

Sunday, January 27 Morning

- 8:00 am – 8:15 am** **Welcome/Orientation to Conference**
Denise C. Park, Ph.D. and Michael D. Rugg, Ph.D.
- Session I** **Animal and Human Models of Neurocognitive Aging**
Moderator – Karen M. Rodrigue, Ph.D.
University of Texas at Dallas
- 8:15 am – 9:00 am** **Invited Talk: Aging Cognition Across-Species**
Carol Barnes, Ph.D.
University of Arizona
- 9:00 am – 9:20 am** **Network Analysis of Structural and Functional Connectivity in Neurocognitive Aging**
David J. Madden¹, Zachary A. Monge², Shivangi Jain¹, Angela D. Cook¹, Alexander Lee¹, Jessica R. Cohen³
¹ *Duke University Medical Center*, ² *Duke University*, ³ *University of North Carolina at Chapel Hill*
- 9:20 am - 9:40 am** **Hippocampal Grey-Matter Integrity is Associated with Episodic Memory in Old Age: Introducing a Multimodal Imaging Latent-Factor Approach**
Ulman Lindenberger¹, Ylva Köhncke¹, Sandra Düzel¹, Simone Kühn², Andreas Brandmaier¹
¹ *Center for Lifespan Psychology, Max Planck Institute for Human Development*, ² *Clinic and Policlinic for Psychiatry and Psychotherapy, University Clinic Hamburg-Eppendorf*
- 9:40 am - 10:00 am** **Cortical patterns of ageing across the 8th decade, and associations with visuospatial reasoning, processing speed and memory**
Simon R. Cox¹, Mathew A. Harris¹, Stuart J. Ritchie¹, Colin R. Buchanan¹, Mark E. Bastin¹, Joanna M. Wardlaw¹, Elliot M. Tucker-Drob², Ian J. Deary¹
¹ *University of Edinburgh*, ² *University of Texas at Austin*
- 10:00 am - 10:15 am** **BREAK**
- 10:15 am – 10:35 am** **Rethinking content-based parcellation of the medial temporal lobe: Implications for cognitive aging**
Lee Ryan
University of Arizona
- 10:35 am - 10:55 am** **The Compensation Related Utilization of Neural Circuits Hypothesis (CRUNCH): Evidence that Working Memory Training Benefits Younger and Older Adults**
Alexandru D. Iordan¹, Katherine A. Cooke¹, Kyle D. Moored², Benjamin Katz³, Martin Buschkuhl⁴, Susanne M. Jaeggi⁵, Thad A. Polk¹, Scott J. Peltier¹, John Jonides¹, Patricia A. Reuter-Lorenz¹
¹ *University of Michigan*, ² *Johns Hopkins University*, ³ *Virginia Tech*, ⁴ *MIND Research Institute*, ⁵ *University of California, Irvine*
- 10:55 am – 11:15 am** **The Impact of Amyloid Deposition on Memory in Cognitively-Normal Adults**
Denise C. Park, Ph.D
University of Texas at Dallas
- 11:00 am – 1:00 pm** **Poster Session 1 and Conference Lunch**
- A-1** **The effects of age on subjective and objective estimates of recollection**
Saad A. Alghamdi, Paul F. Hill, Michael D. Rugg,
University of Texas at Dallas
- A-2** **GABA levels in ventral visual cortex decline with age and predict neural distinctiveness**
Jordan D. Chamberlain¹, Holly Gagnon², Poortata Lalwani², Kaitli Cassidy², Molly Simmonite², Bradle Foerster², Myria Petrou², Rachel D. Seidler³, Daniel H. Weissman², Denise C. Park⁴,
¹ *The Pennsylvania State University*, ² *University of Michigan*, ³ *University of Florida*, ⁴ *University of Texas at Dallas*
- A-3** **Age-related changes in motivational integration involving socio-emotional incentives**
Jennifer L. Crawford, Debbie M. Yee, Todd S. Braver,
Washington University
- A-4** **Individual differences in long-term verbal learning and memory in healthy aging**
Sandra Düzel¹, Yana Fandakova², Andreas Brandmaier², Andrew Bender³, Simone Kühn⁴; Ulman Lindenberger²
¹ *MPIB*, ² *Max-Planck-Institute for Human Research*, ³ *Michigan State University*, ⁴ *UKE Hamburg*
- A-5** **The Role of cognitive reserve (CR) in reducing false memory in young-old and old-old adults**
Tasnuva Enam, Kyle R. Kraemer, Ian M. McDonough
The University Of Alabama
- A-6** **Neural encoding differences in young and older adults during associative memory**
Courtney R. Gray¹, Amy A. Overman, Kayla E. McGraw², Mark A. Rowley², Joanna M. Salerno², Chloe E. Hultman², Nancy A. Dennis¹,
¹ *The Pennsylvania State University*, ² *Elon University*
- A-7** **Differential age-related alteration in the DMN's functional connectivity versus its task-evoked negative BOLD response**
Qolamreza Razlighi^{1,2,3}
¹ *Department of Neurology, Collage of Physician and Surgeons, Columbia University*, ² *Taub Institute for Research on Alzheimer's Disease and The Aging, Columbia University*, ³ *Biomedical Engineering Department, Columbia University*

