Amyloid Imaging Conference*. Miami, FL; January 2012.
- Identification of Non-Invasive Screening Variables for the Prediction of Amyloid Accumulation in a Population-Based Study of Cognitively Normal Elderly Individuals. *Alzheimer's Association International Conference*. Vancouver, BC, Canada; July 2012.
- Technology of Analyzing CSF Samples, Biological Significance of Sphingolipids in Human CSF of Alzheimer Patients. *Eli Lilly and Company*. Indianapolis, IN; December 2012.
- Blood-Based Markers of Neuronal and Microvascular Injury. *Developing Novel Blood-Based Biomarkers for Alzheimer's Disease Advisory Panel. Alzheimer's Drug Discovery Foundation and the Alzheimer's Association*. New York, NY; April 2013.
- Sphingolipids as Biomarkers and Treatment Targets for Alzheimer's. *11th Dutch Endo-Neuro-Psycho Meeting*. Lunteren, the Netherlands; May 2013.

Back-Translation of Clinical Findings: Critical Mechanistic Information Needed for Interpretation. *Ceramides and Aging Workshop, National Institute on Aging, National Institutes of Health*. Bethesda, MD; July 2013.

Development of Sphingolipid Biomarkers for Alzheimer's Disease and Lewy Body Dementia. *14th International Conference on Alzheimer's Drug Discovery*. Jersey City, NJ; September 2013.

Identification of Biomarkers for the Diagnosis, Prediction and Progression of Alzheimer's Disease. *New York Academy of Sciences*. Companion Diagnostics: From Biomarker Identification to Market Entry. New York, NY; April 2014.

Sphingolipids and Neurodegenerative Diseases: A Common Pathway for Multiple Pathologies? *AbbVie Pharmaceuticals*, Chicago, IL; August 2014.

Sphingolipids and Neurodegenerative Diseases: A Common Pathway for Multiple Pathologies? *Lysosomal Therapeutics, Inc*, Boston MD; August 2014.

Sphingolipids in Alzheimer's disease: Use of Metabolomics Tools in Discovering Biomarkers and Therapeutics. *Mayo Clinic Metabolomics Symposium*, Rochester, MN; September 2014.

The Role of Sphingolipids in Aging-Related Diseases and Longevity
5th Annual Mayo Clinic Robert and Arlene Kogod Center on Aging Conference, Rochester, MN; October 2014.

Identifying and Translating Biomarkers for Neurodegenerative Diseases:
Experience with Sphingolipids. *CCaTS Grand Rounds*, Rochester, MN; March 2015.

Sex Differences in the Risk for Alzheimer's Disease. *Symposium on Sex Differences in Translational Medicine*, Wake Forest School of Medicine, Winston-Salem, NC; April 2015.

Are Women at Greater Risk for Alzheimer's Disease? *Alzheimer's Association Gender Vulnerabilities Related to Alzheimer's Disease Think Tank* meeting. Chicago, IL; May 2015.

Biomarkers in DLB: New Perspectives. *Focus on Dementia with Lewy Bodies*, Tricase, Italy; June 2015.

Sphingolipids as Blood-Biomarkers for the Risk and Progression of Alzheimer's Disease. *AAIC Blood-based Biomarker PIA*, Washington, DC; July 2015.

Mild Cognitive Impairment – How Do We Detect this and Does it Go on to Dementia. *19th Australasian Menopause Society*, Canberra, Australia; September 2015.

Dementia – Why Women Are More at Risk and What Can Be Done to Reduce Risk. *19th Australasian Menopause Society*, Canberra, Australia; September 2015.

NIA Intermural Program: A Discussion about the Intramural Program. *2015 Beeson Annual Meeting*, Tarrytown, NY; October 2015.

Case Control and Cohort Studies: Expert Didactic. *General Surgery Journal Club*, Rochester, MN; October 2015.

Differences Between Men and Women in the Risk of Dementia. Symposium Session—Gender and Alzheimer’s Disease. *Alzheimer’s Association International Conference*, Toronto, Canada; July 2016.

Sphingolipids: Critical Pathway for Multiple Neurodegenerative Diseases. *3rd Australian Lipid Meeting (ALM3)*. Baker IDI Heart and Diabetes Institute, Melbourne, Australia; November 2016.

Rochester Epidemiology Project (REP) and the Mayo Clinic Study of Aging (MCSA). *ACT Research Symposium. Advancing Brain Aging Science through Community and Population-Based Studies*, Kaiser Permanente Washington Health Research Institute, Seattle, WA; August 2017.

Linking the REP to Sex-Specific Outcomes. *Celebration of Women’s Health Research*, Rochester, MN; October 2017.

Challenges in Using CSF Biomarkers for Operationalizing the NIA-AA Research Framework. *Alzheimer’s Association International Conference*, Chicago, IL; July 2018.

Invited Panelist, *Ninth Annual Fall Luncheon and Symposium*, The Alzheimer’s Drug Discovery Foundation, New York City, NY; November 2018.

Sex, Gender and Dementia, Symposium – Toward a Sex Dimorphic Neurology, *10th International Meeting on Steroids and Nervous System*, Torino, Italy; February 2019.

Challenges in Using CSF Biomarkers for Operationalizing the NIA-AA AD Research Framework, *American Academy of Neurology Annual Meeting, Invited Science: Aging and Dementia Session*, Philadelphia, PA; May 2019.

Understanding the Impact of Sex and gender in Alzheimer’s Disease: A Call to Action. *Frontiers in Alzheimer’s and Aging Research, Morehouse School of Medicine*. Atlanta, GA; May 2019.

Sex and Gender Differences in Dementia: Do They Exist and Why Does It Matter? *German Center for Neurodegenerative Diseases (DZNE)*, Bonn, Germany; May 2019

Investigating Fluid-Based Biomarkers for Improved Clinical Decision Making. *Biomarkers & Diagnostics for Complex & Rare Diseases*, Boston, MA; June 2019.

Other Presentations

Low Serum Potassium in Mid-life Associated with Decreased CSF Amyloid-beta(1-42) in Late-life: A 24-year Longitudinal Study. *Annual Meeting of the Gerontological Society of America*. San Diego, California; November 2003.

- Association Between Low Serum Potassium, CSF Amyloid-beta, and Incident Dementia in Two Longitudinal Studies. *National Institute on Aging, Laboratory of Neurosciences*. Baltimore, Maryland; January 2004.
- Longitudinal Association Between Serum Total and HDL Cholesterol and Cognition: the Women's Health and Aging Study II. *Annual Meeting of the Gerontological Society of America*. Orlando, Florida; November 2005.
- Lipids and Lipid Peroxidation Products as Biomarkers of Alzheimer Disease Progression. *Annual Meeting of the American Association for Geriatric Psychiatry (AAGP)*. New Orleans, Louisiana; March 2007.
- Plasma Ceramides are Indicative of Alzheimer's Disease Severity and Correlate with White Matter Integrity. *Annual Meeting of the American Association for Geriatric Psychiatry (AAGP)*. Honolulu, HI; March 2009.
- Utility of Fornix Fractional Anisotropy and Hippocampal Volume, Alone and in Combination, in Predicting Conversion. *Annual Meeting of the International College of Geriatric Psychoneuropharmacology (ICGP)*. Athens, Greece; September 2010.
- Clinical Effectiveness of FDA-Approved Medications for Alzheimer's Disease Varies Between Women and Men. *Vascular, Behavioural and Cognition (VAS-COG) Conference*. Lille, France; September 2011.
- Plasma Ceramides are Elevated in Persons with Autopsy-Confirmed Lewy Body or Alzheimer's Disease Pathology and Correlate with Lewy Body Dementia Severity. *20th World Congress on Parkinson's Disease and Related Disorders*. Geneva, Switzerland; December 2013.
- Plasma Sphingolipids Are Associated with Neuroimaging Measures of Amyloid-Beta and Neurodegeneration. *2nd International Workshop on Molecular Medicine of Sphingolipids*. Kloster Banz, Germany; October 2014.
- Predicting the Risk of Mild Cognitive Impairment in the Mayo Clinic Study of Aging. *American Academy of Neurology Annual Meeting*, Washington, DC; April 2015.
- Plasma Ceramides and Glucosylceramides Predict Cognitive Decline Among Cognitively Normal Parkinson's Disease Patients. *3rd International Conference on the Molecular Medicine of Sphingolipids*, French Lick, Indiana; September 2016.
- Plasma Ceramide to Glucosylceramide Ratio is Associated with Parkinson's Disease (PD) Severity and Predicts Cognitive Decline Among Cognitively Normal PD Patients without GBA Mutations. *The 13th International Conference on Alzheimer's & Parkinson's Diseases - AD/PD*, Vienna, Austria; March 2017.
- Plasma Phospho-Tau181 Increases with Alzheimer's Disease Clinical Severity, Correlates with Tau-PET and Predicts Elevated Brain Amyloid. *Advances in Alzheimer's and Parkinson's Therapies an AAT-AD/PD Focus Meeting*, Torino, Italy; March 2018.

- Understanding Sex Differences in the Prevalence, Incidence, and Risk Factors of Alzheimer's Disease. Session 20: Women and Alzheimer's Disease: A Scientific update from the SWHR Interdisciplinary Panel on Alzheimer's Disease. *Organization for the Study of Sex Differences Annual Meeting*, Atlanta, GA; May 2018.
- Plasma Phospho-Tau181 Increases with Alzheimer's Disease Clinical Severity and Correlates with Tau-PET and Predicts Elevated Brain Amyloid. *Mayo Clinic-Karolinska Institute Meeting*, Rochester, MN; September, 2018
- Comparisons of Plasma and CSF Neurofilament for Change in Neuroimaging Measures and Cognition. *AD/PD 2019. The 14th International Conference on Alzheimer's & Parkinson's Diseases*, Lisbon, Portugal; March 2019.
- Sex and Gender Differences in Dementia and Depression- Do They Exist and Why Does It Matter? *International Association of Gerontology and Geriatrics European Region Congress (IAGG-ER) 2019*. Gothenburg, Sweden; May 2019.
- Comparison of Variables Associated with CSF Neurofilament: Total-Tau and Neurogranin in a Community-Based Study. *Alzheimer's Association International Conference*, Los Angeles, CA; July 2019.

Abstracts

1. Donny EC, Caggiula AR, Jacobs KS, Shaida P, **Mielke MM**. The role of dose and feeding schedule on the acquisition of IV nicotine self-administration in rats. Society for Research on Nicotine and Tobacco. Washington, DC, 1996.
2. Donny ED, Caggiula AR, **Mielke MM**, Strong S, Rose C, Ploskina TM, Jacobs KS, Shupanko CD. Use of progressive ratio schedules in nicotine self-administration. Society for Neuroscience Conference. November 1997; Abstract #103.8.
3. Donny EC, Caggiula AR, Shupenko CD, **Mielke MM**, Booth S, Hoffman AS, Imerito CA, Rose C, McCallum SC. Nicotine self-administration in male and female rats on fixed and progressive ratio schedules of reinforcement. Society for Neuroscience Conference. Los Angeles, November 1998.
4. Donny EC, Caggiula AR, Rose C, Jacobs KS, **Mielke MM**, Strong S. Nicotine self-administration using a progressive ratio schedule of reinforcement. Society for Research on Nicotine and Tobacco. Nashville, 1998.
5. Donny EC, Caggiula AR, Gharib M, Maldovan V, Booth S, Sved AF, **Mielke MM**, Hoffman AS, White AR, Host CK Jr. Differential effects of self-administered and yoked nicotine on blood pressure and heart rate in rats using telemetry implants. Society for Neuroscience Conference. Miami, 1999.
6. Donny EC, Caggiula AR, Rowell PP, Gharib M, Maldovan V, Booth S, Hoffman A, **Mielke M**, McCallum S. Nicotinic receptor binding and plasma and brain nicotine levels following nicotine self-administration in male and female rats. Society for Neuroscience Conference. New Orleans, 2000.
7. Zandi PP, Khachaturian A, Breitner J, **Mielke MM**, Sparks DL. Statins and dementia—Does blood brain barrier permeability matter? International Conference on Alzheimer Disease. Stockholm, Sweden, July 2002.
8. **Mielke MM**, Zandi P, Sjögren M, Steen B, Skoog I. Low, not high, serum total cholesterol and phospholipids associated with increased risk of dementia: a 20-year longitudinal study. Vascular, Behavioural and Cognition (VAS-COG) Conference. Göteborg, Sweden, August 2003.
9. **Mielke MM**, Zandi P, Gustafson D, Sjögren K, Skoog I. High serum total cholesterol in mid- and late-life associated with incident dementia in younger, but not older cohorts of women. International Conference of Alzheimer Disease. Philadelphia, July 2004.
10. Rosenberg P, **Mielke MM**, Samus QM, Rosenblass A, Baker A, Brandt J, Rabins PV, Lyketsos CG. Predictors of nursing home placement in assisted living residents. Academy of Psychosomatics Annual Meeting. Marco Island, November 2004.

11. Zandi PP, **Mielke MM**, Gustafson D, Sjögren M, Östling S, Steen B, Skoog I. Free fatty acids and dementia. Vascular, Behavioural and Cognition (VAS-COG) Conference. Florence, June 2005.
12. Rosenberg PB, **Mielke MM**, Xue Q-L, Fried LP, Carlson MC. IL-6 serum levels, vascular risk factors and mood in a longitudinal study of older women: the Women's Health and Aging Study II. Vascular, Behavioural and Cognition (VAS-COG) Conference. Florence, June 2005.
13. **Mielke MM**, Xue Q-L, Rosenberg PB, Fried LP, Carlson MC. Serum total cholesterol associated with speed of processing, not memory: the Women's Health and Aging Study II. Vascular, Behavioural and Cognition (VAS-COG) Conference. Florence, June 2005.
14. Zandi PP, **Mielke MM**, Shao H, Guo X, Waern M, Sacuiu S, Ostling S, Gustafson D, Skoog I. The association of cholesterol with dementia over time in the prospective population study of women in Gothenburg, Sweden. 10th International Conference on Alzheimer's Disease and Related Disorders. Madrid, July 2006. *Alzheimers Dement* 2006;2(3 Suppl):S43-4.
15. **Mielke MM**, Rosenberg P, Tschanz J, Cook L, Corcoran C, Norton M, Welsh-Bohmer KA, Breitner JC, Lyketsos C, and the Cache County Study. Vascular risk factors and functional decline in dementia. 10th International Conference on Alzheimer's Disease and Related Disorders. Madrid, July 2006. *Alzheimers Dement* 2006;2(3 Suppl):S142.
16. Tschanz J, Cook L, Corcoran C, Norton M, **Mielke MM**, Rosenberg P, Buckley T, Clay C, Welsh-Bohmer KA, Breitner JC, Lyketsos C, and the Cache County Study. Vascular factors and the rate of cognitive decline in dementia. The Cache County Study. 10th International Conference on Alzheimer's Disease and Related Disorders. Madrid, July 2006. *Alzheimers Dement* 2006;2(3 Suppl):S270.
17. Tschanz J, Corcoran C, Norton M, **Mielke M**, Rabins P, Treiber K, Welsh-Bohmer KA, Breitner J, Lyketsos C. Rate of cognitive and functional decline in Alzheimer's disease in the Cache County population. International Neuropsychological Society Conference. Portland, February 2007.
18. **Mielke MM**, Haughey N, Bandaru VVR, Carlson MC, Rabins PV, Lyketsos CG. Development of blood-based lipid biomarkers for Alzheimer's disease prevention. American Association for Geriatric Psychiatry Annual Meeting. New Orleans, March 2007.
19. **Mielke MM**, Tschanz J, Norton M, Corcoran C, Rabins P, Steinberg M, Carlson M, Green R, Breitner JCS, Welsh-Bohmer K, Lyketsos CG. Use of acetylcholinesterase inhibitors and memantine in a population-based study of incident AD cases: prevalence of use, characteristics, and relation to mortality. Alzheimer Prevention Conference. Washington, DC, June 2007.
20. **Mielke MM**, George M, Kozauer N, Toroney J, Bandeen-Roche K, Chan G, vanZijl P, Pekar J, Mori S, Lyketsos CG, Albert M. Regionally specific diffusion tensor imaging measures in Alzheimer's disease, MCI, and controls. Alzheimer Prevention Conference. Washington, DC, June 2007.

21. **Mielke MM**, Tschanz J, Hayden KM, Rosenberg PB, Corcoran C, Norton M, Rabins PV, Green RC, Welsh-Bohmer KA, Breitner JCS, Munger R, Lyketsos CG. Interaction between APOE ϵ 4 and vascular factors predict rate of cognitive and functional decline in Alzheimer's disease. Vascular, Behavioural and Cognition (VAS-COG) Conference. San Antonio, July 2007.
22. **Mielke MM**, Haughey N, Bandaru VVR, Rabins PV, Lyketsos CG, Carlson MC. Serum sphingomyelins and ceramides predict development of memory impairment in a population-based longitudinal study. International College of Geriatric Psychoneuropharmacology (ICGP) Conference. San Diego, November 2007.
23. Tschanz J, Cook L, Corcoran C, Norton M, **Mielke M**, Rabins P, Welsh-Bohmer KA, Treiber K, Buckley T, Breitner JCS, Lyketsos C. Gender differences in the trajectory of cognitive decline in Alzheimer's disease in the Cache County population. 36th Annual Meeting of the International Neuropsychological Society. Waikola, HI, February 2008. *J Int Neuropsychol Soc* 2008;14(S1):220.
24. Tschanz J, Corcoran C, Shao H, Zandi PP, Norton M, **Mielke M**, Green RC, Rabins PV, Steinberg M, Welsh-Bohmer KA, Breitner JCS, Lyketsos CG. Association between neuropsychiatric symptoms and mortality in a population-based sample of incident Alzheimer's disease and other dementias: the Cache County Dementia Progression Study. 11th International Conference on Alzheimer's Disease and Related Disorders. Chicago, IL, July 2008. *Alzheimers Dement* 2008;4(4 Suppl):T132.
25. **Mielke MM**, Bandaru VVR, Haughey NJ, Schech SA, Chu M, Zerrate M, Carlson MC, Albert M, Bandeen-Roche K, Lyketsos CG. Plasma ceramides are altered early in the course of AD. 11th International Conference on Alzheimer's Disease and Related Disorders. Chicago, IL. July 2008. *Alzheimers Dement* 2008;4(4 Suppl):T324.
26. Schneider EB†, **Mielke MM**, Yasar S, Carlson MC. Statin use is not associated with cognitive impairment in a cohort of older women. 12th International Conference on Alzheimer's Disease and Related Disorders. Vienna, Austria, June 2009. *Alzheimers Dement* 2009;5(4 Suppl):e13-4.
27. Tschanz JT, Corcoran C, Green RC, Munger RM, **Mielke MM**, Norton MC, Rabins PV, Welsh-Bohmer KA, Buckley T, Breitner JC, Lyketsos CG. Interaction between C-reactive protein level and APOE genotype in predicting rate of progression in Alzheimer's disease. The Cache County Dementia Progression Study. 12th International Conference on Alzheimer's Disease and Related Disorders. Vienna, Austria, June 2009. *Alzheimers Dement* 2009;5(4 Suppl):192.
28. **Mielke MM**, Bandaru VVR, Haughey NJ, Miller MI, Mori S, Schech S, Albert M, Lyketsos CG. Plasma ceramides predict hippocampal atrophy and progression in memory impairment among amnesic mild cognitive impairment. 12th International Conference on Alzheimer's Disease and Related Disorders. Vienna, Austria, June 2009. *Alzheimers Dement* 2009;5(4 Suppl):351-2.

29. Oh ES, **Mielke MM**, Rosenberg PB, Mehta PD, Lyketsos CG. Plasma amyloid level as a predictor of progression to Alzheimer's disease from amnesic mild cognitive impairment (aMCI). 13th International Conference on Alzheimer's Disease and Related Disorders. Honolulu, July 2010.
30. **Mielke MM**, Okonko OC, Mori S, Oishi K, Miller MI, Ceritoglu C, Brown T, Albert M, Lyketsos CG. Fornix fractional anisotropy and hippocampal volume, alone and in combination, predict conversion from MCI to AD. 13th International Conference on Alzheimer's Disease and Related Disorders, Imaging Consortium. Honolulu, July 2010. *Alzheimers Dement* 2010;6(4 Suppl):S16.
31. **Mielke MM**, Okonko OC, Mori S, Oishi K, Miller MI, Ceritoglu C, Brown T, Albert M, Lyketsos CG. Fornix fractional anisotropy and hippocampal volume, alone and in combination, predict conversion from MCI to AD. 13th International Conference on Alzheimer's Disease and Related Disorders, Imaging Consortium. Honolulu, July 2010. *Alzheimers Dement* 2010;6(4 Suppl):S288.
32. Bandaru VVR, **Mielke MM**, Chu M, Lentz M, McArthur JC, Sacktor N, Chang L, Ernst T, Wojna V, Pardo C, Pomper M, the CHARTER Group, and Haughey N. CSF sphingolipids are biomarkers for neurocognitive status in HIV-infected patients. 10th International Symposium on Neurovirology. Milan, Italy, October 2010.
33. Nowrangi MA†, **Mielke MM**, Oishi K, Smith G, Albert M, Mori S, Lyketsos CG. Longitudinal analysis of fractional anisotropy in patients with mild cognitive impairment and Alzheimer's disease. American Neuropsychiatric Association (ANPA) Meeting. Denver, March 2011.
34. Tighe S†, Oishi K, Mori S, Smith G, Albert M, Lyketsos CG, **Mielke MM**. Regionally-specific diffusion tensor imaging correlates of neuropsychiatric symptoms in mild cognitive impairment and Alzheimer's disease. Society of Biological Psychiatry's 66th Annual Meeting. San Francisco, May 2011. *Biol Psychiatr* 2011;69(Suppl 9):79S.
35. Oh E, Jain A, Fedarko NS, Rosenberg PB, Lyketsos CG, Yu Q, **Mielke MM**, Parker D. Plasma neopterin levels in a MCI and Alzheimer's disease. Alzheimer's Association International Conference, Paris, France. *Alzheimers Dement* 2011 July;7(4 Suppl):S143.
36. **Mielke MM**, Haughey NJ, Bandaru VVR, Weinberg DD, Zaidi N, Pavlik V, Doody RS, Lyketsos CG. Plasma sphingomyelin is associated with cognitive progression in Alzheimer's disease. Alzheimer's Association International Conference, Paris, France. *Alzheimers Dement* 2011 July;7(4 Suppl):S322.
37. Rabins PV, Schwartz S, Tschanz J, Corcoran C, Black B, Fauth E, **Mielke M**, Lyketsos C. Risk factors for severe dementia from a population-based sample of incident Alzheimer's disease: the Cache County Dementia Progression Study. Alzheimer's Association International Conference, Paris, France. *Alzheimers Dement* 2011 July;7(4 Suppl):S356.
38. **Mielke MM**, Leoutsakos J, Tschanz J, Green RC, Tripodis Y, Corcoran C, Norton M, Lyketsos C. Interaction between vascular factors and the APOE E4 allele in predicting rate of

- progression in Alzheimer's dementia. Alzheimer's Association International Conference, Paris, France. *Alzheimers Dement* 2011 July;7(4 Suppl):S598.
39. Tripodis Y, **Mielke MM**, Sherva R, Corcoran C, Tschanz J, Lyketsos C, Hendrix S, Green R. Comparison of statistical models estimating rate of decline in a population-based cohort of persons with Alzheimer's disease. The Cache County Study. Alzheimer's Association International Conference, Paris, France. *Alzheimers Dement* 2011 July;7(4 Suppl):S602.
 40. Tripodis Y, **Mielke MM**, Sherva R, Corcoran C, Tschanz J, Welsh-Bohmer K, Breitner J, Lyketsos C, Green R. Gender modifying effect between APOE and cognitive decline in Alzheimer's disease: the Cache County Dementia Progression Study. Alzheimer's Association International Conference, Paris, France. *Alzheimers Dement* 2011 July;7(4 Suppl):S601-2.
 41. **Mielke MM**, Bandaru VR, Xia J, Haughey N, Yasar S, Albert M, Varma V, Harris G, Schneider E, Bandeen-Roche K, Fried L, Lyketsos C, Carlson M. Serum ceramides predict incident Alzheimer's disease: the Women's Health and Aging Study (WHAS) II. Alzheimer's Association International Conference, Paris, France. *Alzheimers Dement* 2011 July;7(4 Suppl):S607.
 42. **Mielke M**, Tschanz J, Lyketsos C, Norton M, Corcoran C, Leoutsakos JM, Green R, Welsh-Bohmer K, Rabins P, Breitner J, Han D, Schwartz S. Clinical effectiveness of FDA-approved medications for Alzheimer's disease varies between women and men. International Society of Behavioural and Cognitive Vascular Disorders (VAS-COG) Conference, Lille, France, September 2011.
 43. **Mielke MM**, Wiste H, Wiegand S, Knopman DS, Lowe V, Roberts RO, Swenson-Dravis DM, Boeve BF, Petersen RC, Jack CR Jr. Predictors of amyloid accumulation in a population-based study of cognitively normal elderly controls. Human Amyloid Imaging Conference, Miami, January 2012. HAI Conference Book, page 20.
 44. Haughey NJ, **Mielke MM**, Bandaru VVR, Sacktor N, Grant I, Letendre S, Fox H, Chang L, Wozna V, Pardo C, McArthur JC. A lipidomic analysis of CSF from HIV-infected subjects identifies metabolites that predict change in cognitive performance. 19th Conference on Retroviruses and Opportunistic Infections, Seattle, Washington, March 2012.
 45. Knopman D, Roberts R, Pankratz V, Geda Y, **Mielke M**, Cha R, Boeve B, Tangalos E, Rocca W, Petersen R. Risk of dementia in persons who refused to participate in a longitudinal study of cognitive aging. American Academy of Neurology Annual Meeting, New Orleans, April 2012. *Neurology* 2012;78(1):P01.083.
 46. Geda Y, Ragossnig M, Roberts LA, Roberts R, Pankratz V, Christianson T, **Mielke M**, Boeve B, Tangalos E, Petersen R. Caloric intake, aging, and mild cognitive impairment: a population-based study. American Academy of Neurology Annual Meeting, New Orleans, April 2012. *Neurology* 2012;78(1):P04.211.
 47. Roberts R, Geda Y, Knopman D, Cha R, Pankratz V, **Mielke M**, Boeve B, Tangalos E, Ivnik R, Rocca W, Petersen R. Does progression and mortality in mild cognitive impairment vary in

- men and women? The Mayo Clinic Study of Aging. American Academy of Neurology Annual Meeting, New Orleans, April 2012. *Neurology* 2012;78(1):P07.155.
48. Oishi K, **Mielke M**, Albert M, Lyketsos CG, Mori S. Neuroanatomical correlates of cognitive and neuropsychiatric worsening in Alzheimer's disease: whole-brain longitudinal DTI analysis. American Academy of Neurology Annual Meeting, New Orleans, April 2012. *Neurology* 2012;78(1):P03.092.
 49. **Mielke M**, Haughey NJ, Xia J, Bandaru VR, Fried LP, Yasar S, Albert M, Varma V, Harris G, Schneider EB, Rabins PV, Bandeen-Roche K, Lyketsos CG, Carlson MC. Serum ceramides predict incident Alzheimer's disease: the Women's Health and Aging Study (WHAS) II. Gordon Research Conference on Glycolipid and Sphingolipid Biology, Barga Italy, April 2012.
 50. Oishi K, **Mielke MM**, Miller MI, Albert MS, Lyketsos CG, Mori S. Atlas-based quantification with machine-learning based characterization of DTI from patients with mild cognitive impairment and Alzheimer's disease. 20th Annual Meeting – The International Society for Magnetic Resonance in Medicine, Melbourne, Australia, May 2012.
 51. **Mielke MM**, Wiste HJ, Weigand SD, Knopman DS, Lowe VJ, Roberts RO, Geda YE, Swenson-Dravis DM, Boeve BF, Senjem ML, Vemuri P, Petersen RC, Jack CR Jr. Identification of non-invasive screening variables for the prediction of amyloid accumulation in a population-based study of cognitively normal elderly individuals. Alzheimer's Association International Conference, Vancouver, BC, Canada. *Alzheimers Dement* 2012 July;8(4 Suppl):246-7.
 52. **Mielke MM**, Wiste HJ, Weigand SD, Knopman DS, Lowe VJ, Roberts RO, Swenson DM, Boeve BF, Geda YE, Senjem ML, Vemuri P, Petersen RC, Jack CR Jr.. Identification of non-invasive screening variables for the prediction of amyloid accumulation in a population-based study of cognitively normal elderly individuals. Alzheimer's Imaging Consortium. 2012; Abstract no. IC-P-038. *Alzheimers Dement* 2012 July;8(4 Suppl):25-6.
 53. Roberts R, Przybelski S, Weigand S, Kantarci K, Preboske G, Senjem M, Murphy M, Geda Y, Knopman D, **Mielke M**, Rocca W, Jack C, Petersen R. Vascular risk factors in midlife increase structural MRI abnormalities in late life: the Mayo Clinic Study of Aging. Alzheimer's Association International Conference, Vancouver, BC, Canada. *Alzheimers Dement* 2012 July;8(4 Suppl):88-89.
 54. Knopman D, Jack C, Wiste H, Weigand S, Vemuri P, Lowe V, Kantarci K, Ivnik R, Boeve B, Roberts R, **Mielke M**, Petersen R. Clinical outcomes for stages of NIA-AA preclinical Alzheimer's disease. Alzheimer's Association International Conference, Vancouver, BC, Canada. *Alzheimers Dement* 2012 July;8(4 Suppl):102.
 55. Rabins P, Schwartz S, Tschanz J, Corcoran C, Black B, Fauth E, **Mielke M**, Lyketsos C. Neuropsychiatric symptoms at baseline predict shorter time to severe dementia in a population-based sample of incident Alzheimer's disease: the Cache County Dementia Progression Study. Alzheimer's Association International Conference, Vancouver, BC, Canada. *Alzheimers Dement* 2012 July;8(4 Suppl):126-7.

56. Lanctot K, Saleem M, Vankata V, Bandaru R, Herrmann N, Swardfager W, **Mielke M**, Haughey N, Oh P. Plasma ceramide concentrations are associated with change in verbal memory performance in patients undertaking cardiac rehabilitation. Alzheimer's Association International Conference, Vancouver, BC, Canada. *Alzheimers Dement* 2012 July;8(4 Suppl):277.
57. **Mielke M**, Savica R, Drubach D, Christianson T, Roberts R, Knopman D, Pankratz V, Boeve B, Rocca W, Petersen R. Slow gait predicts cognitive decline: a population-based cohort study. Alzheimer's Association International Conference, Vancouver, BC, Canada. *Alzheimers Dement* 2012 July;8(4 Suppl):318.
58. Petersen R, Knopman D, Jack C Jr, Wiste H, Weigand S, Vemuri P, Lowe V, Kantarci K, Gunter J, Senjem M, Ivnik R, Boeve B, Roberts R, **Mielke M**. NIA-AA MCI criteria applied to the Mayo Clinic Study of Aging. Alzheimer's Association International Conference, Vancouver, BC, Canada. *Alzheimers Dement* 2012 July;8(4 Suppl):622.
59. Gustafson DR, Bäckman K, Waern M, Östling S, Guo X, **Mielke MM**, Zandi PP, Bengtsson C, Skoog I. Epidemiological evidence for lipid-based dementia prevention: the lipididiet approach. 20th Annual Meeting of the Israel Society for Neuroscience, Sheba Israel, December 2011. *J Mol Neurosci* November 2012;48:S45.
60. Jack C, Wiste H, Weigand S, Jones D, Vemuri P, Lowe V, Pankratz V, **Mielke M**, Knopman D, Petersen R. Characteristics of incident amyloid PET positivity. Human Amyloid Imaging Conference, Miami, January 2013.
61. Vemuri P, Lesnick T, Przybelski S, Knopman D, Machulda M, **Mielke M**, Lowe V, Roberts R, Geda Y, Senjum M, Gunter J, Petersen R, Jack C. Effect of intellectual lifestyle and AD biomarkers on rate of cognitive decline: Mayo Clinic Study of Aging. Human Amyloid Imaging Conference, Miami, January 2013.
62. **Mielke MM**, Wiste HJ, Savica R, Leibson CL, Weigand SD, Knopman DS, Lowe VJ, Vemuri P, Roberts RO, Petersen RC, Jack CR Jr. Association between head trauma, amyloid, and neurodegeneration in a population-based study of cognitively normal and mild cognitive impairment participants. Human Amyloid Imaging Conference, Miami, January 2013.
63. **Mielke MM**, Maetzler W, Haughey NJ, Bandaru VVR, Savica R, Deuschle C, Gräber S, Schleicher E, Berg D, Liepelt-Scarfone I. Plasma monohexylceramides and ceramides are elevated in Parkinson's disease non-GBA mutation carriers with cognitive impairment. 11th International Conference on Alzheimer's & Parkinson's Diseases (AD/PD), Florence, Italy, March 2013.
64. Knopman D, Jack C, Wiste H, Weigand S, Vemuri P, Lowe V, Kantarci K, Senjem M, Gunter J, **Mielke M**, Roberts R, Boeve B, Petersen R. Acceleration of brain injury biomarker abnormalities in cognitively normal elderly with beta-amyloidosis. American Academy of Neurology 65th Annual Meeting, San Diego, March 2013. *Neurology* 2013;80(7 Suppl):IN3-1.001.

65. Roberts RO, **Mielke MM**, Cha RH, Pankratz VS, Knopman DS, Geda YE, Boeve BF, Kantarci K, Rocca WA, Jack CR, Petersen RC, Lowe VJ. Diabetes is associated with global and regional hypometabolism among elderly persons: the Mayo Clinic Study of Aging. American Academy of Neurology 65th Annual Meeting, San Diego, March 2013. *Neurology* 80(7 Suppl):P07.137.
66. Wanzek J, Schwartz S, Sanders C, Gilbert M, Munger R, Marano C, **Mielke M**, Lyketsos C, Tschanz J. Diabetes and metabolic syndrome in predicting severe dementia, institutionalization and mortality in a population-based sample of Alzheimer's disease: the Cache County Dementia Progression Study. 34th Annual Meeting & Scientific Sessions of the Society of Behavioral Medicine, San Francisco, March 2013.
67. Rovinski R, Herrmann N, Saleem M, Swardfager W, **Mielke M**, Haughey N, Oh PI, Lanctot KL. The relationship between very long chain plasma ceramides and anxiety in coronary artery disease. *Biol Psychiatry* 2013;73(9):103S.
68. **Mielke MM**, Wiste HJ, Weigand SD, Vemuri P, Lowe V, Machulda M, Roberts RO, Knopman DS, Kantarci K, Boeve B, Geda YE, Petersen RC, Jack CR Jr. CogState computerized testing is associated with amyloid and FDG-PET: implications for secondary preventive trials. Alzheimer's Imaging Consortium, Boston, July 2013. *Alzheimers Dement* 2013;9(4 Suppl):24.
69. Vemuri P, Wiste HJ, Weigand SD, Knopman DS, **Mielke MM**, Machulda MM, Lowe VJ, Petersen RC, Jack CR Jr. Effect of APOE and family history on AD imaging biomarkers in cognitively normal subjects. Alzheimer's Imaging Consortium. Boston, July 2013. *Alzheimers Dement* 2013;9(4 Suppl):80.
70. **Mielke MM**, Haughey NJ, Bandaru VVR, Zetterberg H, Johnson SC, Gleason CE, Blazel HM, Puglielli L, Sager MA, Asthana S, Carlsson CM. CSF sphingolipid levels correlate with CSF amyloid-beta and tau. Alzheimer's Association International Conference, Boston. *Alzheimers Dement* 2013 July;9(4 Suppl):200-1.
71. Trushina E, Dutta T, Persson X-M, **Mielke M**, Petersen R. Identification of altered metabolic pathways in plasma and CSF in mild cognitive impairment and Alzheimer's disease using metabolomics. Alzheimer's Association International Conference, Boston. *Alzheimers Dement* 2013 July;9(4 Suppl):243.
72. Vemuri P, Wiste HJ, Weigand SD, Knopman DS, **Mielke MM**, Machulda MM, Lowe VJ, Petersen RC, Jack CR Jr. Effect of APOE and family history on AD imaging biomarkers in cognitively normal subjects. Alzheimer's Association International Conference, Boston. *Alzheimers Dement* 2013 July;9(4 Suppl):257.
73. Jones DT, Wiste HJ, Weigand SD, Knopman DS, Lowe V, Vemuri P, **Mielke MM**, Pankratz VS, Petersen RC, Jack CR Jr. Increased posterior default mode network connectivity co-occurs with incident amyloidosis prior to declining in dementia. Alzheimer's Association International Conference, Boston. *Alzheimers Dement* 2013 July;9(4 Suppl):522.

74. **Mielke MM**, Wiste HJ, Savica R, Leibson C, Weigand S, Knopman DS, Vemuri P, Roberts RO, Lowe V, Geda Y, Petersen RC, Jack C. Association between head trauma, amyloid and neurodegeneration in a population-based study of cognitively normal and mild cognitive impairment participants. Alzheimer's Association International Conference, Boston. *Alzheimers Dement* 2013 July;9(4 Suppl):23-24.
75. **Mielke MM**, Wiste HJ, Savica R, Leibson C, Weigand S, Knopman DS, Vemuri P, Roberts RO, Lowe VJ, Geda Y, Petersen RC, Jack C. Association between head trauma, amyloid, and neurodegeneration in a population-based study of cognitively normal participants and participants with mild cognitive impairment. Alzheimer's Association International Conference, Boston. *Alzheimers Dement* 2013 July;9(4 Suppl):616.
76. Vemuri P, Lesnick T, Przybelski S, Knopman D, Machulda M, **Mielke M**, Roberts R, Geda Y, Gregg B, Senjum M, Gunter J, Petersen R, Jack C. Effect of intellectual lifestyle and Alzheimer's disease biomarkers on rate of cognitive decline: Mayo Clinic Study of Aging. Alzheimer's Association International Conference, Boston. *Alzheimers Dement* 2013 July;9(4 Suppl):635.
77. Knopman D, Jack C, Wiste H, Weigand S, Vemuri P, **Mielke M**, Roberts R, Machulda M, Lowe V, Boeve B, Kantarci K, Petersen R. Combinations of amyloid and neurodegeneration biomarkers have a differential impact on cognition. Alzheimer's Association International Conference, Boston. *Alzheimers Dement* 2013 July;9(4 Suppl):682-3.
78. Tschanz J, Schwartz S, Gilbert M, Wanzek J, Sanders C, **Mielke MM**, Corcoran C, Norton M, Lyketsos C. Vascular factors as predictors of severe dementia and mortality in Alzheimer's disease: the Cache County Dementia Progression Study. Alzheimer's Association International Conference, Boston. *Alzheimers Dement* 2013 July;9(4 Suppl):738.
79. Machulda MM, Pankratz VS, Christianson T, **Mielke MM**, Roberts R, Ivnik RJ, Rocca WA, Boeve BF, Knopman DS, Petersen RC. Practice effects and longitudinal cognitive change in normal aging vs. incident mild cognitive impairment and dementia in the Mayo Clinic Study of Aging. Alzheimer's Association International Conference, Boston. *Alzheimers Dement* 2013 July;9(4 Suppl):793.
80. Bandaru VVR, **Mielke MM**, McArthur JC, Grant I, Letendre S, Haughey NJ. Perturbation of eicosanoids are associated with neuroinflammation in HAND. International Society for NeuroVirology, Washington, DC, October 29-November 2, 2013. *J Neurovirol* 2013;19:S8.
81. Dickens AM, Anthony DC, **Mielke MM**, Claridge TDW, Deutsch R, Grant I, Letendre S, Marcotte T, McArthur JC, Haughey NJ. A metabolomics approach to the differentiation of cognitive states of HIV patients. International Society for NeuroVirology, Washington, DC, October 29-November 2, 2013. *J Neurovirol* 2013;19:S25.
82. **Mielke MM**, Bandaru VVR, Han D, An Y, Resnick SM, Ferrucci L, Haughey NJ. Factors affecting longitudinal trajectories of plasma ceramide and metabolite species from mid- to late-life: the Baltimore Longitudinal Study on Aging. Gordon Research Conference on Glycolipid and Sphingolipid Biology, Ventura, CA, January 12-17, 2014.

83. **Mielke MM**, Weigand SD, Wiste HJ, Vemuri P, Lowe V, Machulda MM, Roberts RO, Knopman DS, Kantarci K, Boeve BF, Jack CR Jr, Petersen RC. CogState computerized testing and neurodegenerative and amyloid imaging: implications for secondary preventive trials. Human Amyloid Imaging Conference, Miami, FL, January 15-17, 2014. HAI Conference Book, page 87.
84. Lotto-Newquist B, Acosta J, Roberts RO, **Mielke MM**, Christianson T, Pankratz VS, Stokin GB, Petersen RC, Geda YE. Depression, APOEε4, and the risk of incident mild cognitive impairment: a population-based study. American Neuropsychiatric Association Meeting. February 15-18, 2014. *J Neuropsychiatry Clin Neurosci* 2014;26(2):22-3.
85. Hollas CN†, Geda YE, Petersen RC, **Mielke MM**. Is exercise in early- and mid-adulthood associated with cognition in mid-life? American Association of Geriatric Psychiatry Annual Conference, Orlando, Florida, March 14-17, 2014. *Am J Geriatr Psychiatry* 2014; 22(3, Suppl):S102-3.
86. Dickens AM, Anthony DC, **Mielke MM**, Claridge TDW, Deutsch R, Grant I, Letendre S, Marcotte T, McArthur JC, Haughey NJ. Longitudinal changes in CSF metabolites as a prognostic marker for cognition in HIV-infected patients. *J Neuroimmune Pharmacol* 2014 Mar;9(1):13.
87. Savica R, Dyer RB, **Mielke MM**, Klassen BT, Boeve BB, Klee GG, Ahlskog JE, Rocca WA, Ramirez-Alvarado M. α-synuclein in red blood cells is a potential diagnostic biomarker for Parkinson's disease. American Academy of Neurology Annual Meeting, Philadelphia, PA, April 26-May 3, 2014. *Neurology* 82(10 Suppl):S37.006.
88. Pink A, Acosta J, Roberts R, **Mielke M**, Christianson T, Pankratz V, Stokin GB, Boeve B, Geda Y. Neuropsychiatric symptoms, ApoE4 and the risk of incident dementia: The Mayo Clinic Study of Aging. *Neurology* 2014;82(10 Suppl):P3.215.
89. Knopman DS, Jack CR Jr, Wiste HJ, Lundt ES, Weigand SD, Vemuri P, Lowe VJ, Kantarci K, Gunter JL, Senjem ML, **Mielke MM**, Roberts RO, Boeve BF, Petersen RC. FDG PET, aging and APOE genotype in cognitively normal persons. American Academy of Neurology Annual Meeting, Philadelphia, PA, April 26-May 3, 2014. *Neurology* 2014, 82(10 Suppl):S8.006.
90. Roberts RO, Knopman DS, Przybelski SA, **Mielke MM**, Kantarci K, Pankratz, VS, Geda YE, Boeve BB, Rocca WA, Petersen RC, Jack CR Jr. Association of Type 2 diabetes cognitive impairment is mediated by brain atrophy. American Academy of Neurology Annual Meeting, Philadelphia, PA, April 26-May 3, 2014. *Neurology* 2014;82(10 Suppl):S58.005.
91. Vassilaki M†, Roberts RO, Cha RH, Pankratz VS, Geda YE, **Mielke MM**, Knopman D, Petersen RC. Mortality is greater in persons with non-amnestic than with amnestic mild cognitive impairment. The Mayo Clinic Study of Aging. American Academy of Neurology Annual Meeting, Philadelphia, PA, April 26-May 3, 2014. *Neurology* 2014;83(2):e38.
92. Vassilaki M†, Roberts RO, Cha RH, Pankratz VS, Geda YE, **Mielke MM**, Knopman D, Petersen RC. Mortality is greater in persons with non-amnestic than with amnestic mild

cognitive impairment. The Mayo Clinic Study of Aging. Mayo Clinic Young Investigator Symposium, Rochester, MN, March 2014.

93. Roberts RO, Cha RH, Geda YE, Pankratz VS, Boeve BF, **Mielke MM**, Machulda M, Knopman DS, Petersen RC. Predictors and protective factors for cognitive impairment in very old cognitively normal persons. Alzheimer's Association International Conference. Copenhagen, Denmark. *Alzheimers Dement* 2014 July;10(4 Suppl):P151.
94. Machulda MM, Hagen C, **Mielke MM**, Christianson T, Pankratz VS, Jack CR, Lowe V, Ivnik RJ, Roberts RO, Knopman D, Petersen RC. Practice effects and longitudinal cognitive change as a function of amyloid and neurodegenerative imaging biomarkers in cognitively normal individuals. Alzheimer's Association International Conference. Copenhagen, Denmark. *Alzheimers Dement* 2014 July;10(4 Suppl):P186.
95. Boeve B, Lowe V, Kantarci K, Graff-Radford J, Jones D, Peller P, **Mielke MM**, Ferman T, Silber M, St. Louis E, Smith G, Ivnik R, Bennett J, Aakre J, Pankratz VS, Knopman D, Jack CR, Peterson RC. DaTscan findings in patients with REM sleep behavior disorder and/or cognitive impairment. Alzheimer's Association International Conference. Copenhagen, Denmark. *Alzheimers Dement* 2014 July;10(4 Suppl):P262.
96. Jack CR, Wiste HJ, Weigand SD, Knopman DS, Vemuri P, **Mielke MM**, Lowe VJ, Senjem ML, Gunter JL, Machulda MM, Gregg BE, Pankratz VS, Rocca WA, Petersen RC. Sex and APOE effects on memory performance, neurodegeneration and β -amyloid across the adult lifespan. Alzheimer's Association International Conference. Copenhagen, Denmark. *Alzheimers Dement* 2014 July;10(4Suppl):P228-9.
97. Boeve A†, **Mielke MM**, Geda YE, Roberts RO, Ivnik R, Machulda M, Fields J, Pankratz VS, Boeve B, Knopman D, Rocca W, Petersen RC. Sleep-related features and performance on a computerized cognitive battery: the Mayo Clinic Study of Aging. Alzheimer's Association International Conference. Copenhagen, Denmark. *Alzheimers Dement* 2014 July;10(4 Suppl):P430.
98. Feder NT, Bartley MM, Acosta JI, Roberts RO, Knopman DS, Christianson T, Pankratz VS, **Mielke MM**, Stokin GB, Petersen RC, Geda YE. Physical exercise and the outcome of incident dementia: the Mayo Clinic Study of Aging. Alzheimer's Association International Conference. Copenhagen, Denmark. *Alzheimers Dement* 2014 July;10(4 Suppl):P527.
99. **Mielke MM**, Hagen C, Roberts RO, Vemuri P, Machulda MM, Christianson TJ, Pankratz VS, Knopman DS, Lowe V, Jack C Jr, Petersen RC. Self- and informant-rated daily function is associated with amyloid and neurodegenerative imaging in cognitively normal individuals. Alzheimer's Association International Conference. Copenhagen, Denmark. *Alzheimers Dement* 2014 July;10(4 Suppl):P816.
100. Singh B†, **Mielke MM**, Parsaik AK, Cha RH, Roberts RO, Scanlon PD, Geda YE, Pankratz VS, Petersen RC. COPD is associated with domain-specific and global cognitive decline. U.S. Psychiatric and Mental Health Congress, Orlando, FL, September 20-23, 2014.

101. **Mielke MM**, Savica R, Ferman T, Murray M, Kantarci K, Graff-Radford N, Parisi J, Dickson D, Petersen RC, Boeve B. Plasma sphingolipids are altered in persons with autopsy-confirmed Lewy Body or Alzheimer's disease pathology and correlate with Lewy Body dementia severity. 2nd International Workshop on Molecular Medicine of Sphingolipids. Kloster Banz, Germany, October 2014.
102. **Mielke MM**, Christianson TJ, Hagen CE, Machulda MM, Roberts RO, Vemuri P, Lowe V, Knopman DS, Kantarci K, Jack CR Jr, Petersen RC. CogState trajectories over 30 months and the effect of amyloid and APOE genotype in cognitively normal individuals aged 51-71. Human Amyloid Imaging Conference, Miami, FL, January 15-16, 2015.
103. Weissgerber TL, Milic N, Niu J, White W, Miller V, **Mielke MM**, Garovic VD. Women with a history of preeclampsia demonstrate decreased glycoalyx dimensions later in life. Society for Reproductive Investigation Annual Meeting. San Francisco, CA, March 25-28, 2015.
104. Weissgerber T, Milic N, Niu JY, White W, Miller V, **Mielke M**, Garovic V. Glycoalyx damage is present several decades after affected pregnancies in women with a history of preeclampsia. *Reprod Sci* 2015;22:295A.
105. Vassilaki M†, Cha R, Geda YE, **Mielke MM**, Knopman DS, Petersen RC, Roberts RO. Mortality in mild cognitive impairment is modified by known risk factors. The Mayo Clinic study of aging. *J Am Geriatr Soc* 2015; 63(Suppl S1):S143-4.
106. Vassilaki M†, Cha R, St. Sauver J, **Mielke M**, Geda Y, Machulda M, Knopman D, Petersen R, Roberts R. Multimorbidity and increased risk of mild cognitive impairment. American Academy of Neurology Annual Meeting, Washington, DC, April 18-25, 2015. *Neurology* 2015;84:14 Suppl S16.003.
107. Bartley MM, Aakre JA, **Mielke MM**, Machulda MM, Roberts RO, Petersen RC. Successful cognitive aging in a population based study. *J Am Geriatr Soc* 2015;63:S41.
108. **Mielke M**, Pankratz V, Roberts R, Knopman D, Jack C, Geda Y, Rocca W, Petersen R. Predicting the risk of mild cognitive impairment in the Mayo Clinic Study of Aging. American Academy of Neurology Annual Meeting, Washington, DC, April 18-25, 2015. *Neurology* 2015;84:14 Suppl S16.004.
109. Ruider H, Krell-Roesch J, Stokin G, Lowe V, Roberts R, **Mielke M**, Knopman D, Christianson T, Jack C, Petersen R, Geda Y. FDG-PET of the brain and neuropsychiatric symptoms in normal cognitive aging: the Mayo Clinic Study of Aging. American Academy of Neurology Annual Meeting, Washington, DC, April 18-25, 2015. *Neurology* 2015;84(14 Suppl):S41.006.
110. Knopman D, Jack C, Lundt E, Wiste H, Weigand S, Vemuri P, Lowe V, Kantarci K, Gunter J, Senjem M, **Mielke M**, Roberts R, Boeve B, Machulda M, Petersen R. Progression of cerebral atrophy and hypometabolism in the presence of β -amyloidosis in mild cognitive impairment. American Academy of Neurology Annual Meeting, Washington, DC, April 18-25, 2015. *Neurology* 2015;84:14 Suppl S41.007.

111. Singh B†, **Mielke MM**, Parsaik AK, Cha RH, Roberts RO, Machulda M, Scanlon PD, Pankratz VS, Geda YE, Petersen RC. Longer duration of COPD is associated with domain specific and global cognitive decline. American Psychiatric Association Annual Meeting. Toronto, ON, Canada, May 16-20, 2015.
112. Lowe VJ, Tosakulwong N, Lesnick TG, Gunter JL, Senjem ML, Shuster LT, **Mielke MM**, Bailey KR, Jack CR Jr, Rocca W, Miller VM, Kantarci K. Treatment with 17 β -estradiol in postmenopausal women is associated with lower Pib-PET retention. Alzheimer's Imaging Consortium, Washington, DC. *Alzheimers Dement* 2015 July;11(7 Suppl):P31-P32.
113. Vemuri P, Przybelski SA, Lesnick TG, Knopman DS, Machulda MM, **Mielke MM**, Roberts RO, Lowe VJ, Geda YE, Rocca W, Petersen RC, Jack CR Jr. Longitudinal outcomes and profiles of distinct biomarkers clusters based on vascular disease, neurodegeneration and amyloid deposition. Alzheimer's Association International Conference, Washington, DC. *Alzheimers Dement* 2015 July;11(7 Suppl):P102.
114. Overgaard SM, Przybelski SA, Machulda MM, **Mielke MM**, Knopman DS, Lowe VJ, Petersen RC, Jack CR Jr, Vemuri P. Evidence of reduced neuronal plasticity to education in APOE4- Σ 4 carriers. Alzheimer's Association International Conference, Washington, DC. *Alzheimers Dement* 2015 July;11(7 Suppl):P195.
115. Lowe VJ, Tosakulwong N, Lesnick TG, Gunter JL, Senjem ML, Shuster LT, **Mielke MM**, Bailey KR, Jack CR Jr, Rocca W, Miller VM, Kantarci K. Treatment with 17 β -estradiol in postmenopausal women is associated with lower Pib-PET retention. Alzheimer's Association International Conference. Washington, DC. *Alzheimers Dement* 2015 July;11(7 Suppl):P217.
116. Roberts RO, Aakre J, Kremers W, **Mielke M**, Geda Y, Knopman D, Petersen R. Greater weight change per decade from midlife through late life predicts incident MCI. Alzheimer's Association International Conference, Washington, DC. *Alzheimers Dement* 2015 July;11(7 Suppl):P245.
117. Krell-Roesch J, Pink A, Roberts RO, **Mielke MM**, Christianson TJ, Knopman DS, Stokin GB, Petersen RC, Geda YE. Caloric intake and the risk of mild cognitive impairment: a population-based cohort study. Alzheimer's Association International Conference, Washington, DC. *Alzheimers Dement* 2015 July;11(7 Suppl):P246.
118. Vemuri P, Lesnick TG, Przybelski SA, Machulda MM, Knopman DS, **Mielke M**, Roberts R, Lowe VJ, Rocca W, Geda YE, Petersen RC, Jack CR Jr. Better intellectual lifestyle to keep cognitive impairment away. Alzheimer's Association International Conference, Washington, DC. *Alzheimers Dement* 2015 July;11(7 Suppl):P303-4.
119. Petersen RC, Swenson-Dravis D, Roberts RO, Edwards K, Knopman DS, **Mielke MM**. SCD in a population-based sample: progression to MCI. Alzheimer's Association International Conference, Washington, DC. *Alzheimers Dement* 2015 July;11(7 Suppl):P308-9.
120. Boeve AR†, Ferman TJ, Aakre JA, St. Louis EK, Silber MH, Machulda MM, Fields JA, Graff-Radford N, **Mielke MM**, Geda YE, Jones DT, Graff-Radford J, Knopman DS, Petersen RC, Boeve B. Excessive daytime sleepiness is comparable in behavioral variant

frontotemporal dementia and Alzheimer's disease dementia but greater in dementia with Lewy bodies. Alzheimer's Association International Conference, Washington, DC. *Alzheimers Dement* 2015 July;11(7 Suppl):P392.

121. **Mielke MM**, Machulda MM, Hagen CE, Christianson TJ, Roberts RO, Knopman DS, Vemuri P, Lowe VJ, Jack CR Jr, Petersen RC. Influence of amyloid and APOE genotype on cognitive performance in a middle-aged cohort. Alzheimer's Association International Conference, Washington, DC. *Alzheimers Dement* 2015 July;11(7 Suppl):P553.
122. Gonzalez CE, Venkatraman VK, An Y, Landman B, Bandaru VVR, Haughey NJ, Ferrucci L, **Mielke M**, Resnick SM. Plasma ceramides predict age-related differences in white matter microstructure. Alzheimer's Association International Conference, Washington, DC. *Alzheimers Dement* 2015 July;11(7 Suppl):P555-6.
123. Geda Y, Pink A, Przybelski S, Roberts R, **Mielke M**, Knopman D, Krell-Roesch J, Jack C, Petersen R. MRI measures of the brain and depressive symptoms in normal cognitive aging: a population-based study International. *Psychogeriatrics* 2015; 27:S61.
124. Wennberg AMV†, Gustafson D, Hagen CE, Roberts RO, Knopman D, Jack C Jr, Petersen RC, **Mielke MM**. Serum adiponectin levels and neuroimaging outcomes in the Mayo Clinic Study of Aging. Presentation at the Mayo Fellows Research Association Research Day, Rochester, MN, 2015.
125. Kattah AG, Scantlebury DC, Agarwal S, **Mielke MM**, Rocca WA, Weaver AL, Vaughan LE, Miller VM, Weissgerber TL, White W, Garovic VD. Preeclampsia and end-stage renal disease: a linkage study using the United States renal database system *J Vasc Res* 2016; 53:60.
126. Miller V, Jayachandran M, Garovic VD, **Mielke MM**, Bailey KR, Lahr B, White WM. Sex-specific risk factors contributing to carotid intima-media thickness (CIMT) in menopausal women *J Vascular Res* 2016; 53:53.
127. Wennberg AMV†, Gustafson D, Hagen CE, Roberts RO, Knopman D, Jack C Jr, Petersen RC, **Mielke MM**. Serum adiponectin levels and neuroimaging outcomes in the Mayo Clinic Study of Aging. Human Amyloid Imaging Conference, Miami, FL. January 14-15, 2016.
128. White WM†, **Mielke MM**, Lahr BD, Miller VD, Jayachandran M, Rocca WA, Bailey KR, Garovic VD. A history of preeclampsia predicts coronary artery calcification three decades later. *Am J Obstet Gynecol* 2016; 214(1 Suppl):S25.
129. Wennberg AMV†, Dage JL, Airey DC, Hagen CE, Jack CR Jr, Petersen RC, **Mielke MM**. Higher plasma tau associated with worse cognition: results from the Mayo Clinic Study of Aging. Presentation at the Mayo Young Investigators Research Symposium, Rochester, MN, March 18-19, 2016.
130. Jayachandran M, Kantarci K, Garovic VD, Lahr B, Bailey KR, **Mielke MM**, Miller VM. Microvesicles derived from specific cells of the neurovascular unit associate with white matter hyperintensities in brains of middle aged women with and without history of

- preeclampsia. 2016 Congress of the International Society for Extracellular Vesicles (ISEV2016), Rotterdam, the Netherlands. May 5, 2016. *J Extracellular Vesicles* 2016;5:31552.
131. Jayachandran M, Garovic VD, Lahr BD, Bailey KR, **Mielke MM**, White WM, Miller VM. Coronary artery calcification associates with specific cell-derived blood-borne microvesicles in middle-aged women with and without history of preeclampsia. 2016 Congress of the International Society for Extracellular Vesicles (ISEV2016), Rotterdam, the Netherlands. May 5, 2016. *J Extracellular Vesicles* 2016;5:31552.
 132. Jayachandran M, Zhang S, Gustafson CM, Nemutlu E, Dzeja PP, Garovic SD, **Mielke MM**, Bailey KR, Miller VM. Differences in plasma metabolites between postmenopausal women with and without coronary artery calcification. National Conference on Women's Health Research, Colorado Springs, Colorado, September 2016.
 133. Weissgerber TL, Milic N, Codsí E, White W, **Mielke M**, Garovic D. The vascular glycocalyx, a protective coating of the endothelium, is structurally impaired in preeclamptic pregnancies. *Reprod Sci* 2016;23(S1):137A.
 134. **Mielke MM**, Milic NM, Weissgerber TL, White WM, Kantarci K, Mosley TH, Windham BG, Simpson BN, Turner ST, Garovic VD. Cognition and brain atrophy decades after hypertensive pregnancy disorders. American Academy of Neurology Annual Meeting, Vancouver, BC, Canada, April 15-21, 2016. *Neurology* 86(16 Suppl):P1.089.
 135. Roberts RO, Staubo SC, Aakre JA, Vemuri P, Syrjanen JA, Kremers WK, Vassilaki M, **Mielke MM**, Machulda MM, Geda YE, Knopman DS, Jack CR Jr, Petersen RC. Mediterranean diet and MRI biomarkers of cortical thickness in cognitively normal persons: Mayo Clinic Study of Aging. American Academy of Neurology Annual Meeting, Vancouver, BC, Canada, April 15-21, 2016. *Neurology* 86(16 Suppl):P1.093.
 136. Savica R, Ahlskog JE, Boeve BF, Bower J, **Mielke MM**. Survival and risk of mortality of clinically-diagnosed synucleinopathies: a 15-year population-based study (1991-2005). American Academy of Neurology Annual Meeting, Vancouver, BC, Canada, April 15-21, 2016. *Neurology* 86(16 Suppl):P3.350.
 137. Vassilaki M, Aakre JA, **Mielke MM**, Geda YE, Kremers WK, Alhurani RE, Machulda MM, Knopman DS, Petersen RC, Lowe VJ, Jack CR Jr, Roberts RO. Multimorbidity and neuroimaging biomarkers among cognitively normal persons. INS Data Blitz. American Academy of Neurology Annual Meeting, Vancouver, BC, Canada, April 15-21, 2016. *Neurology* 2016;86(16 Suppl):I12.002.
 138. Vassilaki M, Aakre JA, **Mielke MM**, Geda YE, Kremers WK, Alhurani RE, Machulda MM, Knopman DS, Petersen RC, Lowe VJ, Jack CR Jr, Roberts RO. Multimorbidity and neuroimaging biomarkers among cognitively normal persons. Poster Session IV. American Academy of Neurology Annual Meeting, Vancouver, BC, Canada, April 15-21, 2016. *Neurology* 2016;86(16 Suppl):P4.039.

139. Neureiter J, Krell-Roesch J, Pink A, Stokin G, Roberts R, **Mielke M**, Christianson T, Spanghel K, Lowe V, Jack C, Knopman D, Boeve B, Petersen R, Geda Y. Amyloid- β , neuropsychiatric symptoms and the risk of incident mild cognitive impairment: a prospective cohort study. American Academy of Neurology Annual Meeting, Vancouver, BC, Canada, April 15-21, 2016. *Neurology* 86(16 Suppl):S35.003.
140. Vassilaki M, **Mielke M**, Christianson T, Geda Y, Kremers W, Alhurani R, Machulda M, Knopman D, Petersen R, Lowe V, Jack C, Roberts R. Olfactory dysfunction and neuroimaging biomarkers among cognitively normal individuals. American Academy of Neurology Annual Meeting, Vancouver, BC, Canada, April 15-21, 2016. *Neurology* 86(16 Suppl):S35.006.
141. Krell-Roesch J, Roberts R, Pink A, Stokin G, **Mielke M**, Vemuri P, Christianson T, Spanghel K, Knopman D, Petersen R, Geda Y. Mentally stimulating activities in late-life and the risk of incident mild cognitive impairment: a prospective cohort study. American Academy of Neurology Annual Meeting, Vancouver, BC, Canada, April 15-21, 2016. *Neurology* 86(16 Suppl):S35.007.
142. Wennberg AMV[†], Schafer M, Savica R, Hagen CE, LeBrasseur N, Roberts RO, Knopman D, Jack CR Jr, Petersen RC, **Mielke MM**. Plasma ceramide levels are associated with worse performance in multiple gait parameters in the Mayo Clinic Study of Aging. International Conference on Frailty & Sarcopenia Research, Philadelphia, PA April 28-29, 2016.
143. Weissgerber TL, Milic N, Codsí E, White W, **Mielke M**, Garovic VD. Degradation of the vasoprotective vascular glycocalyx in preeclampsia. 2016 BIRCWH Meeting, Bethesda, MD, June 7, 2016. *J Womens Health* 2016 Sept;25(9):974-5.
144. Savica R, Bower J, Hagen C, Ahlskog JE, **Mielke MM**. Survival and risk of mortality of synucleinopathies: a 15 years population-based study (1991-2005). 20th International Congress of Parkinson's Disease and Movement Disorders, Berlin, Germany. June 19-23, 2016. *Mov Disord* 2016;31(Suppl 2):S720.
145. Schulte C, Liepelt-Scarfone I, Hagen CE, Hauser A-K, Brockmann K, Gasser T, LANDSCAPE Consortium, Berg D, **Mielke MM**. Coding and non-coding Glucocerebrosidase variants have an impact on cognitive decline in Parkinson's disease. 20th International Congress of Parkinson's Disease and Movement Disorders, Berlin, Germany. June 19-23, 2016. *Mov Disord* 2016;31(Suppl 2):S729.
146. **Mielke MM**, Hagen CE, Savica R, Syrjanen JA, Persson XM, Schulte C, LANDSCAPE Consortium, Berg D, Liepelt-Scarfone I. Plasma ceramides and glucosylceramides predict cognitive decline among cognitively normal Parkinson's disease patients. 20th International Congress of Parkinson's Disease and Movement Disorders, Berlin, Germany. June 19-23, 2016. *Mov Disord* 2016;31(Suppl 2):S763.
147. Carvalho DZ, St. Louis EK, Boeve BF, Przybelski SA, Knopman DS, Machulda MM, **Mielke MM**, Roberts RO, Geda YE, Petersen RC, Jack CR, Vemuri P. Sleepiness and fatigue associated with brain atrophy in cognitively normal elderly: Mayo Clinic Study of Aging. *Sleep* 2016;39(Abstract Suppl):A350.

148. Knopman DS, Wiste HJ, Jack CR Jr, Petersen RC, Boeve BF, Kantarci K, Jones DT, **Mielke MM**, Roberts RO, Weigand SD, Graff-Radford J, Vemuri P, Machulda MM, Lowe VJ. AV1451 PET imaging in the spectrum of Alzheimer's disease from clinically normal to dementia. Alzheimer's Association International Conference, Toronto, ON, Canada. *Alzheimers Dement* 2016 July;12(7 Suppl):P243-4.
149. Krell-Roesch J, Pink A, Stokin B, Roberts RO, **Mielke MM**, Vemuri P, Christianson TJ, Lowe VJ, Jack CR Jr, Boeve BF, Petersen RC, Geda YE. Amyloid- β , neuropsychiatric symptoms and the Risk of Incident Mild Cognitive Impairment: The Mayo Clinic Study of Aging. Alzheimer's Association International Conference, Toronto, ON, Canada. *Alzheimers Dement* 2016 July;12(7 Suppl):P685-6.
150. Wennberg AMV[†], Savica R, Hagen CE, Roberts RO, Knopman DS, Jack CR Jr, Petersen RC, **Mielke MM**. Cerebral amyloid deposition is associated with poorer gait in cognitively normal late-middle aged individuals: the Mayo Clinic Study of Aging. Alzheimer's Association International Conference, Toronto, ON, Canada. *Alzheimers Dement* 2016 July;12(7 Suppl):P935.
151. Raman MR, Tosakulwong N, Preboske GM, White WM, Fields JA, **Mielke MM**, Jack CR Jr, Miller VM, Garovic VD, Kantarci K. Decreased posterior gray matter volumes in women who experienced hypertensive pregnancies and have late-life hypertension. Alzheimer's Association International Conference, Toronto, ON, Canada. *Alzheimers Dement* 2016 July;12(7 Suppl):P735, P62-3.
152. Gustafson D, **Mielke MM**, Keating S, Holman S, Minkoff H, Crystal H. Leptin, adiponectin and cognition in middle-aged HIV-infected and uninfected women. The Brooklyn Women's Interagency HIV Study. Alzheimer's Association International Conference, Toronto. *Alzheimers Dement* 2016 July;12(7 Suppl):P1053-4.
153. Dage JL, Airey DC, Wennberg AMV[†], Hagen CE, Knopman DS, Machulda MM, Roberts RO, Jack CR Jr, Petersen RC, **Mielke MM**. Levels of tau protein in plasma are associated with neurodegeneration and cognitive function in a population based elderly cohort. Alzheimer's Association International Conference, Toronto, ON, Canada. *Alzheimers Dement* 2016 July;12(7 Suppl):P877-8.
154. Vemuri P, Lesnick TG, Przybelski SA, Roberts RO, Knopman DS, Lowe VJ, Machulda MM, **Mielke MM**, Geda YE, Petersen RC, Jack CR Jr. Resilience factors for amyloid deposition and neurodegeneration are different. Alzheimer's Association International Conference, Toronto, ON, Canada. *Alzheimers Dement* 2016 July;12(7 Suppl):P234-5.
155. Haughey N, Ubaida-Mohien C, Lamberty B, Dickens A, **Mielke M**, Marcotte T, Letendre S, Franklin D, Sacktor N, Grant I, Cibrowski P, Tharakan R, McArthur J, Fox H. Informatic interrogation of CSF proteomic profiles from HIV-infected subjects implicates acute phase and complement systems in shifting cognitive status. *J Neurovirol* 2016;22(Suppl 1):S27-8.
156. Jack CR Jr., Wiste HJ, Weigand S, Therneau T, Lowe V, Knopman DS, Gunter JL, Senjem ML, Jones D, Kantarci K, Machulda M, **Mielke M**, Roberts RO, Vemuri P, Reyes D, Petersen

- RC. Defining cut-points for imaging biomarkers used in brain aging and Alzheimer's disease research. 11th Human Amyloid Imaging (HAI). 2017 Jan 11;101.
157. Codsí E, Butler Tobah YS, White WM, Kattah AG, Saiki M, Vaughan LE, Weaver AL, Alrahmani L, Parikh P, Borowski KS, Davies NP, Rose CH, **Mielke MM**, Garovic VD. Validation of electronic algorithms based on abstracted clinical data for the diagnosis of hypertensive pregnancy disorders. *Reprod Sci* 2017 Mar; 24(S1):198A.
 158. **Mielke MM**, Savica R, Hagen CE, Syrjanen JA, Schulte C, LANDSCAPE Consortium, Berg D, Liepelt-Scarfone I. Plasma ceramide to glucosylceramide ratio is associated with Parkinson's disease (PD) severity and predicts cognitive decline among cognitively normal PD patients without GBA mutations. Presented at the 13th International Conference on Alzheimer's & Parkinson's Diseases (AD/PD), Vienna, Austria, March 29-April 2, 2017. *Neurodegener Dis* 2017;17(Suppl 1):8-590 – page 284.
 159. Miller VM, Garovic VD, **Mielke MM**, Bailey KR, Lahr B, White WM, Jayachandran M. Vascular activation and development of carotid intima-media thickness in postmenopausal women is influenced by pregnancy history. *Faseb Journal* 2017 Apr; 31: 677.5
 160. Carvalho DZ, St. Louis EK, Boeve BF, Knopman DS, Lowe VJ, Roberts RO, **Mielke MM**, Przybelski SA, Petersen RC, Jack CR Jr, Vemuri P. Excessive daytime sleepiness predicts increased β -amyloid accumulation in non-demented elderly: a longitudinal PiB-PET study *American Academy of Neurology* 2017. 2017; Abstract no. S14.
 161. Zeydan B, Lowe VJ, Przybelski SA, Schwarz CG, Tosakulwong N, Zuk SM, Senjem ML, Gunter JL, Roberts RO, **Mielke MM**, Benarroch EE, Rodriguez M, Machulda MM, Lesnick TG, Knopman DS, Petersen RC, Jack CR Jr, Kantarci K, Kantarci OH. Pittsburgh compound-B PET and MRI biomarkers of cognition in aging MS patients *American Academy of Neurology Annual Meeting*. 2017.
 162. Zeydan B, Lowe VJ, Przybelski SA, Schwarz CG, Tosakulwong N, Zuk SM, Senjem ML, Gunter JL, Roberts RO, **Mielke MM**, Benarroch EE, Rodriguez M, Machulda MM, Lesnick TG, Knopman DS, Petersen RC, Jack CR Jr, Kantarci K, Kantarci OH. Pittsburgh compound-B PET and MRI biomarkers of cognition in aging multiple sclerosis patients *Human Amyloid Imaging (HAI) Conference*. 2017; Abstract no.ID116.
 163. Carvalho DZ, St. Louis EK, Boeve BF, Knopman DS, Lowe VJ, Roberts RO, **Mielke MM**, Przybelski SA, Petersen RC, Jack CR Jr, Vemuri P. Baseline excessive daytime sleepiness associated with an increase in brain metabolism in non-demented elderly: a longitudinal FDG-PET study. *Sleep* 2017;40(Suppl 1): A100-1.
 164. Hassenstab J, Hagen CE, Han B, Lim YY, Maruff P, Stricker NH, **Mielke MM**, Morris JC, O'Gorman J, Jaeger J. Reliability and reproducibility of cognitive composites for Alzheimer's disease secondary prevention trials: the Power-PACC. Presented at the 13th International Conference on Alzheimer's & Parkinson's Diseases (AD/PD), Vienna, Austria, March 29-April 2, 2017. *Neurodegener Dis* 2017;17(Suppl 1):8-590 – page 382-3.

165. Wennberg AMV†, Lesnick TG, Schwarz CG, Knopman DS, Savica R, Hollman JH, Jack CR Jr, Petersen RC, **Mielke MM**. Longitudinal associations between cerebral amyloid deposition, cortical thickness, and gait in the Mayo Clinic Study of Aging. Alzheimer's Association International Conference, London. *Alzheimers Dement* 2017 July;13(7 Suppl):P461-2.
166. Boeve BF, Ross OA, Kantarci K, Ferman TJ, Graff-Radford NR, Graff Radford J, Jones DT, Savica R, Przybelski SA, **Mielke MM**, Knopman DS, Jack CR Jr, Lowe V, Petersen RC. Characterization of the clinical and neuroimaging features of patients with dementia with Lewy bodies associated with variants in glucocerebrosidase (GBA). Alzheimer's Association International Conference, London. *Alzheimers Dement* 2017 July;13(7 Suppl):P384.
167. Stricker NH†, Lundt ES, Edwards K, Machulda MM, Roberts RO, Knopman DS, Petersen RC, **Mielke MM**. Does performance on cogstate vary longitudinally across different modes of administration? Alzheimer's Association International Conference, London. *Alzheimers Dement* 2017 July;13(7 Suppl):P470-1.
168. Knopman DS, Jack CR Jr, Lundt ES, Weigand SD, Vemuri P, Lowe V, Kantarci K, Gunter JL, Senjem ML, **Mielke MM**, Machulda MM, Roberts RO, Boeve BF, Jones DT, Thorneau TM, Petersen RC. Continuous measures of β -amyloidosis and cortical thickness in relation to cognitive decline in cognitively normal individuals: a population-based study. Alzheimer's Association International Conference, London. *Alzheimers Dement* 2017 July;13(7 Suppl):P223-4.
169. Gustafson DR, McFarlane SI, **Mielke MM**, Uglialoro A, Keating S, Holman S, Minkoff H, Crystal H. Ghrelin, amylin, gastric inhibitory peptide and cognition in middle-aged HIV-infected and uninfected women. The Women's Interagency HIV Study. Alzheimer's Association International Conference, London. *Alzheimers Dement* 2017 July;13(7 Suppl):P713.
170. Saleem M†, Herrmann N, Dinoff A, **Mielke MM**, Oh PI, Shammi P, Cao X, Ratnam Bandaru VV, Haughey NJ, Lanctot KL, Li AB. A lipidomics approach to assess plasma sphingolipids as predictors of verbal memory performance in coronary artery disease patients undertaking cardiac rehabilitation: a C18:0 signature for cognitive response to exercise. Alzheimer's Association International Conference, London. *Alzheimers Dement* 2017 July;13(7 Suppl):P1031.
171. Dinoff A, Saleem M, Herrmann N, Haughey NJ, Oh PI, **Mielke MM**, Lanctot KL, PhD. Plasma sphingolipid ratios and verbal memory performance in a coronary artery disease population at risk for vascular cognitive impairment (VCI) and Alzheimer's disease. Alzheimer's Association International Conference, London. *Alzheimers Dement* 2017 July;13(7 Suppl):P1016-7.
172. **Mielke MM**, Hagen CE, Wennberg AMV, Airey DC, Savica R, Knopman DS, Machulda MM, Roberts RO, Lowe V, Jack CR Jr, Petersen RC, Dage JL. Plasma total tau, cognitive decline, and risk of mild cognitive impairment in the Mayo Clinic Study on Aging. Alzheimer's Association International Conference, London. *Alzheimers Dement* 2017 July;13(7 Suppl):P1032-3.

173. Machulda MM, Lundt ES, Kremers WK, **Mielke MM**, Roberts RO, Knopman DS, Bondi MW, Petersen RC. Neuropsychological subtypes of incident mild cognitive impairment in the Mayo Clinic Study of Aging. Alzheimer's Association International Conference, London. *Alzheimers Dement* 2017 July;13(7 Suppl):P1059.
174. van Harten AC, Hagen CE, Edwards K, **Mielke MM**, Swenson-Dravis D, Knopman DS, Roberts RO, Geda YE, Petersen RC. Aspects of subjective cognitive decline that predict incident MCI in the Mayo Clinic Study of Aging. Alzheimer's Association International Conference, London. *Alzheimers Dement* 2017 July;13(7 Suppl):P1331.
175. Graff-Radford J, Przybelski SA, Lesnick TG, Rabinstein A, Flemming K, Brown RD, **Mielke MM**, Spychalla AJ, Vemuri P, Lowe V, Knopman DS, Petersen RC, Jack CR Jr, Kantarci K. Cerebral microbleeds and amyloid burden: the Mayo Clinic Study of Aging. Alzheimer's Association International Conference, London, *Alzheimers Dement* 2017;13(7 Suppl):P1237.
176. **Mielke MM**, Scantlebury D, Kattah A, Weissgerber T, Agarwal S, Weaver A, Vaughan L, Henkin S, Zimmerman K, Miller V, White W, Hayes S, Garovic V. The impact of a history of hypertension in pregnancy on later diagnosis of atrial fibrillation. Poster presented at the Eighth Congress of the International Society for Gender Medicine (IGM Congress 2017), September 14-16, 2017, Sendai, Japan.
177. Wennberg AMV†, Hagen CE, Machulda MM, Hollman JH, Roberts RO, Knopman DS, Petersen RC, **Mielke MM**. Associations between peripheral total IGF-1, IGF-1/IGFBP-3 with functional and cognitive outcomes differ by sex. Poster presented at the Celebration of Women's Health Research Conference, October 18, 2017, Rochester, MN.
178. Jack CR Jr, Wiste HJ, Schwarz CG, Lowe VJ, Senjem ML, Vemuri P, Weigand SD, Therneau TM, Knopman DS, Gunter JL, Jones DT, Graff-Radford J, Kantarci K, Roberts RO, **Mielke MM**, Machulda MM, Petersen RC. Longitudinal tau-PET in aging and Alzheimer's disease Human Amyloid Imaging (HAI) 2018. 2018.
179. **Mielke M**, Hagen C, Xu J, Chai X, Vemuri P, Lowe V, Airey D, Knopman D, Roberts R, Machulda M, Jack C, Petersen R, Dage J. Plasma phospho-tau181 increase with Alzheimer's disease clinical severity, correlates with tau-PET and predicts elevated brain amyloid. Presentation at Advances in Alzheimer's and Parkinson's Therapies (AAT-AD/PD) Focus Meeting, March 2018, Torino, Italy.
180. **Mielke MM**, Syrjanen J, Blennow K, Zetterberg H, Skoog I, Hagen C, van Harten A, Knopman D, Jack CR Jr, Petersen RC, Kern S. Elevated CSF neurofilament levels are associated with risk of mild cognitive impairment among individuals with and without low CSF amyloid-beta. Poster presented at American Academy of Neurology Annual Meeting, Los Angeles, CA, April 21-27, 2018. *Neurology* 2018;90(15 Supplement).
181. Martin P, **Mielke M**, Bower J, Turcano P, Savica R. Smoking and coffee consumption preceding clinically-diagnosed synucleinopathies: a case-control study in Olmsted County, MN (1991-2005). Poster presented at American Academy of Neurology Annual Meeting, Los Angeles, CA, April 21-27, 2018. *Neurology* 2018;90(15 Supplement).

182. Hubbard R, Carabenciov I, Janssen P, **Mielke M**, Wetjen N, Savica R. The incidence of the cavum septum pellucidum (CSP) in a population exposed to head trauma. Poster presented at American Academy of Neurology Annual Meeting, Los Angeles, CA, April 21-27, 2018. *Neurology* 2018;90(15 Supplement).
183. McCarter S, Feemster J, Tabatabal G, Sandness D, Timm P, McCarter A, Talley H, Johnson K, Savica R, Vemuri P, **Mielke M**, Machulda M, Kantarci K, Singer W, Coon E, Josephs K, Boeve B, Silber M, St. Louis E. Neuroscience in the clinic: REM sleep behavior disorder: past, present, future. American Academy of Neurology Annual Meeting, Los Angeles, CA, April 21-27, 2018. *Neurology* 2018;90(15 Supplement).
184. Arenaza-Urquijo EM, Przybelski SA, Machulda MM, Knopman DS, Lowe VJ, **Mielke MM**, Graff Radford J, Petersen RC, Jack CR, Vemuri P. Cognitive resilience in 80+: predictors and imaging correlates of cognition. Alzheimer's Association International Conference, Chicago, IL, July 2018. *Alzheimers Dement* 2018;14(7 Suppl):99-100.
185. Knopman DS, Lundt ES, Therneau RM, Vemuri P, Lowe VJ, Kantarci K, Gunter JL, Senjem ML, **Mielke MM**, Machulda MM, Boeve BF, Jones DT, Albertson SM, Petersen RC, Jack CR Jr. Entorhinal cortex tau PET, cortical thickness and memory performance in cognitively unimpaired persons. Alzheimer's Association International Conference, Chicago, IL, July 2018. *Alzheimers Dement* 2018;14(7 Suppl):221-2.
186. Ramanan VK, Przybelski SA, Graff-Radford J, Lowe VJ, **Mielke MM**, Roberts RO, Knopman DS, Petersen RC, Jack CR Jr, Vemuri P. Statins and brain health: medication effects on neuroimaging biomarkers in older individuals. Alzheimer's Association International Conference, Chicago, IL, July 2018. *Alzheimers Dement* 2018;14(7 Suppl):463-4.
187. Espeland MA, Carmichael OT, Yasar S, Hugenschmidt CE, Hazzard W, Hayden KM, Rapp SR, Neiberg RH, Johnson KC, Hoscheidt SM, **Mielke MM**, and Action for Health in Diabetes. Sex-related differences in cognitive impairment among overweight and obese adults with type 2 diabetes. Alzheimer's Association International Conference, Chicago, IL, July 2018. *Alzheimers Dement* 2018;14(7 Suppl):579-80.
188. Kern S†, Syrjanen J, Blennow K, Zetterberg H, Skoog I, Waern M, Hagen CE, van Harten AC, Knopman DS, Jack CR Jr, Petersen RC, **Mielke MM**. Neurofilament light chain in AD in CSF and blood. Alzheimer's Association International Conference, Chicago, IL, July 2018. *Alzheimers Dement* 2018;14(7 Suppl):603.
189. Graff Radford J, Vemuri P, Rabinstein A, Przybelski SA, Lesnick TG, Flemming K, Brown RD, Knopman DS, Roberts RO, **Mielke MM**, Kremers WK, Jones DT, Huston J, Lowe VJ, Petersen RC, Jack CR Jr, Kantarci K. Incidence of cerebral microbleeds and amyloid burden: the Mayo Clinic Study of Aging. Alzheimer's Association International Conference, Chicago, IL, July 2018. *Alzheimers Dement* 2018;14(7 Suppl):652.
190. van Harten AC, Wiste HJ, **Mielke MM**, Weigand SD, Kremers WK, Eichenlaub U, Batrla-Utermann R, Knopman DS, Jack CR Jr, Petersen RC. CSF biomarkers in the general population: associations with demographics and APOE genotype. Alzheimer's Association

- International Conference, Chicago, IL, July 2018. *Alzheimers Dement* 2018;14(7 Suppl):624-5.
191. Kern S†, Syrjanen J, Blennow K, Zetterberg H, Skoog I, Waern M, Hagen CE, van Harten AC, Knopman DS, Jack CR, Petersen RC, **Mielke MM**. Cerebrospinal fluid neurofilament light protein and risk of mild cognitive impairment in the Mayo Clinic Study of Aging. Alzheimer's Association International Conference, Chicago, IL, July 2018. *Alzheimers Dement* 2018;14(7 Suppl):782.
 192. Arenaza-Urquijo EM, Przybelski SA, Machulda MM, Knopman DS, Lowe VJ, **Mielke MM**, Graff-Radford J, Petersen RC, Jack CR Jr, Vemuri P. Cognitive resilience in 80+: predictors and Imaging Correlates of Cognition. Alzheimer's Association International Conference, Chicago, IL. *Alzheimers Dement* 2018;14(7 Suppl):863.
 193. Stricker NH†, Lundt ES, Albertson SM, Machulda MM, Jack CR Jr, Knopman DS, Petersen RC, **Mielke MM**. Subtle cognitive dysfunction on cogstate is associated with biomarker positive status. Alzheimer's Association International Conference, Chicago, IL, July 2018. *Alzheimers Dement* 2018;14(7 Suppl):917-8.
 194. Li D†, Hagen CE, Knopman DS, Jack CR Jr, Petersen RC, **Mielke MM**. Longitudinal association between phosphatidylcholines, neuroimaging measures of Alzheimer's disease pathophysiology, and cognition in the Mayo Clinic Study on Aging. Alzheimer's Association International Conference, Chicago, IL, July 2018. *Alzheimers Dement* 2018;14(7 Suppl):1156.
 195. **Mielke MM**, Syrjanen J, Blennow K, Zetterberg H, Kern S, Skoog I, Machulda MM, Hagen CE, Knopman DS, Jack CR Jr, Petersen RC. Longitudinal associations of plasma neurofilament levels with amyloid-PET, FDG-PET, and cognition among non-demented participants in the Mayo Clinic Study on Aging. Alzheimer's Association International Conference, Chicago, IL, July 2018. *Alzheimers Dement* 2018;14(7 Suppl):1163-4.
 196. Therneau TM, Weigand SD, Wiste HJ, Lowe VJ, Vemuri P, **Mielke MM**, Roberts RO, Knopman DS, Petersen RC, Jack CR Jr. Accelerated failure time as a model for amyloid and tau accumulation. Alzheimer's Association International Conference, Chicago, IL, July 2018. *Alzheimers Dement* 2018;14(7 Suppl):1285.
 197. Zeydan B, Tosakulwong N, Schwarz CG, Senjem ML, Lesnick TG, Smith CY, Bailey KR, Lowe VJ, Jack CR Jr, Petersen RC, Miller VM, **Mielke MM**, Rocca WA, Kantarci K. Medial temporal lobe neurodegeneration observed in women who underwent bilateral oophorectomy before the onset of menopause. Alzheimer's Association International Conference, Chicago, IL, July 2018. *Alzheimers Dement* 2018;14(7 Suppl):1356.
 198. **Mielke MM**. Challenges in using CSF biomarkers for operationalizing the NIA-AA AD Research Framework. Alzheimer's Association International Conference, Chicago, IL, July 2018. *Alzheimers Dement* 2018;14(7 Suppl):1399.
 199. Alonso-Quinones HJ†, Stish BJ, Hagen CE, Knopman DS, Petersen RC, **Mielke MM**. Prostate cancer, use of androgen deprivation therapy and cognitive impairment. Alzheimer's

- Association International Conference, Chicago, IL, July 2018. *Alzheimers Dement* 2018;14(7 Suppl):1614-5.
200. Martinez de Arenaza Urquijo E, Przybelski S, Scott, Machulda MM, Knopman DS, Lowe VJ, **Mielke MM**, Graff-Radford J, Petersen RC, Jack CR Jr, Vemuri P. AD Biomarker Epidemiology in the Aging Population: Prevalence, Risk Factors and Outcomes AAIC 2018. 2018. (Dr. Vemuri, Plenary speaker).
 201. Graff-Radford J, de Arenaza-Urquijo E, Schwarz C, Brown RD, Ward CP, **Mielke MM**, Przybelski S, Rabinstein AA, Lenick TG, Gunter JL, Petersen RC, Kantarci K, Knopman DS, Lowe V, Jack C, Vemuri P. Topographic white matter hyperintensity patterns associated with alzheimer pathologies *Stroke*. 2019 Feb; 50(Suppl 1):A104
 202. **Mielke MM**, Syrjanen J, Bui HH, Petersen RC, Knopman DS, Jack CR Jr, Graff-Radford J, Vemuri P. Sex-specific relationship between plasma sphingosine-1-phosphate and white matter hyperintensities. Poster presented at Organization for the Study of Sex Differences (OSSD), Washington, DC, May 6, 2019.
 203. Crivelli SM, Luo Q, Giovagnoni C, Stevens J, Bode G, den Hoedt S, Hobo B, Scheithauer A-L, Walter J, Mulder MT, Exley C, **Mielke MM**, Wouters K, Bieberich E, Schneider A, van den Hove D, Verhaagen J, Losen M, Martinez-Martinez P. Neuronal over-expression of the ceramide transfer protein (CERT_L) increased sphingomyelin and reduced amyloid- β levels and inflammation by diminishing amyloid precursor protein cleavage in a mouse model of Alzheimer's disease. Poster presented at the 6th Venusberg meeting on Neuroinflammation, Bonn, Germany, May 2019.
 204. Stang CD, Turcano P, **Mielke MM**, Wennberg AM, Josephs KA, Bower JH, Ahlskog JE, Rocca WA, Boeve BF, Knopman DS, Savica R. Incidence and trends of progressive supranuclear palsy and corticobasal syndrome in Olmsted County: a population based study (1995-2005). Poster presented at the American Academy of Neurology, Philadelphia, PA, May 2019.
 205. Turcano P†, Stang CD, Bower JH, Wennberg AM, Ahlskog JE, **Mielke MM**, Savica R. Levodopa-induced dyskinesia in atypical parkinsonism: a population-based cohort study. Poster presented at the American Academy of Neurology, Philadelphia, PA, May 2019.
 206. Krell-Roesch J, Vassilaki M, Syrjanen JA, Curnutt N, Gritsch D, Vemuri P, **Mielke MM**, Lowe VJ, Jack CR Jr, Kremers WK, Knopman DS, Stokin GB, Petersen RC, Geda YE. Association of cortical versus subcortical A β deposition with depressive and anxiety symptoms: a population-based cross-sectional study. Poster presented at the American Academy of Neurology, Philadelphia, PA, May 2019.
 207. Carvalho D, St. Louis E, Boeve B, Schwarz C, Przybelski S, Knopman D, Lowe V, **Mielke MM**, Reddy A, Petersen R, Jack C, Vemuri P. Witnessed apneas during sleep are associated with elevated tau-PET signal in the entorhinal cortex in cognitively unimpaired elderly. Poster presented at the American Academy of Neurology, Philadelphia, PA, May 2019.

208. Hasan S†, **Mielke MM**, Ahlskog JE, Turcano P, Savica R. Infections leading to hospitalization or sepsis preceding clinically diagnosed alpha-synucleinopathies: a case-control study in Olmsted County, MN (1991-2010). Poster presented at the American Academy of Neurology, Philadelphia, PA, May 2019.
209. Scharf EL, Graff-Radford J, Przybelski SA, Knopman DS, Preboske GM, Schwarz CG, Senjem ML, Gunter JL, Kantarci K, **Mielke MM**, Petersen RC, Jack CR Jr, Vemuri P. Cardiovascular and metabolic risk factors for the development of cerebral small vessel disease: longitudinal FLAIR imaging in the Mayo Clinic Study of Aging. Poster presented at the American Academy of Neurology, Philadelphia, PA, May 2019.
210. Neth BJ, Graff-Radford J, Przybelski SA, Schwarz CG, Reid RI, **Mielke MM**, Petersen RC, Jack CR Jr, Knopman DS, Vemuri P. Factors related to higher neurobiological capital across the lifespan: Mayo Clinic Study of Aging. Poster presented at the American Academy of Neurology, Philadelphia, PA, May 2019.
211. Carvalho DZ, St. Louis E, Boeve B, Schwarz C, Przybelski S, Knopman D, Lowe V, **Mielke MM**, Reddy A, Petersen R, Jack C, Vemuri P. Self-reported apneas during sleep associated with Tau-PET accumulation in the entorhinal cortex in cognitively unimpaired elderly. Poster presented at the American Academy of Neurology, Philadelphia, PA, May 2019.
212. Ramanan VK, Castillo A, Knopman DS, Lowe V, **Mielke MM**, Petersen RC, Jack CR Jr, Vemuri P. *APOE* and education: effects on regional Tau and FDG metabolism in older adults. Poster presented at the American Academy of Neurology, Philadelphia, PA, May 2019.
213. Polsinelli A, Stricker N, Christianson TJ, Machulda MM, Kremers WK, **Mielke MM**, Jack CR Jr, Knopman DS, Petersen RC. Presence of preclinical AD pathology in cognitively unimpaired older adults may exacerbate age-related memory decline. Abstract accepted for presentation at the Aging & Cognition 5th International Conference. Zurich, Switzerland. 2019.
214. Vassilaki M†, Aakre JA, Knopman DS, Kremers WK, **Mielke MM**, Geda YE, Machulda MM, Al Fakir R, Roberts RO, Petersen RC. Hearing difficulties, as reported by partner, and the risk for mild cognitive impairment and dementia. Poster presented at Society for Epidemiologic Research 52nd Annual Meeting, Minneapolis, MN, June 2019.
215. Krell-Roesch J, Syrjanen JA, Vassilaki M, Trautwein S, Barisch-Fritz B, Boes K, Woll A, Kremers WK, Machulda MM, **Mielke MM**, Knopman DS, Petersen RC, Geda YE. Physical exercise, apoe e4 genotype and cognitive trajectories: the Mayo Clinic study of aging. *Med Sci Sports Exercise*. 2019 Jun; 51(6):473
216. Machulda MM, Lundt ES, Albertson SM, Spsychalla AJ, **Mielke MM**, Jack CR Jr, Kremers WK, Vemuri P, Knopman DS, Bondi MW, Petersen RC. Cortical atrophy patterns of empirically derived incident MCI subtypes in the Mayo Clinic Study of Aging. Poster presented at Alzheimer's Association International Conference, Los Angeles, CA; July 2019.
217. Arenaza-Urquijo EM, Przybelski SA, Machulda MM, Knopman DS, Lowe VJ, **Mielke MM**, Reddy AL, Geda YE, Jack CR Jr, Petersen RC, Vemuri P. Stress: better coping associated

- with lower tau in preclinical Alzheimer's disease. Poster presented at Alzheimer's Association International Conference, Los Angeles, CA; July 2019.
218. Vemuri P, Przybelski SA, Lesnick TG, Graff-Radford J, Machulda MM, Reid RI, **Mielke MM**, Lowe VJ, Reddy AL, Petersen RC, Knopman DS, Jack CR Jr. Biomarkers for capturing amyloid independent effects of vascular health on cognitive decline. Alzheimer's Association International Conference, Los Angeles, CA; July 2019.
 219. Ramanan VK, Castillo A, Przybelski SA, Graff-Radford J, **Mielke MM**, Lowe VJ, Knopman DS, Jack CR Jr, Petersen RC, Vemuri P. Long-term NSAID therapy in older adults: effects on at(N)V imaging biomarkers. Poster presented at Alzheimer's Association International Conference, Los Angeles, CA; July 2019.
 220. Li D†, Hagen CE, Bui HH, Vemuri P, Knopman DS, Jack CR Jr, Petersen RC, **Mielke MM**. Correlation of CSF phospholipids and Alzheimer's disease neuropathology in the Mayo Clinic Study of Aging. Alzheimer's Association International Conference, Los Angeles, CA; July 2019.
 221. Jack CR Jr, Therneau TM, Weigand SD, Wiste HJ, Knopman DS, Vemuri P, Lowe VJ, **Mielke MM**, Roberts RO, Machulda MM, Graff-Radford J, Jones DT, Schwarz CG, Gunter JL, Senjem ML, Rocca WA, Petersen RC. Prevalence of clinically vs. biologically defined Alzheimer's spectrum entities using the National Institute on Aging – Alzheimer's Association Research Framework. Alzheimer's Association International Conference, Los Angeles, CA; July 2019.
 222. Krell-Roesch J, Syrjanen J, van Harten AC, Vassilaki M, **Mielke MM**, Vemuri P, Machulda MM, Lowe VJ, Jack CR Jr, Kremers WK, Knopman DS, Stokin GB, Petersen RC, Geda YE. Cross-sectional associations between CSF biomarkers of amyloid and tau with neuropsychiatric symptoms: the Mayo Clinic Study of Aging. Alzheimer's Association International Conference, Los Angeles, CA; July 2019.
 223. Dutt T, Vassilaki M, Christianson TJ, Knopman DS, Kremers WK, **Mielke MM**, Machulda MM, Geda YE, Undavalli C, Roberts RO, Petersen RC. Chronic kidney disease and risk of mild cognitive impairment. Poster presented at Alzheimer's Association International Conference, Los Angeles, CA; July 2019.
 224. Neth BJ, Graff-Radford J, Przybelski SA, Lesnick TG, Schwarz CG, Reid RI, Senjem ML, **Mielke MM**, Petersen RC, Jack CR Jr, Knopman DS, Vemuri P. Relationship between midlife factors and multimodal imaging measures of neurobiological capital: Mayo Clinic Study of Aging. Alzheimer's Association International Conference, Los Angeles, CA; July 2019.
 225. van Harten AC, Wiste HJ, Weigand SD, **Mielke MM**, Kremers WK, Eichenlaub U, Batrla-Utermann R, Dyer RB, Algeciras-Schimnic A, Knopman DS, Jack CR Jr, Petersen RC. Detection of Alzheimer's disease in CSF using automated assays for classical CSF biomarkers. Poster presented at Alzheimer's Association International Conference, Los Angeles, CA; July 2019.

226. Arenaza-Urquijo EM, Przybelski SA, Machulda MM, Knopman DS, Lowe VJ, **Mielke MM**, Reddy AL, Geda YE, Jack CR Jr, Petersen RC, Vemuri P. Stress coping ability associated with tau in preclinical Alzheimer's disease. Poster presented at Alzheimer's Association International Conference, Los Angeles, CA; July 2019.
227. Varatharajah Y, Lowe VJ, Przybelski SA, Schwarz CG, Senjem ML, **Mielke MM**, Knopman DS, Petersen RC, Graff-Radford J, Iyer R, Jack CR Jr, Vemuri P. Discovering sources of variability in amyloid deposition using data-driven analyses. Poster presented at Alzheimer's Association International Conference, Los Angeles, CA; July 2019.
228. **Mielke MM**, Kern S, Syrjanen J, Blennow K, Zetterberg H, Knopman DS, Jack CR Jr, Petersen RC. Comparison of variables associated with CSF neurofilament, total-tau, and neurogranin in a community-based study. Alzheimer's Association International Conference, Los Angeles, CA; July 2019.
229. Ramanan VK, Castillo A, Knopman DS, Graff-Radford J, Lowe VJ, **Mielke MM**, Petersen RC, Jack CR Jr, Vemuri P. Apoe and education: effects on regional tau and FDG metabolism in older adults. Poster presented at Alzheimer's Association International Conference, Los Angeles, CA; July 2019.
230. Stricker NH†, Lundt ES, Christianson TJ, Machulda MM, Kremers WK, Fields JA, **Mielke MM**, Knopman DS, Petersen RC. Normative data that does not exclude participants with mild cognitive impairment results in lower than expected memory impairment rates, particularly in females. Accepted for paper presentation at the 39th Annual National Academy of Neuropsychology Conference, San Diego, CA, November 13-16, 2019.

RESEARCH INTERESTS

My principle research interests emphasize the epidemiology of neurodegenerative and neuropsychiatric disorders. A primary focus is the identification of biomarkers for the diagnosis, prediction, and/or progression of Alzheimer's disease and other neurodegenerative and neuropsychiatric conditions. Much of my work has emphasized sphingolipids (ceramide and sphingomyelins) and neuroimaging measures as risk factors and biomarkers for the development and progression of Alzheimer's disease and, more recently, also of Parkinson's disease and Lewy Body Dementia. I am also interested in sex-specific medicine, especially the interrelationship between sphingolipids, hormones (e.g., estrogen loss over menopause), and the development of cardiovascular disease and neurodegenerative conditions.

RESEARCH GRANTS AWARDED**Current**

U54 AG044170-6 Mielke (PI) 09/01/18-06/31/23

Total Costs: \$7,734,335

Sex-Specific Effects of Endocrine Disruption on Aging and Alzheimer's Disease – Leadership Administration Core and Project 1

The overarching theme of the Mayo Clinic Specialized Center of Research Excellence (SCORE) on Sex Differences is to investigate how abrupt loss of ovarian hormones, caused by bilateral salpingo-oophorectomy (BSO) prior to natural menopause, affects overall aging, physical and cognitive function, and risk for AD pathophysiology.

R01 HL136348-1 Garovic (PI) 09/01/18-06/31/23

Total Costs: \$2,583,277

Hypertensive Pregnancy Disorders and Future Coronary Artery Disease

The goal of this study is to determine the association between hypertensive pregnancy disorders and coronary artery disease, using confirmed diagnosis based on clinical criteria, and adjusting for known cardiovascular risk factors.

Role: Co-Investigator

RF1 AG059009-1 Petersen/Weiner (PIs) 09/01/18-06/30/23

Total Costs: \$6,230,869

Validation of Online Methods to Predict and Monitor Cognitive Decline

The overarching goal of this application is to develop, implement, and validate improved online methods to predict and monitor cognitive and functional decline in elders who have normal cognition or mild cognitive impairment.

Role: Co-Investigator

R01 AG061796 Li (PI) 09/30/18-04/30/23

Total Costs: \$1,144,570

Harnessing Molecular Networks of Resilience for Therapeutic Discoveries in AD

The goals of this project are to: 1) decipher the direction and cell-specificity of molecular targets in Alzheimer's disease (AD) by leveraging well-characterized brain samples and applying RNA sequencing and cell proteomic approaches; 2) determine the longitudinal change in plasma and CSF measures of these targets; 3) validate the cell-specific molecular changes in iPSC-based models; and 4) match compounds to molecular targets using systems-based pharmacogenomics.

Role: Co-Investigator

R01 AG055529-1 LeBrasseur (PI) 08/15/18-03/31/23

Total Costs: \$2,875,575

Senescence and Growth Differentiation Factors as Modifiers of Aging

The aims of this study are to assess the associations of GDF8, GDF11, and senescence-related proteins.

Role: Co-Investigator

RF1 AG57547-1 Kantarci (PI) 09/51/17-06/30/22

Total Costs: \$10,638,873

Prevention of Alzheimer's Disease in Women: Risks and Benefits of Hormone Therapy

The aims of this proposal are to utilize the infrastructure of the Kronas Early Estrogen Prevention Study (KEEPS), a randomized clinical trial of oral conjugated estrogen, transdermal estradiol, or placebo, to examine the relationship between hormone therapy and in vivo measures of brain amyloid-beta and tau.

Role: Co-Investigator

R01 AG 56366-1 Vemuri (PI) 09/15/17-05/31/22

Total Costs: \$3,903,910

Exceptional Aging: Identifying Modifiers of Alzheimer's Disease Trajectories

The aims of this proposal are to identify important risk and protective factors for Alzheimer's disease pathology and cognitive decline in a population-based sample, and to apply these factors to discover pathways to "exceptional aging."

Role: Co-Investigator

RF1 AG055151-2 Mielke (PI) 05/01/17-04/30/22

Total Costs: \$3,974,969

Reproductive Risk Factors for Alzheimer's Disease Dementia and Pathology

The overall aims of this proposal are to elucidate the impact of two hormonally-related sex-specific factors for women, pregnancy (e.g., number of pregnancies, hypertensive pregnancy disorders) and menopause (surgically-induced or natural), on the risk of cognitive decline, AD, and neuroimaging measures of A β , neurodegeneration, and cerebrovascular pathologies. Because the literature and our preliminary data suggest that risk scores for cardiovascular disease and dementia are less predictive in women compared to men, we also propose to incorporate these sex-specific factors to develop a more predictive risk score of mild cognitive impairment and AD for women. To accomplish these goals we will utilize the Mayo Clinic Study of Aging and Rochester Epidemiology Project medical records linkage system.

R01 AG 57708-1 Vassilaki (PI) 05/01/18-02/28/22

Total Costs: \$596,848

Pathways Linking Neuropsychiatric Symptoms, Neuroimaging Biomarkers, and the Outcome of Incident Mild Cognitive Impairment

The goals of this project are to prospectively examine the relationship between psychiatric symptoms and neuroimaging measures of amyloid-beta, hypometabolism, and cortical thickness in the Mayo Clinic Study of Aging.

Role: Co-Investigator

R01 AG059654-1 Mielke (Site PI) 08/01/18-05/31/22

Total Costs: \$148,316

Blood Biomarkers as Surrogate Endpoints of Treatment Responses to Aerobic Exercise and/or Cognitive Training in Amnesic Mild Cognitive Impairment

The goal of this project is to investigate plasma biomarkers as surrogate endpoints for early detection and prediction of cognitive responses to 3 lifestyle interventions in older adults with amnesic MCI: aerobic exercise (cycling only), cognitive training (speed of processing only), and combined aerobic exercise and cognitive training.

Alzheimer's Drug Discovery Foundation Lowe (PI) 03/01/19-02/28/21

Targeting Neuroinflammation as a Contributing Pathology in Alzheimer's Disease Dementia

The major goal of this project is to determine if neuroinflammation, as measured by PET imaging, is associated-with: 1) Ab plaques in cognitively impaired vs. cognitively unimpaired participants; 2) rate of cognitive decline *preceding* PET imaging by 5 or more years; and 3) plasma biomarkers of inflammation.

Role: Co-Investigator

R21 AG058738-1 St. Sauver (PI) 08/01/18-07/31/20
Total Costs: \$437,250

Interdisciplinary Infrastructure for Aging Research: Rochester Epidemiology Project

The goals of this application are to develop a novel research infrastructure via interdisciplinary partnerships to address key aging research questions and to examine associations between novel biomarkers and a wide range of important aging-related health outcomes.

Role: Co-Investigator

Biogen Mielke (PI) 01/12/18-06/11/20
Total Costs: \$328,614

Addressing Scientific Knowledge Gaps in Alzheimer's Disease. A Retrospective Data Analysis

Addressing Scientific Knowledge Gaps in Alzheimer's Disease. A Retrospective Data Analysis

The goals of this project are to examine a combination of modifiable and non-modifiable risk factors and to determine whether they influence the rate of progression of cognitive decline from normal cognition to mild cognitive impairment (MCI) and prodromal Alzheimer's dementia (AD) (i.e., brain amyloid positive amnesic MCI [pAD]), to dementia and AD diagnosis and death.

N/A Mielke (PI) 01/01/18-1/31/20
Minnesota Partnership for Biotechnology and Medical Genomics

Total Costs: \$350,000

Targeting Tau Phosphorylation and Missorting to Treat Alzheimer's Diseases

The goals of this project are to enhance our understanding by which intracellular tau disrupts synaptic function and impairs cognition.

U01 AG06786-32 Petersen/Mielke/Jack (PI) 07/01/19-06/30/23
Total Costs: \$7,500,150

Alzheimer's Disease Patient Registry

The overall goal of this revision is to use the infrastructure of the Mayo Clinic Study of Aging (MCSA), with population-based recruitment of Olmsted County, MN residents aged 70+, to establish a younger population-based sample of persons aged 50-69. We will examine risk factors of mild cognitive impairment (MCI) and dementia, determine the prevalence of abnormal biomarkers of Alzheimer's disease pathophysiology, develop risk models of MCI and AD, and assess the sensitivity of a computerized cognitive battery to early cognitive change.

1 R01 AG049704-4 Mielke (PI) 09/01/15-04/30/20
Total Costs: \$1,450,444 NCE

Sphingolipids and Inflammation in the Development and Progression of Alzheimer's

The overarching goal of this project is to determine the temporal relationship between plasma and CSF sphingolipids (e.g., ceramides, sphingomyelins) and measures of A β pathology, neurodegeneration, and cognitive decline. We will also determine whether inflammatory processes (e.g., TNF- α and IL-6) modify these associations.

Completed

W81XWH-15-1-0573-1 Brown/Mielke (Co-PI) 09/15/15-09/14/19

Department of Defense

Total Direct Costs: \$500,000

Understanding the Connection Between Traumatic Brain Injury and AD: A Population-based Study

Most studies of traumatic brain injury have been conducted on select populations. This study will ascertain the incidence of TBI in Olmsted County, MN between 1985 and 1999 using the Rochester Epidemiology Medical Records linkage system. We will then longitudinally determine whether TBI, including number of events and severity, is associated with subsequent risk of Alzheimer's disease, Parkinson's disease, and other neurodegeneration conditions.

Role: Co-Principal Investigator

Biogen Mielke/Roberts (PI) 07/01/16-02/28/19

Total Costs: \$308,667

NCE

Predicting Elevated Brain Amyloid-Beta among Individuals with Cognitive Impairment

The goal of this project is to identify a method/risk score to determine, at the primary care level, who is most likely to have significant brain amyloid-beta deposition.

Role: Co-Principal Investigator

Lundbeck Mielke (PI) 10/30/16-10/29/18

Total Costs: \$100,992

Identifying a Sensitive Cognitive Endpoint for Randomized Controlled Trials of Early Alzheimer's Disease

The goal of this study is to identify a composite of neuropsychological tests that are sensitive to amyloid-beta (A β)-related cognitive change among patients with prodromal and very early Alzheimer's disease.

P50 AG44170-5 Miller (PI) 09/01/12-05/31/18

Total Direct Costs: \$4,143,079

Sex-specific Risk for Vascular Dysfunction and Cognitive Decline. Project 1 – Hypertension in Pregnancy and Future Cardiovascular Disease

This program-project seeks to develop a Specialized Center for Research on Sex Differences at Mayo Clinic. Dr. Mielke is involved in Project 1 of the proposed center. The overarching hypothesis of Project 1 is that a history of hypertensive pregnancy disorders, in general, and preeclampsia, in particular, are risk factors for mortality (all-cause and cardiovascular), future CVD, and cognitive impairment. We will test this hypothesis using the unique population-based records-linkage system of the Rochester Epidemiology Project.

Role: Co-Investigator

Grant Number: NA Mielke/Roberts (PI) 07/01/16-05/31/18

Roche Pharmaceuticals

Total Costs: \$573,455

Alzheimer's Disease Registry with Roche

The overall aim of this application is to identify a combination of modifiable and non-modifiable risk factors that can help identify persons at risk for mild cognitive impairment (MCI; including prodromal AD defined as biomarker positive amnesic MCI [pAD]) and dementia outcomes (including biomarker positive Alzheimer's dementia [AD]) in a population-based setting.

Role: Co-PD/PI

2P30 MH75673-10 Mielke (PI) 07/01/11-06/30/17

Total Direct Costs: \$73,181

Center for Novel Therapeutics for HIV-Associated Cognitive Disorders

The primary goals of the Surrogate Marker / Pharmacokinetic Core will be to: 1) Assist in the development and monitoring of surrogate markers for HIV-associated neurocognitive disorders (HAND). 2) To provide mentorship and consultation for Neuro-AIDS researchers in the development of clinically useful surrogate markers for HAND and to validate these as predictive and associative markers for cognitive impairment and as surrogate markers for therapeutic effectiveness.

Role: Principal Investigator of Sub-contract

Biogen FP89010 Mielke (PI) 07/01/16-06/30/17

Total Costs: \$197,129

Identifying Predictors of Elevated Brain Amyloid-Beta

The overarching goal of this proposal is to identify a method/risk score to determine, at the primary care level, who is most likely to have significant amyloid-beta deposition.

Role: Principal Investigator

U01 AG016976-18 Boeve (PI) 07/01/16-06/30/17

Total Direct Costs: \$156,869

Plasma Biomarkers in Lewy Body Disease (NACC projects 2016-04 and 2016-JI-08)

The primary goals of this project are to use proteomic and lipidomic approaches to determine whether we can discriminate Dementia with Lewy Bodies (DLB) from other neurodegenerative disease (Alzheimer's disease, Parkinson's disease) and to identify subgroups of DLB.

Role: Co-Investigator

FP00074480 Mielke (PI) 01/01/14-10/31/16

Michael J. Fox Foundation for Parkinson's Research

Total Direct Costs: \$215,646

Assessment of Plasma Glucosylceramides and Ceramides as Biomarkers of Cognitive Impairment in Parkinson's Disease

This study aimed to determine whether plasma ceramide and glucosylceramide levels are associated with cognitive impairment in patients with Parkinson's disease (PD), including those with and without *GBA* mutations, and predict rate of cognitive decline. We used blood and data already collected from 500 PD patients enrolled in the Dempark/Landscape study and follow-up for up to 3 years. This project determined the utility of plasma ceramide and glucosylceramide as blood-based cognitive biomarkers in PD.

Role: Principal Investigator

Biogen FP89323 Mielke (PI) 06/01/16-09/15/16, NCE

Total Direct Costs: \$25,223

Identifying a More Sensitive Alzheimer's Cognitive Composite Endpoint for Preclinical Alzheimer's Diseases Randomized Controlled Trials

The overarching goal of this proposal is to determine whether a more sensitive Preclinical Alzheimer Cognitive Composite (PACC) score can be developed by examining an extensive neuropsychological battery without a priori specifying which domains tests must come from.

Results from the Mayo Clinic Study of Aging will be compared to those of these Washington University Adult Children's Study and the Australian Imaging Biomarker and Lifestyle study.
Role: Principal Investigator

FP00082085 Mielke (PI) 03/01/15-8/31/15

Michael J. Fox Foundation for Parkinson's Research

Total Direct Costs: \$72,573

Comparison of Pre- and Post-mortem CSF Levels of Proteins and Lipids

Few studies have utilized post-mortem CSF samples, for a variety of reasons. This pilot study examined the correlation between pre- and post-mortem CSF levels of alpha-synuclein, amyloid-beta, tau, and sphingolipids, which are all biomarkers of interest for PD.

Role: Principal Investigator

U01 AG037526-5 Mielke (PI) 09/01/11-05/31/15

Total Direct Costs: \$1,806,089

Longitudinal Study of Lipids and APOE in the Development of AD and AD Pathology

The overall aim of the proposed study was to examine, in the 30-year follow-up of participants in the Baltimore Longitudinal Study of Aging, whether peripheral lipids (sphingolipids, fatty acids, cholesterol and cholesterol esters) modify the association between ApoE and clinical onset of MCI or AD.

Role: Principal Investigator

Mayo Clinic Mielke (PI) 06/2014-05/2015

Development - Gifts from Benefactors

Intersect Sphingolipid and Inflammatory Pathways, AD Pathology and Cognitive Decline

The goals of this study were to understand the relationship between sphingolipids, inflammation, and the development and progression of Alzheimer's disease pathology and cognitive decline.

Role: Program Director/Principal Investigator

Driskill Foundation Petersen/Mielke (PIs) 04/01/12-03/31/15

Walter S. and Lucienne Driskill Foundation

Total Direct Costs: \$2,160,348

Computerized Assessment and Neuroimaging in Study of Aging Younger Cohort

The major goal of this project was to examine the role of a computerized instrument (CogState) as a first-line screen to identify persons who should have more extensive cognitive testing using standard pencil-and-paper neuropsychological tests and more invasive and expensive Alzheimer Disease biomarker evaluations.

Role: Co-Program Director/Principal Investigator

20121214-1 Mielke (PI) 03/01/13-08/31/14

Alzheimer's Drug Discovery Foundation

Total Direct Costs: \$100,000

Plasma Lipidomic Comparison of Individuals with Alpha-Synuclein Comparison of Individuals with Alpha-Synuclein, Amyloid, or Normal Pathology

The overall goal of this project was to identify plasma biomarkers (focusing on lipids and alpha-synuclein levels) associated with alpha-synuclein brain pathology that could be used as early clinical measures for the early and accurate differential diagnosis of DLB.

Role: Principal Investigator

20131207.01-1 Mielke (PI) 01/20/14-01/19/15

Alzheimer's Drug Discovery Foundation

Total Direct Costs: \$6,960

Evaluation of Changes in Plasma Ceramides and Amino Compounds with an mTOT

This study aims to examine ceramides and amino acids as potential mechanisms by which a new type of insulin sensitizer (Mitoglitazone) is associated with improved FDG PET metabolism in Alzheimer's disease patients. The proposed study will assay plasma levels of ceramides and amino acids at baseline and 12-week follow-up in AD patients randomized to MSDC-C006 (mTOT modulator Mitoglitazone; n=16) or placebo (n=13).

Role: Principal Investigator

ADRC Pilot Project (P50 AG 16574) Mielke (PI) 05/01/14-04/30/15

Total Direct Costs: \$25,000

Change in Plasma Ceramide and Glucosylceramides with the Clinical Phenotype of Lewy Body Dementia

The present proposal seeks to examine whether plasma ceramides and glucosylceramides differ among individuals at high-risk of developing DLB (i.e., those with idiopathic REM Sleep Behavior Disorder [iRBD] and non-amnesic MCI cases), and whether the lipids associate with disease severity, including known neuroimaging measures of DLB.

Role: Principal Investigator

EU #1-NEURO2 Geda (PI) 01/01/11-01/01/16

St. Anne's University Hospital Brno

Total Direct Costs: \$747,825

Neuroepidemiology – Aging, Pre-Clinical Alzheimer's Disease and Dementia

The goal of this study is to design and conduct a study of aging and mild cognitive impairment in Brno and Prague, Czech Republic. The study will examine epidemiological and translational research to identify risk factors, putative protective factors, and biomarkers of cognitive aging and mild cognitive impairment (MCI).

Role: Co-Investigator

U01 AG06786 Petersen (PI) 09/01/09-08/31/14

Total Direct Costs: \$5,227,355

Alzheimer's Disease Patient Registry

The overall goal of this revision is to examine the prevalence, incidence, and risk factors for Mild Cognitive Impairment.

Role: Co-Investigator

R01 AG21136 Tschanz (PI) 07/01/09-06/30/11

Total Direct Costs: \$1,269,641

Progression of Dementia: A Population Study

This project will continue to follow enrolled incident dementia cases identified by the Cache County Study on Memory in Aging, along with their caregivers, to study genetic and environmental factors (and their interactions) which affect cognitive, behavioral, and functional decline.

Role: Co-Investigator

U01 AG033655 Albert (PI) 04/2009-06/2011

Total Direct Costs: \$109,033

Biomarkers of Cognitive Decline in Older Individuals: The BIOCARD Cohort

The goal of this project was to identify predictors of cognitive decline among normal individuals. The domains of investigation being examined include: cognitive testing, magnetic resonance imaging, cerebrospinal fluid, and blood.

Role: Co-Investigator

1R03 AG032427-01A1 Mielke (PI) 09/30/09-05/13/11

Total Direct Costs: \$90,000

Longitudinal Study of Membrane Lipids: Preclinical Alzheimer's Biomarkers

This project will examine blood-based lipids (sphingolipids, cholesterol, oxysterols, and lipid peroxidation products) as predictors of cognitive impairment and dementia in the Women's Health and Aging Study (WHAS) II.

Role: Principal Investigator

Lyketsos/Mielke (Co-PIs) 08/01/07-07/31/10

George and Cynthia Mitchell Foundation

Total Direct Costs: \$300,000

This study, in collaboration with Baylor College of Medicine and University of Texas Medical Branch at Galveston, seeks to identify blood-based biomarkers of AD including lipids, lipid peroxidation products and amyloid-beta oligomers using well-defined normal controls, MCI, and AD participants and sophisticated statistical methods to predict progression.

Role: Co-Principal Investigator

1R21 NS060271 Mielke (PI) 07/15/07-06/30/10

Total Direct Costs: \$275,000

Blood-Based Lipid Biomarkers Reflective of Alzheimer-Associated Neurodegeneration

The aim of this R21 grant, submitted to NINDS, is to correlate the longitudinal changes in blood lipid biomarkers and neurodegeneration, as assessed by morphometric MRI, to determine whether these markers are indirect indicators of neurodegeneration. Blood and imaging data from normal controls, MCI, and AD participants already obtained in an ASL/DTI imaging study will be used.

Role: Principal Investigator

1R21 AG028754-01A1 Mielke (PI) 07/01/07-06/30/10

Total Direct Costs: \$275,000

Development of Blood Lipid Biomarkers for Alzheimer Disease

The aim of this R21 grant is to examine blood-based lipid levels as potential biomarkers of neurodegeneration and progression of Alzheimer's disease using participants from the Johns Hopkins Alzheimer Disease Research Center.

Role: Principal Investigator

ADRC Pilot Project (5 P50 AG05146) Mielke (PI) 04/01/07-03/31/08

Total Direct Costs: \$29,130

Blood Lipid Biomarkers as Indicators of AD-Associated Neurodegeneration

This study examines the cross-sectional correlation between blood-based lipid levels and morphometric MRI measures in patients with AD, MCI, and cognitively normal controls.

Role: Principal Investigator

1R01 AG19825 Carlson (PI) 09/20/02-09/29/07

Yearly Direct Costs: \$328,969

Cognitive Pathways to Disability

This study complements the Women's Health and Aging Study II to understand how age-related changes in various domains of cognition may exert downstream effects on physical function and the implementation of compensatory strategies.

Role: Co-Investigator

Older Americans Independence Center (OAIC) Pilot Mielke (PI) 08/01/05-08/31/06

Brain-derived and Peripheral Lipid Levels as Predictors of Cognitive and Physical Frailty

Total Direct Cost: \$25,000

The funding for this study was awarded through the National Institute on Aging-supported Older Americans Independence Center (OAIC) of the Johns Hopkins Medical Institutions. The focus of this study is to examine brain-derived and peripheral lipids as predictors of both cognitive and physical frailty.

Role: Principal Investigator

BIBLIOGRAPHY

Peer-Reviewed Articles

1. Donny EC, Caggiula AR, **Mielke MM**, Jacobs KS, Rose C, Sved AF. Acquisition of nicotine self-administration in rats: the effects of dose, feeding schedule and drug contingency. *Psychopharmacology* 1998 Mar;136(1):83-90.
2. Donny EC, Caggiula AR, **Mielke MM**, Booth S, Gharib MA, Maldovan V, Hoffman A, McCallum S. Nicotine self-administration in rats on a progressive ratio schedule of reinforcement. *Psychopharmacology* 1999 Nov;147(2):135-42.
3. Donny EC, Caggiula AR, Rose C, Jacobs KS, **Mielke MM**, Sved AF. Differential effects of response-contingent and response-independent nicotine in rats. *Eur J Pharmacol* 2000 Aug 25;402(3):231-40.
4. Donny EC, Caggiula AR, Rowell PP, Gharib MA, Maldovan V, Booth S, **Mielke MM**, Hoffman A, McCallum S. Nicotine self-administration in rats: estrous cycle effects, sex differences and nicotinic receptor binding. *Psychopharmacology* 2000 Sept;151(4):392-405.
5. **Mielke MM**, Zandi PP, Sjögren M, Gustafson D, Östling S, Steen B, Skoog I. High total cholesterol levels in late-life associated with a reduced risk of dementia. *Neurology* 2005 May 24;64(10):1689-95.
6. Rosenberg PB, **Mielke MM**, Lyketsos CG. Caregiver assessment of patients' depression in Alzheimer disease: longitudinal analysis in a drug treatment study. *Am J Geriatr Psychiatry* 2005 Sept;13(9):822-6.
7. **Mielke MM**, Zandi PP, Blennow K, Gustafson D, Sjögren M, Rosengren L, Skoog I. Low serum potassium in mid-life associated with CSF amyloid-beta (1-42) in late-life. *Alzheimers Dis Assoc Disord* 2006 Jan-Mar;20(1):30-6.
8. Rosenberg P, **Mielke MM**, Samus QM, Rosenblass A, Baker A, Brandt J, Rabins PV, Lyketsos CG. Transition to nursing home from assisted living is not associated with dementia or dementia-related problem behaviors. *J Am Directors Med Assoc* 2006 Feb;7(2):73-8.
9. Sjögren M, **Mielke MM**, Gustafson D, Zandi P, Skoog I. Cholesterol and Alzheimer's disease – is there a relation? *Mech Ageing Dev* 2006 Feb;127(2):138-47.
10. **Mielke MM**, Lyketsos CG. Lipids and the pathogenesis of Alzheimer's disease: is there a link? *Int Rev Psychiatry* 2006 Apr;18(2):173-86.
11. Jerome GJ, Glass TA, **Mielke MM**, Xue Q-L, Andersen RE, Fried LP. Physical activity participation by presence and type of functional deficits in older women: the Women's Health and Aging Studies. *J Gerontol A Biol Med Sci* 2006 Nov;61(11):1171-6.
12. **Mielke MM**, Zandi PP. Hematologic risk factors of vascular disease and their relation to dementia. *Dement Geriatr Cogn Disord* 2006;21(5-6):335-52.

13. Morgan MD†, **Mielke MM**, O'Brien R, Troncoso JC, Zonderman AB, Lyketsos CG. Rates of depression in individuals with pathologic but not clinical Alzheimer disease are lower than those in individuals without the disease: findings from the Baltimore Longitudinal Study of Aging (BLSA). *Alzheimers Dis Assoc Disord* 2007 July-Sept;21:199-204. PMID: PMC2607061
14. **Mielke MM**, Rosenberg P, Tschanz JT, Cook L, Corcoran C, Hayden KM, Norton M, Rabins PVR, Green R, Welsh-Bohmer K, Breitner JCS, Munger R, Lyketsos C. Vascular factors predict rate of progression in Alzheimer disease. *Neurology* 2007 Nov;69(19): 1850-8.
15. Kozauer NA, **Mielke MM**, Chan GKC, Rebok GW, Lyketsos CG. Apolipoprotein E genotype and lifetime cognitive decline. *Int Psychogeriatr* 2008 Feb;20(1):109-23. [Epub 2007 Aug;2(1):1-15].
16. Rao V, Spiro J, Vaishnavi S, Rastogi P, **Mielke M**, Noll K, Cornwell E, Schretlen D, Makley M. Prevalence and types of sleep disturbances acutely after traumatic brain injury. *Brain Inj* 2008 May;22(5):381-6. PMID: PMC2377197
17. **Mielke MM**, Xue Q-L, Zhou J, Chaves PHM, Fried LP, Carlson MC. Baseline serum cholesterol is selectively associated with motor speed and not rates of cognitive decline: the Women's Health and Aging Study II. *J Gerontol A Biol Sci Med Sci* 2008 June;63(6):619-24. PMID: PMC3304295
18. Lyketsos CG, Szekely CA, **Mielke MM**, Rosenberg PB, Zandi PP. Developing new treatments for Alzheimer's disease: the who, what, when, and how of biomarker guided therapies. *Int Psychogeriatr* 2008 Oct;20(5):871-89. PMID: PMC2688723
19. Rosenberg PB, **Mielke MM**, Tschanz JT, Cook L, Corcoran C, Hayden KM, Norton M, Rabins PVR, Green RC, Welsh-Bohmer K, Breitner JCS, Munger R, Lyketsos C. Effects of cardiovascular medications on rate of functional decline in Alzheimer's Disease. *Am J Geriatr Psychiatry* 2008 Nov;16(11):883-92. PMID: PMC2676234
20. **Mielke MM**, Kozauer NA, Chan KCG, George M, Toroney J, Zerrate M, Bandeen-Roche K, Wang M-C, vanZijl P, Pekar JJ, Mori S, Lyketsos CG, Albert M. Regionally-specific diffusion tensor imaging in mild cognitive impairment and Alzheimer's disease. *NeuroImage* 2009 May 15;46(1):47-55. PMID: PMC2688089
21. Gustafson DR, Bäckman K, Waern M, Östling S, Guo X, Zandi P, **Mielke MM**, Skoog I. Adiposity indicators and dementia over 32 years in Sweden. *Neurology* 2009 Nov 10;73(19):1559-66. PMID: PMC2777073
22. Carlson MC, Erickson KI, Kramer AF, Voss MW, Bolea N, **Mielke M**, McGill S, Rebok GW, Seeman T, Fried LP. Evidence for neurocognitive plasticity in at-risk older adults: the Experience Corps program. *J Gerontol A Biol Sci Med Sci* 2009 Dec;64(12):1275-82. PMID: PMC2781785

23. **Mielke MM**, Bandaru VVR, Haughey NJ, Rabins PV, Lyketsos CG, Carlson MC. Serum sphingomyelins and ceramides are early predictors of memory impairment. *Neurobiol Aging* 2010 Jan;31(1):17-24. PMID: PMC2783210
24. Ewers M, **Mielke MM**, Hampel H. Blood-based biomarkers of microvascular pathology in Alzheimer's disease. *Exp Gerontol* 2010 Jan;45(1):75-9. PMID: PMC2815204
25. Rao V, Bertrand M, Rosenberg P, Makley M, Schretlen D, Brandt J, **Mielke MM**. Predictors of new-onset depression after mild traumatic brain injury. *J Neuropsychiatry Clin Neurosci* 2010 Winter;22(1):100-4. PMID: PMC2918274
26. Rosenberg PB, **Mielke MM**, Xue Q-L, Carlson MC. Depressive symptoms predict incident cognitive impairment in cognitive healthy older women. *Am J Geriatr Psychiatry* 2010 Mar;18(3):204-11. PMID: PMC2838202
27. Oh ES, **Mielke MM**, Rosenberg PB, Jain A, Fedarko N, Lyketsos CG, Mehta P. Comparison of conventional ELISA with electrochemiluminescence technology for detection of amyloid-beta (A β) in plasma. *J Alzheimers Dis* 2010 Mar;21(3):769-73. PMID: PMC3075593
28. Okonkwo OC, Alosco ML, Griffith HR, **Mielke MM**, Shaw LM, Trojanowski JQ, Tremont G, ADNI. Cerebrospinal fluid abnormalities and rate of decline in everyday function across the dementia spectrum: normal aging, mild cognitive impairment, and Alzheimer's disease. *Arch Neurol* 2010 June;67(6):688-96. PMID: PMC2888499
29. **Mielke MM**, Haughey N, Bandaru VVR, Schech S, Carrick R, Carlson MC, Mori S, Miller MI, Ceritoglu C, Brown T, Albert M, Lyketsos CG. Plasma ceramides are altered in MCI and predict cognitive decline and hippocampal volume loss. *Alzheimers Dement* 2010 Sept;6(5):378-85. PMID: PMC2933928
30. **Mielke MM**, Zandi P, Shao H, Waern M, Östling S, Guo X, Bjorkelund C, Lissner L, Skoog I, Gustafson DR. The 32-year relationship between cholesterol and dementia from midlife to late life. *Neurology* 2010 Nov 23;75(21):1888-95. PMID: PMC2995387
31. **Mielke MM**, Bandaru VVR, McArthur JC, Chu M, Haughey NJ. Disturbance in cerebral spinal fluid sphingolipid content is associated with memory impairment in subjects with the human immunodeficiency virus. *J Neurovirol* 2010 Nov;16(6):445-56. PMID: PMC3144420
32. **Mielke MM**, Lyketsos CG. Alterations of the sphingolipid pathway in Alzheimer's disease: new biomarkers and treatment targets? *Neuromolecular Med* 2010 Dec;12(4):331-40. PMID: PMC3129545
33. Okonkwo OC, **Mielke MM**, Griffith HR, Moghekar AR, O'Brien R, Shaw LM, Trojanowski JQ, Albert M, ADNI. Cerebrospinal fluid profiles predict prospective course and outcome in patients with amnesic mild cognitive impairment. *Arch Neurol* 2011 Jan;68(1):113-9. PMID: PMC3058271
34. **Mielke MM**, Leoutsakos J-M, Tschanz JT, Green RC, Tripodis Y, Corcoran CD, Norton MC, Lyketsos CG. Interaction between vascular factors and the APOE E4 allele in predicting rate

- of progression in Alzheimer's dementia. *J Alzheimers Dis* 2011 Jan; 26(1):127-34. PMID: PMC3164737
35. Rosenberg PB, **Mielke MM**, Appleby B, Oh E, Leoutsakos J-M, Lyketsos CG. Neuropsychiatric symptoms in MCI subtypes: the importance of executive dysfunction. *Int J Geriatr Psychiatry* 2011 Apr;26(4):364-72. PMID: PMC3204866
 36. Gracia-Garcia P†, Rao V, Haughey NJ, Bandaru VVR, Smith G, Rosenberg PB, Lobo A, Lyketsos CG, **Mielke MM**. Elevated plasma ceramides in depression. *J Neuropsychiatry Clin Neurosci* 2011 Spring;23(2):215-8. PMID: PMC3121176
 37. Gracia-Garcia P, **Mielke MM**, Rosenberg PB, Bergey A, Rao V. Personality changes in brain injury. *J Neuropsychiatry Clin Neurosci* 2011 Spring;23(2):E14. PMID: PMC3142353
 38. Tschanz JT, Corcoran CD, Schwartz S, Treiber K, Green RC, Norton MC, **Mielke MM**, Piercy K, Steinberg M, Rabins PVR, Leoutsakos J-M, Welsh-Bohmer KA, Breitner JCS, Lyketsos CG. Progression of cognitive, functional, and neuropsychiatric symptom domains in a population cohort with Alzheimer's dementia: the Cache County Dementia Progression Study. *Am J Geriatr Psychiatry* 2011 June;19(6):532-42. PMID: PMC3101372
 39. Oishi K, Akhter K, **Mielke M**, Ceritoglu C, Zhang J, Jiang H, Li X, Younes L, Miller MI, van Zijl PC, Albert M, Lyketsos CG, Mori S. Multi-modal MRI analysis with disease-specific spatial filtering: initial testing to predict mild cognitive impairment patients who convert to Alzheimer's disease. *Front Neurol* 2011 Aug; Volume 2, Article 54:1-8 (doi: 10.3389/fneur.2011.00054). PMID: PMC3160749
 40. **Mielke MM**, Haughey NJ, Bandaru VR, Weinberg DD, Darby E, Zaidi N, Pavlik V, Doody RS, Lyketsos CG. Plasma sphingomyelins are associated with cognitive progression in Alzheimer's disease. *J Alzheimers Dis* 2011 Nov;27(2):259-69. PMID: PMC3218198
 41. Yasar S, Ko JY, Nothelle S, **Mielke MM**, Carlson MC. Evaluation of the effect of systolic blood pressure and pulse pressure on cognitive function: the Women's Health and Aging Study II. *PLoS One* 2011 Dec;6(12):e27976. PMID: PMC3235094
 42. Oishi K, **Mielke MM**, Albert M, Lyketsos CG, Mori S. DTI analyses and clinical applications in Alzheimer's disease. *J Alzheimers Dis* 2011; 26(Suppl 3):287-96. PMID: PMC3294372
 43. **Mielke MM**, Okonkwo OC, Oishi K, Mori S, Tighe S, Miller MI, Ceritoglu C, Brown T, Albert M, Lyketsos CG. Fornix integrity and hippocampal volume predict memory decline and progression to Alzheimer's disease. *Alzheimers Dement* 2012 Mar;8(2):105-13. PMID: PMC3305232
 44. **Mielke MM**, Leoutsakos J-M, Corcoran CD, Green RC, Norton MC, Welsh-Bohmer KA, Tschanz JT, Lyketsos CG. Effects of Food and Drug Administration-approved medications for Alzheimer's disease on clinical progression. *Alzheimers Dement* 2012 May;8(3):180-7. PMID: PMC3341471

45. Rao V, **Mielke MM**, Xu X, Smith G, McCann U, Bergey A, Doshi V, Pham DL, Yousem D, Mori S. Diffusion tensor imaging atlas-based analyses in major depression after mild traumatic brain injury. *J Neuropsychiatry Clin Neurosci* 2012 June;24(3):309-15. PMID: NA
46. **Mielke MM**, Bandaru VVR, Haughey NJ, Xia J, Fried LP, Yasar S, Albert M, Varma V, Harris G, Schneider EB, Rabins PV, Bandeen-Roche K, Lyketsos CG, Carlson MC. Serum ceramides increase the risk of Alzheimer disease: the Women's Health and Aging Study II. *Neurology* 2012 Aug;79(7):633-41. PMID: PMC3414665
47. Tighe SK†, Oishi K, Mori S, Smith GS, Albert M, Lyketsos CG, **Mielke MM**. Diffusion tensor imaging of neuropsychiatric symptoms in mild cognitive impairment and Alzheimer's dementia. *J Neuropsychiatry Clin Neurosci* 2012 Sept;24(4):484-8. PMID: PMC3533244
48. Leoutsakos J-M, Han D, **Mielke MM**, Forrester S, Tschanz JT, Corcoran CD, Green RC, Norton MC, Welsh-Bohmer KA, Lyketsos CG. Effects of general medical health on Alzheimer's progression: the Cache County Dementia Progression Study. *Int Psychogeriatr* 2012 Oct;24(10):1561-70. PMID: PMC3573852
49. **Mielke MM**, Wiste HJ, Weigand SD, Knopman DS, Lowe VJ, Roberts RO, Geda YE, Swenson-Dravis DM, Boeve BF, Senjem ML, Vemuri P, Petersen RC, Jack CR Jr. Indicators of amyloid burden in a population-based study of cognitively normal elderly. *Neurology* 2012 Oct;79(15):1570-7. PMID: PMC3475629
50. Oishi K, **Mielke MM**, Albert M, Lyketsos CG, Mori S. The fornix sign: a potential sign for Alzheimer's disease based on diffusion tensor imaging. *J Neuroimaging* 2012 Oct;22(4):365-74. PMID: PMC3256282
51. **Mielke MM**, Haughey NJ. Could plasma sphingolipids be diagnostic or prognostic biomarkers for Alzheimer's disease? *Clin Lipidol* 2012 Oct;7(5):525-36. PMID: PMC3627378
52. Rosenberg PB, **Mielke MM**, Han D, Leoutsakos JS, Lyketsos CG, Rabins PV, Zandi PP, Breitner JC, Norton MC, Welsh-Bohmer KA, Zuckerman IH, Rattinger GB, Green RC, Corcoran C, Tschanz JT. The association of psychotropic medication use with the cognitive, functional, and neuropsychiatric trajectory of Alzheimer's disease. *Int J Geriatr Psychiatry* 2012 Dec;27(12):1248-57. PMID: PMC3448859
53. Parker DC, **Mielke MM**, Yu Q, Rosenberg PB, Jain A, Lyketsos CG, Fedarko NS, Oh ES. Plasma neopterin level as a marker of peripheral immune activation in amnesic mild cognitive impairment and Alzheimer's disease. *Int J Geriatr Psychiatry* 2013 Feb;28(2):149-54. PMID: PMC3505262
54. Geda YE, Ragossnig M, Roberts LA, Roberts RO, Pankratz VS, Christianson RJH, **Mielke MM**, Levine JA, Boeve BF, Sochor O, Tangalos EG, Knopman DS, Petersen RC. Caloric intake, aging, and mild cognitive impairment: a population-based study. *J Alzheimers Dis* 2013 Jan;34(2):501-7. PMID: PMC3578975

55. Jack CR, Wiste H, Lesnick TG, Weigand SD, Knopman DS, Vemuri P, Pankratz VS, Senjem ML, Gunter JL, **Mielke MM**, Lowe VJ, Boeve BF, Petersen RC. Brain β -amyloid load approaches a plateau. *Neurology* 2013 Mar;80(10):890-6. PMID: PMC3653215
56. Roberts RO, Geda YE, Knopman DS, Cha RH, Pankratz VS, Boeve BF, Tangalos EG, Ivnik RJ, **Mielke MM**, Petersen RC. Cardiac disease associated with increased risk of nonamnestic mild cognitive impairment: stronger effect on women. *JAMA Neurol* 2013 Mar;70(3):374-82. PMID: PMC3734560
57. Rabins PV, Schwartz S, Black BS, Corcoran C, Fauth E, **Mielke M**, Christensen J, Lyketsos C, Tschanz J. Predictors of progression to severe Alzheimer disease in an incidence sample. *Alzheimers Dement* 2013 Mar;9(2):204-7. PMID: PMC3791880
58. Miller VM, Garovic VD, Kantarci K, Barnes JN, Jayachandran M, **Mielke MM**, Joyner MJ, Shuster LT, Rocca WA. Sex-specific risk of cardiovascular disease and cognitive decline: pregnancy and menopause. *Biol Sex Differ* 2013 Mar;4(1):6. PMID: PMC3623746
59. Trushina E, Dutta T, Persson X-MT, **Mielke MM**, Petersen RC. Identification of altered metabolic pathways in plasma and CSF in mild cognitive impairment and Alzheimer's disease using metabolomics. *PLoS One* 2013 May;8(5):e63644. PMID: PMC3658985
60. Rosenberg PB, **Mielke MM**, Appleby BS, Oh ES, Geda YE, Lyketsos CG. The association of neuropsychiatric symptoms in MCI with incident dementia and Alzheimer disease. *Am J Geriatr Psychiatry* 2013 July;21(7):685-95. PMID: PMC3428504
61. **Mielke MM**, Roberts RO, Savica R, Cha R, Drubach DI, Christianson T, Pankratz VS, Geda YE, Machulda MM, Ivnik RJ, Knopman DS, Boeve BF, Rocca WA, Petersen RC. Assessing the temporal relationship between cognition and gait: slow gait predicts cognitive decline in the Mayo Clinic Study of Aging. *J Gerontol A Biol Sci Med Sci* 2013 Aug;68(8):929-37. PMID: PMC3712358
62. Knopman DS, Jack CR Jr, Wiste HJ, Weigand SD, Vemuri P, Lowe VJ, Kantarci K, Gunter JL, Senjem ML, **Mielke MM**, Roberts RO, Boeve BF, Petersen RC. Selective worsening of brain injury biomarker abnormalities in cognitively normal elderly persons with β -amyloidosis. *JAMA Neurol* 2013 Aug;70(8):1030-8. PMID: PMC3884555
63. Knopman DS, Jack CR Jr, Wiste HJ, Weigand SD, Vemuri P, Lowe VJ, Kantarci K, Gunter JL, Senjem ML, **Mielke MM**, Roberts RO, Boeve BF, Petersen RC. Brain injury biomarkers are not dependent on β -amyloid in normal elderly. *Ann Neurol* 2013 Aug;73(4):472-80. PMID: PMC3660408
64. Petersen RC, Aisen P, Boeve BF, Geda YE, Ivnik RJ, Knopman DS, **Mielke M**, Pankratz VS, Roberts R, Rocca WA, Weigand S, Weiner M, Wiste H, Jack CR Jr. Mild cognitive impairment due to Alzheimer disease in the community. *Ann Neurol* 2013 Aug;74(2):199-208. PMID: PMC3804562
65. Nowrangi MA†, Lyketsos CG, Leoutsakos J-MS, Oishi K, Albert M, Mori S, **Mielke MM**. Longitudinal, region-specific course of diffusion tensor imaging measures in mild cognitive

- impairment and Alzheimer's disease. *Alzheimers Dement* 2013 Sept;9(5):519-28. PMID: PMC3639296
66. **Mielke MM**, Maetzler W, Haughey NJ, Bandaru VVR, Savica R, Deuschle C, Gasser T, Hauser AK, Gräber-Sultan S, Schleicher E, Berg D, Liepelt-Scarfone I. Plasma ceramide and glucosylceramide metabolism is altered in sporadic Parkinson's disease and associated with cognitive impairment: a pilot study. *PLoS One* 2013 Sept;8(9):e73094. PMID: PMC3776817
 67. Bandaru VVR, ***Mielke MM**, Sacktor N, McArthur JC, Grant I, Letendre S, Chang L, Wojna V, Pardo C, Calabresi P, Munsaka S, Haughey NJ. A lipid storage-like disorder contributes to cognitive decline in HIV-infected subjects. *Neurology* 2013 Oct;81(17):1492-9. PMID: PMC3888167
 68. Singh B†, Parsaik AK, **Mielke MM**, Roberts RO, Scanlon PD, Geda YE, Pankratz S, Christianson T, Yawn BP, Petersen RC. Chronic obstructive pulmonary disease and association with mild cognitive impairment: the Mayo Clinic Study of Aging. *Mayo Clin Proc* 2013 Nov;88(11):1222-30. PMID: PMC3875365
 69. Sachdev PS, Lipnicki DM, Kochan NA, Crawford JD, Rockwood K, Xiao S, Li J, Li X, Brayne C, Matthews FE, Stephan BCM, Lipton RB, Katz MJ, Ritchie K, Carrière I, Ancelin ML, Seshadri S, Au R, Beiser AS, Lam LCW, Wong CHY, Fung AWT, Kim KW, Han JW, Kim TH, Petersen RC, Roberts RO, **Mielke MM**, Ganguli M, Dodge H, Hughes T, Anstey KJ, Cherbuin N, Butterworth P, Ng TP, Gao Q, Reppermund S, Brodaty H, Meguro K, Schupf N, Manly J, Stern Y, Lobo A, Lopez-Anton R, Santabárbara J, for COSMIC. COSMIC (Cohort Studies of Memory in an International Consortium): an international consortium to identify risk and protective factors and biomarkers of cognitive ageing and dementia in diverse ethnic and sociocultural groups. *BMC Neurol* 2013 Nov;13:165. PMID: PMC3827845
 70. Jack C, Wiste HJ, Weigand SD, Knopman DS, Lowe V, Vemuri P, **Mielke MM**, Jones DT, Senjem ML, Gunter JL, Gregg BE, Pankratz VS, Petersen RC. Amyloid-first and neurodegeneration-first profiles characterize incident amyloid PET positivity. *Neurology* 2013 Nov;81:1732-40. PMID: PMC3821718
 71. McDade EM, Boot BP, Christianson TJ, Pankratz VS, Boeve BF, Ferman TJ, Bieniek K, Hollman JH, Roberts RO, **Mielke MM**, Knopman DS, Petersen RC. Subtle gait changes in patients with REM sleep behavior disorder. *Mov Disord* 2013 Nov;28(13):1847-53. PMID: PMC3952497
 72. Machulda MM, Pankratz VS, Christiansen TJ, Ivnik RJ, **Mielke MM**, Roberts RO, Boeve BF, Knopman DS, Petersen RC. Practice effects and longitudinal cognitive change in normal aging vs. incident mild cognitive impairment and dementia in the Mayo Clinic Study of Aging. *Clin Neuropsychol* 2013 Nov;27(8):1247-64. PMID: PMC3869900
 73. Gustafson DR, **Mielke MM**, Tien PC, Valcour V, Cohen M, Anastos K, Liu C, Pearce L, Golub ET, Minkoff H, Crystal HA. Anthropometric measures and cognition in middle-aged

- HIV-infected and uninfected women. The Women's Interagency HIV Study. *J Neurovirol* 2013 Dec;19(6):574-85. PMID: PMC3957488
74. Saleem M†, Bandaru VVR, Herrmann N, Swardfager W, **Mielke MM**, Oh PI, Shammi P, Kiss A, Haughey NJ, Rovinski R, Lanctôt KL. Ceramides predict verbal memory performance in coronary artery disease patients undertaking exercise: a prospective cohort pilot study. *BMC Geriatrics* 2013 Dec;13(1):135. PMID: PMC3924163
 75. Roberts RO, Knopman DS, Geda YE, Cha RH, Pankratz VS, Baertlein L, Boeve BF, Tangalos EG, Ivnik RJ, **Mielke MM**, Petersen RC. Association of diabetes with amnesic and non-amnesic mild cognitive impairment. *Alzheimers Dement* 2014 Jan;10(1):18-26. PMID: PMC3830601
 76. Snyder HM, Carrillo MC, Grodstein F, Henriksen K, Jeromin A, Lovestone S, **Mielke MM**, O'Bryant S, Sarasa M, Sjøgren M, Soares H, Teeling J, Trushina E, Ward M, West T, Bain LJ, Shineman DW, Weiner M, Fillit HM. Developing novel blood-based biomarkers for Alzheimer's disease. *Alzheimers Dement* 2014 Jan;10(1):109-14. PMID: NA
 77. **Mielke MM**, Savica R, Wiste HJ, Weigand SD, Vemuri P, Knopman DS, Lowe VJ, Roberts RO, Machulda MM, Geda YE, Petersen RC, Jack CR Jr. Head trauma and in vivo measures of amyloid and neurodegeneration in a population-based study. *Neurology* 2014 Jan;82(1):70-6. PMID: PMC3873622
 78. **Mielke MM**, Vemuri P, Rocca WA. Clinical epidemiology of Alzheimer's disease: assessing sex and gender differences. *Clin Epidemiol* 2014 Jan;6:37-48. PMID: PMC3891487
 79. Singh B†, Parsaik AK, **Mielke MM**, Erwin PJ, Knopman DS, Petersen RC, Roberts RO. Association of Mediterranean diet with mild cognitive impairment and Alzheimer's disease: a systematic review and meta-analysis. *J Alzheimers Dis* 2014 Jan;39(2):271-82. PMID: PMC3946820
 80. Roberts RO, Knopman DS, **Mielke MM**, Cha RH, Pankratz VS, Christianson TJH, Geda YE, Boeve BF, Ivnik RJ, Tangalos EG, Rocca WA, Petersen RC. Higher risk of progression to dementia in mild cognitive impairment cases who revert to normal. *Neurology* 2014 Jan;82(4):317-25. PMID: PMC3929198
 81. Steinberg M, Hess K, Corcoran C, **Mielke MM**, Norton M, Breitner J, Green R, Leoutsakos J, Welsh-Bohmer K, Lyketsos CG, Tschanz J. Vascular risk factors and neuropsychiatric symptoms in Alzheimer's disease: the Cache County Study. *Int J Geriatr Psychiatry* 2014 Feb;29(2):153-9. PMID: PMC3883945
 82. Roberts RO, Knopman DS, Przybelski SA, **Mielke MM**, Kantarci K, Preboske GM, Senjem ML, Pankratz VS, Geda YE, Boeve BF, Ivnik RJ, Rocca WA, Petersen RC, Jack CR Jr. Association of type 2 diabetes with brain atrophy and cognitive impairment. *Neurology* 2014 Apr;82(13):1132-41. PMID: PMC3966799
 83. Roberts RO, Knopman DS, Cha RH, **Mielke MM**, Pankratz VS, Boeve BF, Kantarci K, Geda YE, Jack CR Jr, Petersen RC, Lowe FJ. Diabetes and elevated hemoglobin A1c levels are

- associated with brain hypometabolism but not amyloid accumulation. *J Nucl Med* 2014 May;55(5):759-64. PMID: PMC4011952
84. Jack CR Jr, Wiste HJ, Knopman DS, Vemuri P, **Mielke MM**, Weigand SD, Senjem ML, Gunter JL, Lowe V, Gregg BE, Pankratz VS, Petersen RC. Rates of β -amyloid accumulation are independent of hippocampal neurodegeneration. *Neurology* 2014 May;82(18):1605-12. PMID: PMC4013810
 85. Singh B†, **Mielke MM**, Parsaik AK, Cha RH, Roberts RO, Scanlon PD, Geda YE, Christianson TJ, Pankratz VS, Petersen RC. A prospective study of chronic obstructive pulmonary disease and risk of mild cognitive impairment. *JAMA Neurol* 2014 May;71(5):581-8. PMID: PMC4020948
 86. Geda YE, Roberts RO, **Mielke MM**, Knopman DS, Christianson TJH, Pankratz VS, Boeve BF, Sochor O, Tangalos EG, Petersen RC, Rocca WA. Baseline neuropsychiatric symptoms and the risk of incident mild cognitive impairment: a population-based study. *Am J Psychiatr* 2014 May;171(5):572-81. PMID: PMC4057095
 87. Nicholson AM, Finch NA, Thomas CS, Wojtas A, Rutherford NJ, **Mielke MM**, Roberts RO, Boeve BF, Knopman DS, Petersen RC, Rademakers R. Progranulin protein levels are differently regulated in plasma and CSF. *Neurology* 2014 May;82(21):1871-8. PMID: PMC4105255
 88. Trushina E, **Mielke MM**. Recent advances in the application of metabolomics to Alzheimer's disease. *Biochim Biophys Acta* 2014(Aug);1842(8):1232-9. PMID: PMC3842412
 89. Knopman DS, Roberts RO, Pankratz VS, Cha RH, Rocca WA, **Mielke MM**, Boeve BF, Tangalos EG, Ivnik RJ, Geda YE, Petersen RC. Incidence of dementia among participants and nonparticipants in a longitudinal study of cognitive aging. *Am J Epidemiol* 2014 Aug;180(4):414-23. PMID: PMC4128768
 90. Knopman DS, Jack CR Jr, Wiste HJ, Lundt ES, Weigand SD, Vemuri P, Lowe VJ, Kantarci K, Gunter JL, Senjem ML, **Mielke MM**, Roberts RO, Boeve BF, Petersen RC. ¹⁸Fluorodeoxyglucose positron emission tomography, aging and apolipoprotein E genotype in cognitively normal persons. *Neurobiol Aging* 2014 Sept;35(9):2096-106. PMID: PMC4053507
 91. Rocca WA, **Mielke MM**, Vemuri P, Miller VM. Sex and gender differences in the causes of dementia: a narrative review. *Maturitas* 2014 Oct;79(2):196-201. PMID: PMC4169309
 92. Jack CR Jr, Wiste HJ, Weigand SD, Rocca WA, Knopman DS, **Mielke MM**, Lowe VJ, Senjem ML, Gunter JL, Preboske GM, Pankratz VS, Vemuri P, Petersen RC. Age-specific population frequencies of cerebral β -amyloidosis and neurodegeneration among people with normal cognitive function aged 50-89 years: a cross-sectional study. *Lancet Neurol* 2014 Oct;13(10):997-1005. PMID: PMC4324499
 93. **Mielke MM**, Haughey NJ, Bandaru VVR, Zetterberg H, Blennow K, Andreasson U, Johnson SC, Gleason CE, Blazel HM, Puglielli L, Sager MA, Asthana S, Carlsson CM. Cerebrospinal

- fluid sphingolipids, β -amyloid, and tau in adults at risk for Alzheimer's disease. *Neurobiol Aging* 2014 Nov;35(11):2486-94. PMID: PMC4170854
94. **Mielke MM**, Weigand SD, Wiste HJ, Vemuri P, Machulda MM, Knopman DS, Lowe V, Roberts RO, Kantarci K, Rocca WA, Jack CR Jr, Petersen RC. Independent comparison of CogState computerized testing and a standard cognitive battery with neuroimaging. *Alzheimers Dement* 2014 Nov;10(6):779-89. PMID: PMC4273919
 95. Jessen F, Amariglio RE, van Boxtel M, Breteler M, Ceccaldi M, Ch  telat G, Dubois B, Dufouil C, Ellis KA, van der Flier WM, Glodzik L, van Harten AC, de Leon MJ, McHugh P, **Mielke MM**, Molinuevo JL, Mosconi L, Osorio RS, Perrotin A, Petersen RC, Rabin LA, Rami L, Reisberg B, Rentz DM, Sachdev PS, de la Sayette V, Saykin AJ, Scheltens P, Shulman MB, Slavin MJ, Sperling RA, Stewart R, Uspenskaya O, Vellas B, Visser PJ, Wagner M, Subjective Cognitive Decline Initiative (SCD-I) Working Group. A conceptual framework for research on subjective cognitive decline in preclinical Alzheimer's disease. *Alzheimers Dement* 2014 Nov;10(6):844-52. PMID: PMC4317324
 96. Vemuri P, Lesnick TG, Przybelski SA, Machulda M, Knopman DS, **Mielke MM**, Roberts RO, Geda YE, Rocca WA, Petersen RC, Jack CR Jr. Association of lifetime intellectual enrichment with cognitive decline in the older population. *JAMA Neurol* 2014 Aug;71(8):1017-24. PMID: PMC4266551
 97. Nowrangi MA†, Okonkwo O, Lyketsos C, Oishi K, Mori S, Albert M, **Mielke MM**. Atlas-based diffusion tensor imaging correlates of executive function. *J Alzheimers Dis* 2015 Jan;44(2):585-98. PMID: PMC4334128
 98. Vassilaki M, Cha RH, Aakre, JA, Therneau TM, Geda YE, **Mielke MM**, Knopman DS, Petersen RC, Roberts RO. Mortality in mild cognitive impairment varies by subtype, sex and lifestyle factors: the Mayo Clinic Study of Aging. *J Alzheimers Dis* 2015 Jan;45(4):1237-45. PMID: PMC4398642
 99. **Mielke MM**, Bandaru VVR, Han D, An Y, Resnick SM, Ferrucci L, Haughey NJ. Factors affecting longitudinal trajectories of plasma sphingomyelins: the Baltimore Longitudinal Study of Aging. *Aging Cell* 2015 Feb;14(1):112-21. PMID: PMC4310757
 100. Vemuri P, Lesnick TG, Przybelski SA, Knopman DS, Preboske GM, Kantarci K, Raman MR, Machulda MM, **Mielke MM**, Lowe VJ, Senjem ML, Gunter JL, Rocca WA, Roberts RO, Petersen RC, Jack CR Jr. Vascular and amyloid pathologies are independent predictors of cognitive decline in normal elderly. *Brain* 2015 Mar;138(Pt 3):761-71. PMID: PMC4339775
 101. Pink A, Stokin GB, Bartley MM, Roberts RO, Sochor O, Machulda MM, Krell-Roesch J, Knopman DS, Acosta JI*, Christianson TJ, Pankratz VS, **Mielke MM**, Petersen RC, Geda YE. Neuropsychiatric symptoms, *APOE* ϵ 4, and the risk of incident dementia: a population-based study. *Neurology* 2015 Mar;84(9):935-43. PMID: PMC4351664
 102. Dickens AM, Anthony DC, Deutsch R, **Mielke MM**, Claridge TDW, Grant I, Franklin D, Rosario D, Marcotte T, Letendre S, McArthur JC, Haughey NJ. Cerebrospinal fluid metabolomics implicate bioenergetic adaptation as a neural mechanism regulating shifts in

- cognitive states of HIV-infected subjects. *AIDS* 2015 Mar;29(5):559-69. PMID: PMC4340743
103. Pankratz VS, Roberts RO, **Mielke MM**, Knopman DS, Jack CR Jr, Geda YE, Rocca WA, Petersen RC. Predicting the risk of mild cognitive impairment in the Mayo Clinic Study of Aging. *Neurology* 2015 Apr;84(14):1433-42. PMID: PMC4395890
 104. Roberts RO, Cha RH, **Mielke MM**, Geda YE, Boeve BF, Machulda MM, Knopman DA, Petersen RC. Risk and protective factors for cognitive impairment in persons aged 85 years and older. *Neurology* 2015 May;84(18):1854-61. PMID: PMC4433468
 105. Jack CR Jr, Wiste HJ, Weigand SD, Knopman DS, Vemuri P, **Mielke MM**, Low V, Senjem ML, Gunter JL, Machulda MM, Gregg BE, Pankratz VS, Rocca WA, Petersen RC. Age, sex and APOE ϵ 4 effects on memory, brain structure, and β -amyloid across the adult life span. *JAMA Neurol* 2015 May;72(5):511-9. PMID: PMC4428984
 106. Vassilaki M, Aakre JA, Cha RH, Kremers WK, St. Sauver JL, **Mielke MM**, Geda YE, Machulda MM, Knopman DS, Petersen RC, Roberts RO. Multimorbidity and risk of mild cognitive impairment. *J Am Geriatr Soc* 2015 Sept;63(9):1783-90. PMID: PMC4607039
 107. Rabin LA, Smart CM, Crane PK, Amariglio RE, Berman LM, Boada M, Buckley RF, Chetelat G, Dubois B, Ellis KA, Gifford KA, Jefferson AL, Jessen F, Katz MJ, Lipton RB, Luck T, Maruff P, **Mielke MM**, Molinuevo JL, Naeem F, Perrotin A, Petersen RC, Rami L, Reisberg B, Rentz DM, Riedel-Heller SG, Risacher SL, Rodriguez O, Sachdev PS, Saykin AJ, Slavin MJ, Snitz BE, Sperling RA, Tandetnik C, van der Flier WM, Wagner M, Wolfsgruber S, Sikkes SA. Subjective cognitive decline in older adults: An overview of self-report measures used across 19 international research studies. *J Alzheimers Dis* 2015 Sept;48(Suppl 1):S63-86. PMID: PMC4617342
 108. Roberts RO, Aakre JA, Cha RH, Kremers WK, **Mielke MM**, Velgos SN, Geda YE, Knopman DS, Petersen RC. Association of pancreatic polypeptide with mild cognitive impairment varies by APOE E4 allele. *Front Aging Neurosci* 2015 Sept;7:172. PMID: PMC4561818
 109. Peterlin BL, **Mielke MM**, Dickens AM, Chatterjee S, Dash P, Alexander G, Vieria RVA, Bandaru VVR, Dorskind JM, Tietjen GE, Haughey NH. Interictal, circulating sphingolipids in women with episodic migraine: a case-control study. *Neurology* 2015 Oct;85(14):1214-23. PMID: PMC4607595
 110. **Mielke MM**, Machulda MM, Hagen CE, Edwards KK, Roberts RO, Pankratz VS, Knopman DS, Jack CR Jr, Petersen RC. Performance of the CogState computerized battery in the Mayo Clinic Study on Aging. *Alzheimers Dement* 2015 Nov;11(11):1367-76. PMID: PMC4595161
 111. Knopman DS, Beiser A, Machulda MM, Fields J, Roberts RO, Pankratz VS, Aakre J, Cha RH, Rocca WA, **Mielke MM**, Boeve BF, Devine S, Ivnik RJ, Au R, Auerbach S, Wolf PA, Seshadri S, Petersen RC. Spectrum of cognition short of dementia: Framingham Heart Study and Mayo Clinic Study of Aging. *Neurology* 2015 Nov;85(19):1712-21. PMID: PMC4653114

112. **Mielke MM**, Bandaru VVR, Han D, An Y, Resnick SM, Ferrucci L, Haughey NJ. Demographic and clinical variables affecting mid- to late-life trajectories of plasma ceramide and dihydroceramide species. *Aging Cell* 2015 Dec;14(6):1014-1023. PMID: PMC4693456
113. Jack CR Jr, Wiste HJ, Weigand SD, Knopman DS, **Mielke MM**, Vemuri P, Lowe V, Senjem ML, Gunter JL, Reyes D, Machulda MM, Roberts R, Petersen RC. Different definitions of neurodegeneration produce similar amyloid/neurodegeneration biomarker group findings. *Brain* 2015 Dec;138(Pt 12):3747-3759. PMID: PMC4655341
114. Knopman DS, Jack CR Jr, Lundt ES, Wiste HJ, Weigand SD, Vemuri P, Lowe VJ, Kantarci K, Gunter JL, Senjem ML, **Mielke MM**, Machulda MM, Roberts RO, Boeve BF, Jones DT, Petersen RC. Role of beta-amyloidosis and neurodegeneration in subsequent imaging changes in mild cognitive impairment. *JAMA Neurol* 2015 Dec;72(12):1475-83. PMID: PMC4735877
115. Gustafson DR, **Mielke MM**, Keating SA, Holman S, Minkoff H, Crystal HA. Leptin, adiponectin and cognition in middle-aged HIV-infected and uninfected women. The Brooklyn Women's Interagency HIV Study. *J Gerontol Geriatr Res* 2015;4(5):240. PMID: PMC4984413
116. Roberts RO, Christianson TJ, Kremers WK, **Mielke MM**, Machulda MM, Vassilaki M, Alhurani RE, Geda YE, Knopman DS, Petersen RC. Association between olfactory dysfunction and amnesic mild cognitive impairment and Alzheimer disease dementia. *JAMA Neurol* 2016 Jan;73(1):93-101. PMID: PMC4710557
117. Jack CR Jr, Therneau TM, Wiste HJ, Weigand SD, Knopman DS, Lowe VJ, **Mielke MM**, Vemuri P, Roberts RO, Machulda MM, Senjem ML, Gunter JL, Rocca WA, Petersen RC. Transition rates between amyloid and neurodegeneration biomarker states and to dementia: a population-based, longitudinal cohort study. *Lancet Neurol* 2016 Jan;15(1):56-64. PMID: PMC4784263
118. Petersen RC, Wiste HJ, Weigand SD, Rocca WA, Roberts RO, **Mielke MM**, Lowe VJ, Knopman DS, Pankratz VS, Machulda MM, Geda YE, Jack CR Jr. Association of elevated amyloid levels with cognition and biomarkers in cognitively normal people from the community. *JAMA Neurol* 2016 Jan;73(1):85-92. PMID: PMC4710552
119. **Mielke MM**, Milic NM, Weissgerber TL, White WM, Kantarci K, Mosley TH, Windham BG, Simpson BN, Turner ST, Garovic VD. Impaired cognition and brain atrophy decades after hypertensive pregnancy disorders. *Circ Cardiovasc Qual Outcomes* 2016 Jan;9(2 Suppl 1):S70-6. PMID: PMC4770570
120. **Mielke MM**, Machulda MM, Hagen CE, Christianson TJ, Roberts RO, Knopman DS, Vemuri P, Lowe VJ, Kremers WK, Jack CR Jr, Petersen RC. Influence of amyloid and *APOE* on cognitive performance in a late middle-aged cohort. *Alzheimers Dement* 2016 Mar;12(3):281-91. PMID: PMC4850495

121. Vemuri P, Lesnick TG, Przybelski SA, Knopman DS, Machulda M, Lowe VJ, **Mielke MM**, Roberts RO, Gunter JL, Senjem ML, Geda YE, Rocca WA, Petersen RC, Jack CR Jr. Effect of intellectual enrichment on AD biomarker trajectories: longitudinal imaging study. *Neurology* 2016 Mar;86(12):1128-35. PMID: PMC4820132
122. White WM†, **Mielke MM**, Araoz PA, Lahr BD, Bailey KR, Jayachandran M, Miller VM, Garovic VD. A history of preeclampsia is associated with a risk for coronary artery calcification 3 decades later. *Am J Obstet Gynecol* 2016 Apr;214(4):519.e1-8. PMID: PMC4808608
123. Alhurani RE, Vassilaki M, Aakre JA, **Mielke MM**, Kremers WK, Machulda MM, Geda YE, Knopman DS, Peterson RC, Roberts RO. Decline in weight and incident mild cognitive impairment: Mayo Clinic Study of Aging. *JAMA Neurol* 2016 Apr;73(4):439-46. PMID: PMC4828256
124. Graff-Radford J, Madhavan M, Vemuri P, Rabinstein AA, Cha RH, **Mielke MM**, Kantarci K, Lowe V, Senjem ML, Gunter JL, Knopman DS, Petersen RC, Jack CR Jr, Roberts RO. Atrial fibrillation, cognitive impairment, and neuroimaging. *Alzheimers Dement* 2016 Apr;12(4):391-8. PMID: PMC4841716
125. Savica R, Murray ME, Persson X-M, Kantarci K, Parisi JE, Dickson DW, Petersen RC, Ferman TJ, Boeve BF, **Mielke MM**. Plasma sphingolipid changes with autopsy-confirmed Lewy Body or Alzheimer's pathology. *Alzheimers Dement: Diagnosis, Assessment & Disease Monitoring* 2016 May;3:43-50. PMID: PMC4852484
126. Vassilaki M, Aakre JA, **Mielke MM**, Geda YE, Kremers WK, Alhurani RE, Machulda MM, Knopman DS, Petersen RC, Lowe VJ, Jack CR Jr, Roberts RO. Multimorbidity and neuroimaging biomarkers among cognitively normal persons. *Neurology* 2016 May;86(22):2077-84. PMID: PMC4891208
127. Kantarci K, Lowe VJ, Lesnick TG, Tosakulwong N, Bailey KR, Fields JA, Shuster LT, Zuk SM, Senjem ML, **Mielke MM**, Gleason C, Jack CR, Rocca WA, Miller VM. Early postmenopausal transdermal 17 β -estradiol therapy and amyloid- β deposition. *J Alzheimers Dis* 2016 May;53(2):547-56. PMID: PMC4955514
128. Wennberg AMV†, Gustafson D, Hagen CE, Roberts RO, Knopman D, Jack C Jr, Petersen RC, **Mielke MM**. Serum adiponectin levels, neuroimaging, and cognition in the Mayo Clinic Study of Aging. *J Alzheimers Dis* 2016 May;53(2):573-81. PMID: PMC4955718
129. Gonzalez CE†, Venkatraman VK, An Y, Landman BA, Davatzikos C, Bandaru VVR, Haughey NJ, Ferrucci L, **Mielke MM**, Resnick SM. Peripheral sphingolipids are associated with variation in white matter microstructure in older adults. *Neurobiol Aging* 2016 July;43(7):156-63. PMID: PMC4894643
130. Krell-Roesch J, Ruider H, Lowe VJ, Stokin GB, Pink A, Roberts RO, **Mielke MM**, Knopman DS, Christianson TJ, Machulda MM, Jack CR, Petersen RC, Geda YE. FDG-PET and neuropsychiatric symptoms among cognitively normal elderly persons: the Mayo Clinic Study of Aging. *J Alzheimers Dis* 2016 July;53(4):1609-16. PMID: PMC4981903

131. Knopman DS, Jack CR Jr, Wiste HJ, Weigand SD, Vemuri P, Lowe VJ, Kantarci K, Gunter JL, Senjem ML, **Mielke MM**, Machulda MM, Roberts RO, Boeve BF, Jones DT, Petersen RC. Age and neurodegeneration imaging biomarkers in persons with Alzheimer disease dementia. *Neurology* 2016 Aug;87(7):691-8. PMID: PMC4999168
132. Miller VM, Garovic VD, Bailey KR, Lahr BD, **Mielke MM**, White WM, Jayachandran M. Pregnancy history and blood-borne microvesicles in middle aged women with and without coronary artery calcification. *Atherosclerosis* 2016 Oct;253:150-55. PMID: PMC5198517
133. Fabbri E, Yang A, Simonsick EM, Chia CW, Zoli M, Haughey NJ, **Mielke MM**, Ferrucci L, Coen PM. Circulating ceramides are inversely associated with cardiorespiratory fitness in participants aged 54-96 years from the Baltimore Longitudinal Study of Aging. *Aging Cell* 2016 Oct;15(5):825-31. PMID: PMC5013023
134. Knopman DS, Jack CR Jr, Lundt ES, Weigand SD, Vemuri P, Lowe VJ, Kantarci K, Gunter JL, Senjem ML, **Mielke MM**, Machulda MM, Roberts RO, Boeve BF, Jones DT, Petersen RC. Evolution of neurodegeneration-imaging biomarkers from clinically normal to dementia in the Alzheimer disease spectrum. *Neurobiol Aging* 2016 Oct;46:32-42. PMID: PMC5018437
135. Snyder HM, Asthana S, Bain L, Brinton R, Craft S, Dubal DB, Espeland MA, Gatz M, **Mielke MM**, Raber J, Rapp PR, Yaffe K, Carrillo MC. Sex biology contributions to vulnerability to Alzheimer's disease: a think tank convened by the Women's Alzheimer's Research Initiative. *Alzheimers Dement* 2016 Nov;12(11):1186-96. PMID: Not Applicable
136. Dage JL, Wennberg AMV, Airey DC, Hagen CE, Knopman DS, Machulda MM, Roberts RO, Jack Jr CR, Petersen RC, **Mielke MM**. Levels of tau protein in plasma are associated with neurodegeneration and cognitive function in a population-based elderly cohort. *Alzheimers Dement* 2016 Dec;12(12):1226-34. PMID: PMC5148697
137. Krell-Roesch J, Pink A, Roberts RO, Stokin GB, **Mielke MM**, Spangehl KA, Bartley MM, Knopman DS, Christianson TJH, Petersen RC, Geda YE. Timing of physical activity, apolipoprotein E epsilon4 genotype, and risk of incident mild cognitive impairment. *J Am Geriatr Soc* 2016 Dec;64(12):2479-86. PMID: PMC5173416
138. Savica R, Wennberg AMV, Hagen C, Edwards K, Roberts RO, Hollman JH, Knopman DS, Boeve BF, Machulda MM, Petersen RC, **Mielke MM**. Comparison of gait parameters for predicting cognitive decline: The Mayo Clinic Study of Aging. *J Alzheimers Dis* 2017 Jan;55(2):559-67. PMID: PMC5378311
139. O'Bryant SE, **Mielke MM**, Rissman RA, Lista S, Vanderstichele H, Zetterberg H, Lewczuk P, Posner H, Hall J, Johnson L, Fong YL, Luthman J, Jeromin A, Batrla-Utermann R, Villarreal A, Britton G, Snyder PJ, Henriksen K, Grammas P, Gupta V, Martins R, Hampel H, and the Biofluid Based Biomarker Professional Interest Area. Blood-based biomarkers in Alzheimer disease: current state of the science and a novel collaborative paradigm for advancing from discovery to clinic. *Alzheimers Dement* 2017 Jan;13(1):45-58. PMID: PMC5218961

140. Janssen PHH, Mandrekar J, **Mielke MM**, Ahlskog JE, Boeve BF, Josephs K, Savica R. High school football and late-life risk of neurodegenerative syndromes, 1956-1970. *Mayo Clin Proc* 2017 Jan; 92(1):66-71. PMID: PMC5452974
141. Machulda MM, Hagen CE, Wiste HJ, **Mielke MM**, Knopman DS, Roberts RO, Vemuri P, Lowe VJ, Jack CR Jr, Petersen RC. Practice effects and longitudinal cognitive change in clinically normal older adults differ by Alzheimer imaging biomarker status. *Clin Neuropsychol* 2017 Jan;31(1):99-117. PMID: PMC5408356
142. Pink A, Przybelski SA, Krell-Roesch J, Stokin GB, Roberts RO, **Mielke MM**, Spanghehl KA, Knopman DS, Jack CR Jr, Petersen RC, Geda YE. Cortical thickness and anxiety symptoms among cognitively normal elderly persons: The Mayo Clinic Study of Aging. *J Neuropsychiatry Clin Neurosci* 2017 Jan;29(1):60-6. PMID: PMC5473777
143. Staubo SC, Aakre JA, Vemuri P, Syrjanen JA, **Mielke MM**, Geda YE, Kremers WK, Machulda MM, Knopman DS, Petersen RC, Jack CR Jr, Roberts RO. Mediterranean diet, micronutrients and macronutrients, and MRI measures of cortical thickness. *Alzheimers Dement* 2017 Feb;13(2):168-77. PMID: PMC5259552
144. Wennberg AMV†, Savica R, **Mielke MM**. Association between various brain pathologies and gait disturbance. *Dement Geriatr Cogn Disord* 2017 Feb;43(3-4):128-43. PMID: PMC5466166
145. Savica R, Grossardt BR, Bower JH, Ahlskog JE, **Mielke MM**, Rocca WA. Incidence and time trends of drug-induced parkinsonism: a 30-year population-based study. *Mov Disord* 2017 Feb;32(2):227-34. PMID: PMC5318251
146. McFarlane SI, **Mielke MM**, Uglialoro A, Keating SM, Holman S, Minkoff H, Crystal HA, Gustafson DR. Ghrelin, amylin, gastric inhibitory peptide and cognition in middle-aged HIV-infected and uninfected women. The Women's Interagency HIV Study. *J Neurol Neurophysiol* 2017 Feb;8(1):413. PMID: PMC5497768
147. Jack CR, Wiste HJ, Weigand SD, Therneau TM, Lowe VJ, Knopman DS, Gunter JL, Senjem ML, Jones DT, Kantarci K, Machulda MM, **Mielke MM**, Roberts RO, Vemuri P, Reyes DA, Petersen RC. Defining imaging biomarker cut points for brain aging and Alzheimer's disease. *Alzheimers Dement* 2017 Mar;13(3):205-16. PMID: PMC5344738
148. Krell-Roesch J, Vemuri P, Pink A, Roberts RO, Stokin GB, **Mielke MM**, Christianson TJ, Knopman DS, Petersen RC, Kremers WK, Geda YE. Association between mentally stimulating activities in late life and the outcome of incident mild cognitive impairment, with an analysis of the APOE epsilon4 genotype. *JAMA Neurol* 2017 Mar;74(3):332-8. PMID: PMC5473779
149. Kattah AG, Scantlebury DC, Agarwal S, **Mielke MM**, Rocca WA, Weaver AL, Vaughan LE, Miller VM, Weissgerber TL, White W, Garovic VD. Preeclampsia and ESRD: the role of shared risk factors. *Am J Kidney Dis* 2017 Apr;69(4):498-505. PMID: PMC5366077

150. Carvalho DZ, St. Louis EK, Boeve BF, **Mielke MM**, Przybelski SA, Knopman DS, Machulda MM, Roberts RO, Geda YE, Petersen RC, Jack CR Jr, Vemuri P. Excessive daytime sleepiness and fatigue may indicate accelerated brain aging in cognitively normal late middle-aged and older adults. *Sleep Med* 2017 Apr;32:236-43. PMID: PMC5551490
151. Wennberg AMV†, Savica R, Hagen CE, Roberts RO, Knopman DS, Hollman JH, Vemuri P, Jack CR Jr, Petersen RC, **Mielke MM**. Cerebral amyloid deposition is associated with gait parameters in the Mayo Clinic Study of Aging. *J Am Geriatr Soc* 2017 Apr;65(4):792-99. PMID: PMC5397339
152. Jung Y, Boot BP, **Mielke MM**, Ferman TJ, Geda YE, McDade E, Christianson TJH, Knopman DS, St. Louis EK, Silber MH, Petersen RC, Boeve BF. Phenoconversion from probable rapid eye movement sleep behavior disorder to mild cognitive impairment to dementia in a population-based sample. *Alzheimers Dement* 2017 May;8:127-30. PMID: PMC5470599
153. Jack CR Jr, Wiste HJ, Weigand SD, Therneau TM, Knopman DS, Lowe V, Vemuri P, **Mielke MM**, Roberts RO, Machulda MM, Senjem ML, Gunter JL, Rocca WA, Petersen RC. Age-specific and sex-specific prevalence of cerebral beta-amyloidosis, tauopathy, and neurodegeneration in cognitively unimpaired individuals aged 50-95 years: a cross-sectional study. *Lancet Neurol* 2017 June;16(6):435-44. PMID: PMC5516534
154. Ubaida-Mohien C, Lamberty B, Dickens AM, **Mielke MM**, Marcotte T, Sacktor N, Grant I, Letendre S, Franklin D, Cibrowski P, Tharakan R, McArthur JC, Fox H, Haughey NJ. Modifications in acute phase and complement systems predict shifts in cognitive status of HIV-infected patients. *AIDS* 2017 June;31(10):1365-78. PMID: PMC5501712
155. Vassilaki M, Christianson TJ, **Mielke MM**, Geda YE, Kremers WK, Machulda MM, Knopman DS, Petersen RC, Lowe VJ, Jack CR Jr, Roberts RO. Neuroimaging biomarkers and impaired olfaction in cognitively normal individuals. *Ann Neurol* 2017 June;81(6):871-82. PMID: PMC5517772
156. Vemuri P, Knopman DS, Lesnick TG, Przybelski SA, **Mielke MM**, Graff-Radford J, Murray ME, Roberts RO, Vassilaki M, Lowe VJ, Machulda MM, Jones DT, Petersen RC, Jack CR Jr. Evaluation of amyloid protective factors and Alzheimer disease neurodegeneration protective factors in elderly individuals. *JAMA Neurol* 2017 June;74(6):718-26. PMID: PMC5649401
157. Fields JA, Garovic VD, **Mielke MM**, Kantarci K, Jayachandran M, White WM, Butts AM, Graff-Radford J, Lahr BD, Bailey KR, Miller VM. Preeclampsia and cognitive impairment later in life. *Am J Obstet Gynecol* 2017 July;217(1):74.e1-e11. PMID: PMC5615406
158. Pink A, Przybelski SA, Krell-Roesch J, Stokin GB, Roberts RO, **Mielke MM**, Knopman DS, Jack CR, Petersen RC, Geda YE. Cortical thickness and depressive symptoms in cognitively normal individuals: the Mayo Clinic Study of Aging. *J Alzheimers Dis* 2017 June;58(4):1273-81. PMID: PMC5713905
159. Flemming KD, Graff-Radford J, Aakre J, Kantarci K, Lanzino G, Brown RD Jr, **Mielke MM**, Roberts RO, Kremers W, Knopman DS, Petersen RC, Jack CR Jr. Population-based

- prevalence of cerebral cavernous malformations in older adults: Mayo Clinic Study of Aging. *JAMA Neurol* 2017 July;74(7):801-5. PMID: PMC5647645
160. Savica R, Grossardt BR, Bower JH, Ahlskog JE, Boeve BF, Graff-Radford J, Rocca WA, **Mielke MM**. Survival and causes of death among people with clinically diagnosed synucleinopathies with parkinsonism: a population-based study. *JAMA Neurol* 2017 July;74(7):839-46. PMID: PMC5647647
 161. **Mielke MM**, Hagen CE, Wennberg AMV, Airey DC, Savica R, Knopman DS, Machulda MM, Roberts RO, Jack CR Jr, Petersen RC, Dage JL. Association of plasma total tau with cognitive decline and risk of mild cognitive impairment or dementia in the Mayo Clinic Study on Aging. *JAMA Neurol* 2017 Sept;74(9):1073-80. PMID: PMC5710182
 162. Garovic VD, Milic NM, Weissgerber TL, **Mielke MM**, Bailey KR, Lahr B, Jayachandran M, White WM, Hodis HN, Miller VM. Carotid artery intima-media thickness and subclinical atherosclerosis in women with remote histories of preeclampsia: results from a Rochester Epidemiology Project-based study and meta-analysis. *Mayo Clin Proc* 2017 Sept;92(9):1328-40. PMID: PMC5663464
 163. Dinoff A, Saleem M†, Herrmann N, **Mielke MM**, Oh PI, Venkata SLV, Haughey NJ, Lanctôt KL. Plasma sphingolipids and depressive symptoms in coronary artery disease. *Brain Behav* 2017 Sept;7(11):e00836. PMID: PMC5698859
 164. Nedelska Z, Przybelski SA, Lesnick TG, Schwarz CG, Lowe VJ, Machulda MM, Kremers WK, **Mielke MM**, Roberts RO, Boeve BF, Knopman DS, Petersen RC, Jack CR Jr, Kantarci K. ¹H-MRS metabolites and rate of amyloid- β accumulation on serial PET in clinically normal adults. *Neurology* 2017 Sept;89(13):1391-9. PMID: PMC5649764
 165. Jayachandran M, Garovic VD, **Mielke MM**, Bailey KR, Lahr BD, Miller VM. Characterization of intravascular cellular activation in relationship to subclinical atherosclerosis in postmenopausal women. *PLoS One*. 2017 Sept;12(9):e0183159. PMID: PMC5598935
 166. **Mielke MM**, Haughey NJ, Han D, An Y, Bandaru VVR, Lyketsos CG, Ferrucci L, Resnick SM. The association between plasma ceramides and sphingomyelins and risk of Alzheimer's disease differs by sex and APOE in the Baltimore Longitudinal Study of Aging. *J Alzheimers Dis* 2017 Oct;60(3):819-28. PMID: PMC5493514
 167. Saleem M†, Herrmann N, Dinoff A, **Mielke MM**, Oh PI, Shammi P, Cao X, Lakshmi Swarajya VV, Haughey NJ, Lanctôt KL. A lipidomics approach to assess the association between plasma sphingolipids and verbal memory performance in coronary artery disease patients undertaking cardiac rehabilitation: a C18:0 signature for cognitive response to exercise. *J Alzheimers Dis* 2017 Oct;60(3):829-41. PMID: PMC5753402
 168. Turcano P†, **Mielke MM**, Josephs KA, Bower JH, Parisi JE, Boeve BF, Savica R. Clinicopathologic discrepancies in a population-based incidence study of parkinsonism in Olmsted County: 1991-2010. *Mov Disord* 2017 Oct;32(10):1439-46. PMID: PMC5931206

169. Roberts RO, Knopman DS, Syrjanen JA, Aakre JA, Vassilaki M, Kremers WK, **Mielke MM**, Machulda MM, Graff-Radford J, Geda YE, Vemuri P, Lowe V, Jack CR Jr, Petersen RC. Weighting and standardization of frequencies to determine prevalence of AD imaging biomarkers. *Neurology* 2017 Nov;89:2039-48. PMID: PMC5711507
170. Rocca WA, Gazzuola Rocca L, Smith CY, Grossardt BR, Faubion SS, Shuster LT, Stewart EA, **Mielke MM**, Kantarci K, Miller VM. Cohort profile: the Mayo Clinic Cohort Study of Oophorectomy and Aging-2 (MOA-2) in Olmsted County, Minnesota (USA). *BMJ Open* 2017 Nov;7(11):e018861. PMID: PMC5719295
171. Vemuri P, Lesnick TG, Przybelski SA, Knopman DS, Lowe VJ, Graff-Radford J, Roberts RO, **Mielke MM**, Machulda MM, Petersen RC, Jack CR Jr. Age, vascular health, and Alzheimer's disease biomarkers in an elderly sample. *Ann Neurol* 2017 Nov;82(5):706-18. PMID: PMC5696029
172. Raman MR, Tosakulwong N, Zuk SM, Senjem ML, White WM, Fields JA, **Mielke MM**, Lesnick TG, Bailey KR, Jack CR Jr, Miller VM, Garovic VD, Kantarci K. Influence of preeclampsia and late-life hypertension on MRI measures of cortical atrophy. *J Hypertens* 2017 Dec;35(12):2479-85. PMID: PMC5668159
173. Pichler M, Vemuri P, Rabinstein AA, Aakre J, Flemming KD, Brown RD Jr, Kumar N, Kantarci K, Kremers W, **Mielke MM**, Knopman DS, Jack CR Jr, Petersen RC, Lowe V, Graff-Radford J. Prevalence and natural history of superficial siderosis: a population-based study. *Stroke* 2017 Dec;48(12):3210-4. PMID: PMC5705336
174. Lowe VJ, Wiste HJ, Senjem ML, Weigand SD, Therneau TM, Boeve BF, Josephs KA, Fang P, Pandey MK, Murray ME, Kantarci K, Jones DT, Vemuri P, Graff-Radford J, Schwarz CG, Machulda MM, **Mielke MM**, Roberts RO, Knopman DS, Petersen RC, Jack CR Jr. Widespread brain tau and its association with ageing, Braak stage and Alzheimer's dementia. *Brain* 2018 Jan;141(1):271-87. PMID: PMC5837250
175. Vassilaki M, Aakre JA, Syrjanen JA, **Mielke MM**, Geda YE, Kremers WK, Machulda MM, Alhurani RE, Staubo SC, Knopman DS, Petersen RC, Lowe VJ, Jack CR Jr, Roberts RO. Mediterranean diet, its components and amyloid imaging biomarkers. *J Alzheimers Dis* 2018;64(1):281-90. PMID: PMC6031931
176. Sacktor N, Skolasky RL, Moxley R, Wang S, **Mielke MM**, Munro C, Steiner J, Nath A, Haughey N, McArthur J. Paroxetine and fluconazole therapy for HIV-associated neurocognitive impairment: results from a double-blind, placebo-controlled trial. *J Neurovirology* 2018 Feb;24(1):16-27. PMID: PMC5792316
177. Krell-Roesch J, Lowe VJ, Neureiter J, Pink A, Roberts RO, **Mielke MM**, Vemuri P, Stokin GB, Christianson TJ, Jack CR, Knopman DS, Boeve BF, Kremers WK, Petersen RC, Geda YE. Depressive and anxiety symptoms and cortical amyloid deposition among cognitively normal elderly persons: the Mayo Clinic Study of Aging. *Int Psychogeriatr* 2018 Feb;30(2):245-51. PMID: PMC5815897

178. Fatemi F, Kantarci K, Graff-Radford J, Preboske GM, Weigand SD, Przybelski SA, Knopman DS, Machulda MM, Roberts RO, **Mielke MM**, Petersen RC, Jack CR Jr, Vemuri P. Sex differences in cerebrovascular pathologies on FLAIR in cognitively unimpaired elderly. *Neurology* 2018 Feb;90(6):e466-73. PMID: PMC5818016
179. Arnold Fiebelkorn C, Vemuri P, Rabinstein AA, **Mielke MM**, Przybelski SA, Kantarci K, Jones DT, Brown RD Jr, Knopman DS, Petersen RC, Jack CR Jr, Graff-Radford J. Frequency of acute and subacute infarcts in a population-based study. *Mayo Clin Proc* 2018 Mar;93(3):300-6. PMID: PMC5837928
180. Savica R, Bradley BF, **Michelle MM**. When do alphasynucleinopathies start? An epidemiological timeline: a review. *JAMA Neurol* 2018 Apr;75(4):503-9. PMID: Not Applicable
181. Krell-Roesch J, Feder NT, Roberts RO, **Mielke MM**, Christianson TJ, Knopman DS, Petersen RC, Geda YE. Leisure-time physical activity and the risk of incident dementia: the Mayo Clinic Study of Aging. *J Alzheimers Dis* 2018 Apr;63(1):149-55. PMID: PMC5900557
182. Jack CR Jr, Wiste HJ, Schwarz CG, Lowe VJ, Senjem ML, Vemuri P, Weigand SD, Therneau TM, Knopman DS, Gunter JL, Jones DT, Graff-Radford J, Kantarci K, Roberts RO, **Mielke MM**, Machulda MM, Petersen RC. Longitudinal tau PET in ageing and Alzheimer's disease. *Brain* 2018 May;141(5):1517-28. PMID: PMC5917767
183. Knopman DS, Lundt ES, Therneau TM, Vemuri P, Lowe VJ, Kantarci K, Gunter JL, Senjem ML, **Mielke MM**, Machulda MM, Roberts RO, Boeve BF, Jones DT, Petersen RC, Jack CR Jr. Joint associations of beta-amyloidosis and cortical thickness with cognition. *Neurobiol Aging* 2018 May; 65:121-31. PMID: PMC5871603
184. Zeydan B, Lowe VJ, Schwarz CG, Przybelski SA, Tosakulwong N, Zuk SM, Senjem ML, Gunter JL, Roberts RO, **Mielke MM**, Benarroch EE, Rodriguez M, Machulda MM, Lesnick TG, Knopman DS, Petersen RC, Jack CR Jr, Kantarci K, Kantarci OH. Pittsburgh compound-B PET white matter imaging and cognitive function in late multiple sclerosis. *Mult Scler* 2018 May;24(6):739-49. PMID: PMC5665724
185. Scantlebury DC, Kattah AG, Weissgerber TL, Agarwal S, **Mielke MM**, Weaver AL, Vaughan LE, Henkin S, Zimmerman K, Miller VM, White WM, Hayes SN, Garovic VD. Impact of a history of hypertension in pregnancy on later diagnosis of atrial fibrillation. *J Am Heart Assoc* 2018 May 13;7(10):e007584. PMID: PMC6015308
186. Wennberg AMV†, Hagen CE, Petersen RC, **Mielke MM**. Trajectories of plasma IGF-1, IGFBP-3, and their ratio in the Mayo Clinic Study of Aging. *Exp Gerontol* 2018 June;106:67-73. PMID: PMC5911407
187. Wennberg AMV†, Hagen CE, Machulda MM, Roberts RO, Knopman DS, Petersen RC, **Mielke MM**. The association between peripheral total IGF-1, IGFBP-3, and IGF-1/IGFBP-3 and functional and cognitive outcomes in the Mayo Clinic Study of Aging. *Neurobiol Aging* 2018 June;66:68-74. PMID: PMC5924628

188. Carvalho DZ, St. Louis EK, Knopman DS, Boeve BF, Lowe VJ, Roberts RO, **Mielke MM**, Przybelski SA, Machulda MM, Petersen RC, Jack CR Jr, Vemuri P. Association of excessive daytime sleepiness with longitudinal β -amyloid accumulation in elderly persons without dementia. *JAMA Neurol* 2018 June;75(6):672-80. PMID: PMC5885188
189. Wennberg AMV†, Schafer MJ, LeBrasseur NK, Savica R, Bui HH, Hagen CE, Hollman JH, Petersen RC, **Mielke MM**. Plasma sphingolipids are associated with gait parameters in the Mayo Clinic Study of Aging. *J Gerontol A Biol Sci Med Sci* 2018 June;73(7):960-5. PMID: PMC6001885
190. Chan P, Saleem M†, Herrmann N, **Mielke MM**, Haughey NJ, Oh PI, Kiss A, Lanctôt KL. Ceramide accumulation is associated with declining verbal memory in coronary artery disease patients: an observational study. *J Alz Disease* 2018 July;64(4):1235-46. PMID: PMC6087453
191. van Harten AC, **Mielke MM**, Swenson-Dravis DM, Hagen CE, Edwards KK, Roberts RO, Geda YE, Knopman DS, Petersen RC. Subjective cognitive decline and risk of MCI: the Mayo Clinic Study of Aging. *Neurology* 2018 July;91(4):e300-12. PMID: PMC6070384
192. Wennberg AMV†, Hagen CE, Edwards K, Roberts RO, Machulda MM, Knopman DS, Petersen RC, **Mielke MM**. Association of antidiabetic medication use, cognitive decline, and risk of cognitive impairment in older people with type 2 diabetes: results from the population-based Mayo Clinic Study of Aging. *Int J Geriatr Psychiatry* 2018 Aug;33(8):1114-20. PMID: PMC6219634
193. **Mielke MM**, Hagen CE, Xu J, Chai X, Vemuri P, Lowe VJ, Airey DC, Knopman DS, Roberts RO, Machulda MM, Jack CR Jr, Petersen RC, Dage JL. Plasma phospho-tau181 increases with Alzheimer's disease clinical severity and is associated with tau- and amyloid-positron emission tomography. *Alzheimers Dement* 2018 Aug;14(8):989-97. PMID: PMC6097897
194. Wennberg AMV†, Lesnick TG, Schwarz CG, Savica R, Hagen CE, Roberts RO, Knopman DS, Hollman JH, Vemuri P, Jack CR Jr, Petersen RC, **Mielke MM**. Longitudinal association between brain amyloid-beta and gait in the Mayo Clinic Study of Aging. *J Gerontol A Biol Sci Med Sci* 2018 Aug;73(9):1244-50. PMID: PMC6093355
195. Roberts RO, Aakre JA, Kremers WK, Vassilaki M, Knopman DS, **Mielke MM**, Alhurani R, Geda YE, Machulda MM, Coloma P, Schauble B, Lowe VJ, Jack CR Jr, Petersen RC. Prevalence and outcomes of amyloid positivity among persons without dementia in a longitudinal, population-based setting. *JAMA Neurol* 2018 Aug;75(8):970-9. PMID: PMC6142936
196. Nebel RA, Aggarwal NT, Barnes LL, Gallagher A, Goldstein JM, Kantarci K, Mallampalli MP, Mormino EC, Scott L, Yu WH, Maki PM, **Mielke MM**. Understanding the impact of sex and gender in Alzheimer's disease: a call to action. *Alzheimers Dement* 2018 Sept;14(9):1171-83. PMID: Not Applicable.

197. Espeland MA, Carmichael O, Yasar S, Hugenschmidt C, Hazzard W, Hayden KM, Rapp SR, Neiberg R, Johnson KC, Hoscheidt S, **Mielke MM**, for the Action for Health in Diabetes (Look AHEAD) Research Group. Sex-related differences in the prevalence of cognitive impairment among overweight and obese adults with type 2 diabetes. *Alzheimers Dement* 2018 Sept;14(9):1184-92. PMID: PMC6338071
198. Ramanan VK, Przybelski SA, Graff-Radford J, Castillo AM, Lowe VJ, **Mielke MM**, Roberts RO, Reid RI, Knopman DS, Jack CR, Petersen RC, Vemuri P. Statins and brain health: Alzheimer's disease and cerebrovascular disease biomarkers in older adults. *J Alzheimers Dis* 2018 Sept;65(4):1345-52. PMID: PMC6260813
199. Rocca WA, Gazzuola Rocca L, Smith CY, Grossardt BR, Faubion SS, Shuster LT, Stewart EA, **Mielke MM**, Kantarci K, Miller VM. Personal, reproductive, and familial characteristics associated with bilateral oophorectomy in premenopausal women: a population-based case-control study. *Maturitas* 2018 Nov;117:64-77. PMID: PMC6231412
200. Rocca WA, Gazzuola Rocca L, Smith CY, Grossardt BR, Faubion SS, Shuster LT, Kirkland JL, LeBrasseur NK, Schafer MJ, **Mielke MM**, Kantarci K, Stewart EA, Miller VM. Loss of ovarian hormones and accelerated somatic and mental aging. *Physiology* 2018 Nov;33(6):374-83. PMC Journal – In Process
201. Vemuri P, Lesnick TG, Przybelski SA, Graff-Radford J, Reid RI, Lowe VJ, Zuk SM, Senjem ML, Schwarz CG, Gunter JL, Kantarci K, Machulda MM, **Mielke MM**, Petersen RC, Knopman DS, Jack CR Jr. Development of a cerebrovascular magnetic resonance imaging biomarker for cognitive aging. *Ann Neurol* 2018 Nov;84(5):705-16. PMID: PMC6282853
202. Molinuevo JL, Ayton S, Batrla R, Bednar MM, Bittner T, Cummings J, Fagan AM, Hampel H, **Mielke MM**, Mikulskis A, O'Bryant S, Scheltens P, Sevigny J, Shaw LM, Soares HD, Tong G, Trojanowski JQ, Zetterberg H, Blennow K. Current state of Alzheimer's fluid biomarkers. *Acta Neuropathol* 2018 Dec; 136 (6):821-53. PMID: PMC6280827
203. Milic NM, Codsí E, Butler Tobah YS, White WM, Kattah AG, Weissgerber TL, Saiki M, Parashuram S, Vaughan LE, Weaver AL, Savic M, **Mielke MM**, Garovic VD. Electronic algorithm is superior to hospital discharge codes for diagnoses of hypertensive disorders of pregnancy in historical cohorts. *Mayo Clin Proc* 2018 Dec;93(12):1707-19. PMID: PMC6353636
204. Turcano P†, **Mielke MM**, Bower JH, Parisi JE, Cutsforth-Gregory JK, Ahlskog JE, Savica R. Levodopa-induced dyskinesia in Parkinson disease: a population based cohort study. *Neurology* 2018 Dec;91(24):e2238-43. PMID: PMC329327
205. **Mielke MM**. Sex and gender differences in Alzheimer disease dementia: do they exist and where? *Psychiatric Times* 2018;35 (11):14-7. PMID: PMC6390276
206. Vassilaki M, Aakre JA, Kremers WK, **Mielke MM**, Geda YE, Machulda MM, Knopman DS, Coloma PM, Schauble B, Vemuri P, Lowe VJ, Jack CR Jr, Petersen RC, Roberts RO. Association between functional performance and Alzheimer's disease biomarkers in

- individuals without dementia. *J Am Geriatrics Soc* 2018 Dec;66(12):2274-81. PMID: PMC6391872
207. Petersen RC, Lundt ES, Therneau TM, Weigand SD, Knopman DS, **Mielke MM**, Roberts RO, Lowe VJ, Machulda MM, Kremers WK, Geda YE, Jack CR Jr. Predicting progression to mild cognitive impairment. *Ann Neurol* 2019 Jan;85(1):155-60. PMID: PMC6504922
 208. Graff-Radford J, Botha H, Rabinstein AA, Gunter JL, Przybelski SA, Lesnick T, Huston J 3rd, Flemming KD, Preboske GM, Senjem ML, Brown RD Jr, **Mielke MM**, Roberts RO, Lowe VJ, Knopman DS, Petersen RC, Kremers W, Vemuri P, Jack CR Jr, Kantarci K. Cerebral microbleeds: prevalence and relationship to amyloid burden. *Neurology* 2019 Jan;92(3):e253-62. PMID: PMC6340386
 209. Zeydan B, Tosakulwong N, Schwarz CG, Senjem ML, Gunter J, Reid RI, Gazzuola Rocca L, Lesnick TG, Smith CY, Bailey KR, Lowe VJ, Roberts RO, Jack CR Jr, Petersen RC, Miller VM, **Mielke MM**, Rocca WA, Kantarci K. Association of bilateral salpingo-oophorectomy before menopause onset with medial temporal lobe neurodegeneration. *JAMA Neurol* 2019 Jan; 76(1):95-100. PMID: PMC6439881
 210. Wennberg AM†, Whitwell JL, Tosakulwong N, Weigand SD, Murray ME, Machulda MM, Petrucelli L, **Mielke MM**, Jack CR Jr, Knopman DS, Parisi JE, Petersen RC, Dickson DW, Josephs KA. The influence of tau, amyloid, alpha-synuclein, TDP-43, and vascular pathology in clinically normal elderly individuals. *Neurobiol Aging* 2019 Jan;77:26-36. PMID: PMC6486870
 211. Krell-Roesch J, Cerhan LP, Machulda MM, Roberts RO, **Mielke MM**, Knopman DS, Syrjanen JA, Christianson TJ, Petersen RC, Geda YE. Functional activity and neuropsychiatric symptoms in normal aging and mild cognitive impairment: the Mayo Clinic Study of Aging. *Alzheimer Dis Assoc Disord* 2019 Jan-Mar;33(1):68-71. PMID: PMC6374214
 212. Babulal GM, Quiroz YT, Albeni BC, Arenaza-Urquijo E, Astell AJ, Babiloni C, Bahar-Fuchs A, Bell J, Bowman GL, Brickman AM, Chetelat G, Ciro C, Cohen AD, Dilworth-Anderson P, Dodge HH, Dreux S, Edland S, Esbensen A, Evered L, Ewers M, Fargo KN, Fortea J, Gonzalez H, Gustafson DR, Head E, Hendrix JA, Hofer SM, Johnson LA, Jutten R, Kilborn K, Lanctot KL, Manly JJ, Martins RN, **Mielke MM**, Morris MC, Murray ME, Oh ES, Parra MA, Rissman RA, Roe CM, Santos OA, Scarmeas N, Schneider LS, Schupf N, Sikkes S, Snyder HM, Sohrabi HR, Stern Y, Strydom A, Tang Y, Terrera GM, Teunissen C, Melo van Lent D, Weinborn M, Wesselman L, Wilcock DM, Zetterberg H, O'Bryant SE, International Society to Advance Alzheimer's Research and Treatment, Alzheimer's Association. Perspectives on ethnic and racial disparities in Alzheimer's disease and related dementias: Update and areas of immediate need. *Alzheimers Dement* 2019 Feb;15(2):292-312. PMID: PMC6368893
 213. Kern S†, Syrjanen JA, Blennow K, Zetterberg H, Skoog I, Waern M, Hagen CE, van Harten AC, Knopman DS, Jack CR Jr, Petersen RC, **Mielke MM**. Association of cerebrospinal fluid neurofilament light protein with risk of mild cognitive impairment among individuals without cognitive impairment. *JAMA Neurol* 2019 Feb;76(2):187-93. PMID: PMC6439969

214. Krell-Roesch J, Vassilaki M, **Mielke MM**, Kremers WK, Lowe VJ, Vemuri P, Machulda MM, Christianson TJ, Syrjanen JA, Stokin GB, Butler LM, Traber M, Jack CR Jr, Knopman DS, Roberts RO, Petersen RC, Geda YE. Cortical beta-amyloid burden, neuropsychiatric symptoms, and cognitive status: the Mayo Clinic Study of Aging. *Transl Psychiatry* 2019 Mar;9(1):123. PMID: PMC6438979
215. Li D†, Hagen C, Fett AR, Bui HH, Knopman D, Vemuri P, Machulda MM, Jack CR Jr, Petersen RC, **Mielke MM**. Longitudinal association between phosphatidylcholines, neuroimaging measures of Alzheimer's disease pathophysiology, and cognition in the Mayo Clinic Study of Aging. *Neurobiol Aging* 2019 July;79:43-49. PMID: PMC6591044
216. Arenaza-Urquijo EM, Przybelski SA, Lesnick TL, Graff-Radford J, Machulda MM, Knopman DS, Schwarz CG, Lowe VJ, **Mielke MM**, Petersen RC, Jack CR, Vemuri P. The metabolic brain signature of cognitive resilience in the 80+: beyond Alzheimer pathologies. *Brain* 2019 Apr;142(4):1134-47. PMID: PMC6439329
217. Knopman DS, Lundt ES, Therneau TM, Vemuri P, Lowe VJ, Kantarci K, Gunter JL, Senjem ML, **Mielke MM**, Machulda MM, Boeve BF, Jones DT, Graff-Radford J, Albertson SM, Schwarz CG, Petersen RC, Jack CR Jr. Entorhinal cortex tau, amyloid-beta, cortical thickness and memory performance in non-demented subjects. *Brain* 2019 Apr;142(4):1148-60. PMID: PMC6439321
218. Li D†, Misialek JR, Jack CR, **Mielke MM**, Knopman D, Gottesman R, Mosley T, Alonso A. Plasma metabolites associated with brain MRI measures of neurodegeneration in older adults in the Atherosclerosis Risk in Communities-Neurocognitive Study (ARIC-NCS). *Int J Mol Sci* 2019 Apr 9;20(7):1744. PMID: PMC6479561
219. Hasan S†, **Mielke MM**, Ahlskog JE, Bower J, Turcano P, Savica R. Erectile dysfunction preceding clinically diagnosed alpha-synucleinopathies: a case-control study in Olmsted County. *Parkinsons Dis* 2019 Apr;2019:6303945. PMID: PMC6481034
220. Vassilaki M, Aakre JA, Kremers WK, **Mielke MM**, Geda YE, Alhurani RE, Dutt T, Machulda MM, Knopman DS, Vemuri P, Coloma PM, Schauble B, Lowe VJ, Jack CR Jr, Petersen RC, Roberts RO. The association of multimorbidity with preclinical AD stages and SNAP in cognitively unimpaired persons. *J Gerontol A Biol Sci Med Sci* 2019 May;74(6):877-83. PMID: PMC6521911
221. Boeve A†, Ferman TJ, Aakre J, St Louis E, Silber M, Machulda M, Fields J, Graff-Radford N, **Mielke M**, Geda Y, Jones D, Graff-Radford J, Knopman D, Petersen R, Boeve B. Excessive daytime sleepiness in major dementia syndromes. *Am J Alzheimers Dis Other Dement* 2019 June;34(4):261-4. PMID: PMC6709580
222. Jack CR Jr, Wiste HJ, Therneau TM, Weigand SD, Knopman DS, **Mielke MM**, Lowe VJ, Vemuri P, Machulda MM, Schwarz CG, Gunter JL, Senjem ML, Graff-Radford J, Jones DT, Roberts RO, Rocca WA, Petersen RC. Associations of amyloid, tau, and neurodegeneration biomarker profiles with rates of memory decline among individuals without dementia. *JAMA*

2019 June; 321(23):2316-25. PMID: PMC6582267

223. Eakin KA, Saleem M, Herrmann N, Cogo-Moreira H, **Mielke MM**, Oh PI, Haughey NJ, Venkata SLV, Lanctot KL, Swardfager W. Plasma sphingolipids mediate a relationship between Type 2 diabetes and memory outcomes in patients with coronary artery disease undertaking exercise. *J Alzheimers Dis* 2019 June;69(3):717-27. PMID: Not Applicable.
224. Lowe VJ, Bruinsma TJ, Wiste HJ, Min HK, Weigand SD, Fang P, Senjem ML, Therneau TM, Boeve BF, Josephs KA, Pandey MK, Murray ME, Kantarci K, Jones DT, Vemuri P, Graff-Radford J, Schwarz CG, Machulda MM, **Mielke MM**, Roberts RO, Knopman DS, Petersen RC, Jack CR Jr. Cross-sectional associations of tau-PET signal with cognition in cognitively unimpaired adults. *Neurology* July;93(1):e29-39. PMID: PMC6659005
225. **Mielke MM**, Syrjanen JA, Blennow K, Zetterberg H, Vemuri P, Skoog I, Machulda MM, Kremers WK, Knopman DS, Jack C Jr, Petersen RC, Kern S. Plasma and CSF neurofilament light: relation to longitudinal neuroimaging and cognitive measures. *Neurology* 2019 July;93:e252-60. PMID: PMC6656645
226. Machulda MM, Lundt ES, Albertson SM, Kremers WK, **Mielke MM**, Knopman DS, Bondi MW, Petersen RC. Neuropsychological subtypes of incident mild cognitive impairment in the Mayo Clinic Study of Aging. *Alzheimers Dement* 2019 July; 15:878-87. PMID: PMC6646057
227. Stricker NH†, Lundt ES, Edwards KK, Machulda MM, Kremers WK, Roberts RO, Knopman DS, Petersen RC, **Mielke MM**. Comparison of PC and iPad administrations of the Cogstate Brief Battery in the Mayo Clinic Study of Aging: assessing cross-modality equivalence of computerized neuropsychological tests. *Clin Neuropsychol* 2019 Aug;33(6):1102-26. PMID: PMC6510645
228. Schulte PJ†, Warner DO, Martin DP, Deljou A, **Mielke MM**, Knopman DS, Petersen RC, Weingarten TN, Warner MA, Rabinstein AA, Hanson AC, Schroeder DR, Sprung J. Association between critical care admissions and cognitive trajectories in older adults. *Crit Care Med* 2019 Aug;47:116-24. PMID: PMC6629515
229. Wennberg AMV†, Hagen CE, Machulda MM, Knopman DS, Petersen RC, **Mielke MM**. The cross-sectional and longitudinal associations between IL-6, IL-10, and TNF α and cognitive outcomes in the Mayo Clinic Study of Aging. *J Gerontol A Biol Sci Med Sci* 2019 Aug;74:1289-95. PMID: PMC6625589
230. Graff-Radford J, Arenaza-Urquijo EM, Knopman DS, Schwarz CG, Brown RD, Rabinstein AA, Gunter JL, Senjem ML, Przybelski SA, Lesnick T, Ward C, **Mielke MM**, Lowe VJ, Petersen RC, Kremers WK, Kantarci K, Jack CR, Vemuri P. White matter hyperintensities: relationship to amyloid and tau burden. *Brain* 2019 Aug;142(8):2483-91. PMID: PMC6658846
231. Krell-Roesch J, Syrjanen JA, Vassilaki M, Machulda MM, **Mielke MM**, Knopman DS, Kremers WK, Petersen RC, Geda YE. Quantity and quality of mental activities and the risk of

- incident mild cognitive impairment. *Neurology* 2019 Aug;93(6):e548-58. PMID: PMC6710000
232. Goudarzvand S, St Sauver J, **Mielke MM**, Takahashi PY, Lee Y, Sohn S. Early temporal characteristics of elderly patient cognitive impairment in electronic health records. *BMC Med Inform Decis Mak* 2019 Aug 8;19 (Suppl 4):149. PMID: PMC6686236
 233. Wang F, Lesser ER, Cutsforth-Gregory JK, Bhatti MT, Kilgore KP, Hodge DO, Graff-Radford J, Petersen RC, Knopman DS, **Mielke MM**, Lanzino G, Leavitt JA, Chen JJ. Population-based evaluation of lumbar puncture opening pressures. *Front Neurol*. 2019 Aug;10:899. PMID: PMC6706777
 234. Savica R, Turcano P, Bower JH, Ahlskog JE, **Mielke MM**. Survival and progression in synucleinopathy phenotypes with parkinsonism: a population-based study. *Mayo Clin Proc* 2019 Sept;94(9):1825-31. *PMC Journal – In Process*.
 235. Jack CR, Wiste HJ, Botha H, Weigand SD, Therneau TM, Knopman DS, Graff-Radford J, Jones DT, Ferman TJ, Boeve BF, Kantarci K, Lowe VJ, Vemuri P, **Mielke MM**, Fields JA, Machulda MM, Schwarz CG, Senjem ML, Gunter JL, Petersen RC. The bivariate distribution of amyloid-beta and tau: relationship with established neurocognitive clinical syndromes. *Brain* 2019 Oct;142(10):3230-42. PMID: PMC6763736
 236. Saleem M†, Herrmann N, Dinoff A, Marzolini S, **Mielke MM**, Andrezza A, Oh PI, Vattem Venkata SL, Haughey NJ, Lanctôt KL. Association between sphingolipids and cardiopulmonary fitness in coronary artery disease patients undertaking cardiac rehabilitation. *J Gerontol A Biol Sci Med Sci* (in press). *PMC Journal – In Process (Method A Journal)*
 237. Jack CR Jr, Therneau TM, Weigand SD, Wiste HJ, Knopman DS, Vemuri P, Lowe VJ, **Mielke MM**, Roberts RO, Machulda MM, Graff-Radford J, Jones DT, Schwarz CG, Gunter JL, Senjem ML, Rocca WA, Petersen RC. Prevalence of biologically vs clinically defined Alzheimer spectrum entities using the National Institute on Aging-Alzheimer's Association Research Framework. *JAMA Neurology* (in press). PMID: PMC6632154
 238. Sundermann EE, Maki PM, Biegon A, Lipton R, **Mielke MM**, Machulda M, Bondi MW. Sex-specific norms for verbal memory tests may improve diagnostic accuracy of amnesic MCI. *Neurology* (in press). *PMC Journal – In Process*
 239. Graff-Radford J, Gunter JL, Jones DT, Przybelski SA, Schwarz CG, Huston J, Lowe VJ, Elder BD, Machulda MM, Gunter MB, Petersen RC, Kantarci K, Vemuri P, **Mielke MM**, Knopman DS, Graff-Radford NS, Jack CR Jr. Cerebrospinal fluid dynamics disorders: relationship to Alzheimer biomarkers and cognition. *Neurology* (in press).
 240. McCarter S, Tabatabai G, Jong H-Y, Sandness DJ, Timm PC, Johnson KL, McCarter AR, Savica R, Vemuri P, Machulda MM, Kantarci K, **Mielke MM**, Boeve BF, Silber MH, St. Louis EK. REM sleep atonia loss distinguishes synucleinopathy in older adults with cognitive impairment. *Neurology* (in press).

241. Miller VM, Jayachandran M, Barnes JN, **Mielke MM**, Kantarci K, Rocca WA. Risk factors of neurovascular aging in women. *J Neuroendocrinol.* 2019:e12777. PMID: 31397036
NIHMSID: NIHMS1045893. PMC Journal – In Process
242. **Mielke MM**, Syrjanen JA, Blennow K, Zetterberg H, Skoog I, Vemuri P, Machulda MM, Graff-Radford J, Knopman DS, Jack CR Jr, Petersen RC, Kern S. Comparison of variables associated with CSF neurofilament, total-tau, and neurogranin. *Alzheimers Dement* (in press).
NIHMSID: NIHMS1538159
243. Vassilaki M, Aakre JA, Knopman DS, Kremers WK, **Mielke MM**, Geda YE, Machulda MM, Al Fakir R, Undavalli C, Roberts RO, Petersen RC. Informant-based hearing difficulties and the risk for mild cognitive impairment and dementia. *Age Ageing.* 2019 Aug 22 [Epub ahead of print] PMID: 31437275 DOI: 10.1093/ageing/afz099. PMC Journal – In Process (Method A).
244. **Mielke MM**, Syrjanen JA, Bui HH, Petersen RC, Knopman DS, Jack CR Jr, Graff-Radford J, Vemuri P. Elevated plasma ceramides are associated with higher white matter hyperintensity volume—Brief Report. *Arterioscler Thromb Vascular Biol* (in Press). NIHMSID: NIHMS1539059
245. Scharf EL, Graff-Radford J, Przybelski SA, Lesnick TG, **Mielke MM**, Knopman DS, Preboske GM, Schwarz CG, Senjem ML, Gunter JL, Machulda M, Kantarci K, Petersen RC, Jack CR Jr, Vemuri P. Cardiometabolic health and longitudinal progression of white matter hyperintensity: the Mayo Clinic Study of Aging. *Stroke.* 2019; PMID: 31510903 (in press).
PMC Journal – In Process (Method B)
246. Vemuri P, Lesnick TG, Knopman DS, Przybelski SA, Reid RI, **Mielke MM**, Graff-Radford J, Lowe VJ, Machulda MM, Petersen RC, Jack CR Jr. Amyloid, vascular, and resilience pathways associated with cognitive aging. *Ann Neurol* 2019 (Epub 2019 Sept 11) PMID: 31509621 (in press). PMC Journal – In Process (Method B)
247. Sprung J, Schulte PJ, Knopman DS, **Mielke MM**, Petersen RC, Weingarten TN, Martin DP, Hanson AC, Schroeder DR, Warner DO. Cognitive function after surgery with regional or general anesthesia: A population-based study. *Alzheimers Dement.* 2019 Sep 5 Epub 2019 Sep 05 PMID: 31495602 DOI: 10.1016/j.jalz.2019.06.4949

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§Indicates co-senior author

†Indicates mentee

Other Reviews:

1. **Mielke M.** Depression. In: Eaton WW, Addington AM, Bass J, Forman V, Gilbert S, Hayden K, Mielke M, editors. Risk factors for major mental disorders: a review of the epidemiologic literature. Baltimore, Department of Mental Hygiene, Bloomberg School of Public Health, Johns Hopkins University, November, 2002. Review for NIMH.

Editorials:

1. **Mielke MM.** Editorial. Shifting our focus to blood-based biomarkers of Alzheimer's disease: the promise of ceramides and sphingomyelins. *Neurodegen Dis Manage* 2012 Feb;2(1):91-4. PMID: NA
2. Khachaturian AS, **Mielke MM**, Khachaturian ZS. Editorial. Biomarker development: a population-level perspective. *Alzheimers Dement* 2012 July;8(4):247-9. PMID: NA
3. **Mielke MM.** Editorial. Focusing on the fornix: can fornix diffusion tensor imaging measures be used to predict Alzheimer's disease? *Neurodegen Dis Manage* 2012 December;2(6):549-51. PMID: NA
4. **Mielke MM**, Montine T, Khachaturian AS. Editorial. Vascular diseases: one pathway toward new conceptual models of dementia. *Alzheimers Dement* 2012 Oct; 8(5 Suppl): S69-70. PMID: NA
5. Leyhe T, Darreh-Shori T, Laske C, **Mielke MM**, Maetzler W. Editorial. Biomarkers in Alzheimer's disease and Lewy body disorders with dementia. *Int J Alzheimer Dis* 2013;Article ID 473181. PMID: PMC3556405
6. **Mielke MM**, Maetzler W. Editorial. A "bird's eye" view on the current status and potential benefits of blood biomarkers for Parkinson's disease. *Biomark Med* 2014 Feb;8(2):225-7. PMID: NA
7. Martinez Martinez P, **Mielke MM**. Sphingolipids in Alzheimer's disease and related disorders. *J Alzheimers Dis* 2017 Oct;60(3):753-6. PMID: NA
8. Savica R, **Mielke MM**. Overall survival and causes of death in neurodegeneration-an overlooked and underreported theme-Reply. *JAMA Neurol.* 2017 Nov;74(11):1379-80. PMID: NA
9. **Mielke MM**, Otto M. Neurofilaments in blood - (almost) facing clinical application. *Neurology* 2017 Nov;89(21):2126-7. PMID: NA
10. Khachaturian AS, Hayden KM, **Mielke MM**, Tang Y, Lutz MW, Gustafson DR, Kukull WA, Mohs R, Khachaturian ZS. Future prospects and challenges for Alzheimer's disease drug development in the era of the NIA-AA research framework. *Alzheimers Dement* 2018 Apr;14(4):532-4. PMID: NA
11. Khachaturian AS, Hayden KM, **Mielke MM**, Tang Y, Lutz MW, Gold M, Kukull WA, Mohs R, Gauthier S, Molinuevo JL, Zetterberg H, Khachaturian ZS. New thinking about thinking, part two. Theoretical articles for Alzheimer's & Dementia. *Alzheimers Dement* 2018 June; 14(6):703-6. PMID: NA
12. Savica R, Boeve BF, **Mielke MM**. Orthostatic hypotension as a prodromal marker of alpha-synucleinopathies-reply. *JAMA Neurol* 2018 Sept;75(9):1155.

13. **Mielke MM**, Ferretti MT, Iulita MF, Hayden K, Khachaturian AS. Sex and gender in Alzheimer's disease – Does it matter? *Alzheimers Dement* 2018 Sept;14(9):1101-3.

Book Chapters

1. Oishi K, **Mielke MM**, Albert M, Lyketsos CG, Mori S. DTI Analyses and Clinical Applications in Alzheimer's Disease. In: Ashford JW, Rosen A, Adamson M, Bayley P, Sabri O, Furst A, Black SE, Weiner M, editors. *Handbook of Imaging the Alzheimer Brain*. IOS Press, 2011.