- A-8** **PPAR γ for Memory in Aging and Neurological Disease: Role of ERK Phosphorylation**
Egide Ishimwe, Larry Denner, Kelly Dineley,
University of Texas Medical Branch
- A-9** **Age Differences in Facial Processing and Working Memory**
Farooq Kamal, Cassandra Morrison, Kenneth Campbell, Vanessa Taler
University of Ottawa
- A-10** **Systemic inflammation and the body's composition of lean muscle and adipose tissue exert strong influence over long-term fluid intelligence in 4,687 middle-aged adults**
Brandon S. Klinedinst¹, Colleen Pappas¹, Scott Le¹, Siobhan M. Hoscheidt², Auriel A. Willette¹
¹*Iowa State University*, ²*Wake Forest University*;
- A-11** **A Longitudinal Model of Diet Impacting Fluid Intelligence**
Scott T. Le, Brandon S. Klinedinst, Auriel A. Willette
Iowa State University
- A-12** **Neurofeedback Training of Selective Attention in Advanced Age: A Real-Time fMRI Approach Targeting dACC Plasticity**
Tian Lin¹, Mohit Rana², Dawn Bowers¹, Ranganatha Sitaram², Natalie C. Ebner¹
¹*University of Florida*, ²*Pontificia Universidad Católica de Chile*
- A-13** **Age-related differences in the impact of mind-wandering and perceptual clutter on performance in a go/no-go task**
David Maillet, Lujia Yu, Lynn Hasher, Cheryl L. Grady,
Baycrest Health Science, University of Toronto
- A-14** **Age and egocentric perspective taking: role of parietal cortex**
Hannah R. Maybrier, Marta Stojanovic, Taylor R. Hendershott, Denise P. Head,
Washington University in St. Louis
- A-15** **The Relationship Between Functional Brain Networks and Cognitive Intraindividual Variability in Healthy Aging and Early Alzheimer's Disease**
Karin L. Meeker, Jill D. Waring,
Saint Louis University
- A-16** **Predicting Executive Functions from Physical, Social, and Mental Activities in Older Adults Over 50**
Christina X. Mu¹, Lee Ryan²
¹*California State University, Fullerton*, *University of Arizona, Tucson*
- A-17** **Bilateral common carotid artery stenosis (BCAS) induces sustained impairment of breathing, motor deficits, and cognitive function**
Yashasvee Munshi, Anthony Patrizz, Michael E. Maniskas, Jun Li, Louise D. McCullough,
UTHealth
- A-18** **Age differences in selective covert attention and associative memory**
Shireen A. Parimoo¹, Cheryl L. Grady²
¹*University of Toronto*, ²*Rotman Research Institute*
- A-19** **Comparison of Cognitive Function of older Black, White, and Mexican/Mexican Americans with Type-2 Diabetes**
Samantha L. Saldana, Charles A. Guarnaccia
University of North Texas
- A-20** **Investigating Memory Consolidation Through Transcranial Direct Current Stimulation and Distribution of Training in Older Adults**
Rachel N. Smith¹, Austin Moon¹, Jacky Au¹, Elena Carbone², John Jonides³, Susanne M. Jaeggi¹
¹*University of California, Irvine*, ²*University of Padova*, ³*University of Michigan, Ann Arbor*;
- A-21** **Sex differences in brain-behavior correlations during an episodic memory task: an adult lifespan study**
Sivaniya Subramaniapillai¹; Sricharana Rajagopal¹, Stamatoula Pasvanis², Natasha Rajah¹
¹*McGill University*, ²*Douglas Institute Research Centre*;
- A-22** **Between-Network Functional Connectivity is Modified by Age and Cognitive Task Domain**
Eleanna Varangis, Qolamreza Razlighi, Christian G. Habeck, Yaakov Stern,
Columbia University
- A-23** **Age-related decrease in BOLD modulation is mediated by white matter degradation and accounts for poorer task performance**
Christina E. Webb, David A. Hoagey, Chris M. Foster, Karen M. Rodrigue, Kristen M. Kennedy
University of Texas at Dallas
- A-24** **Individual Differences in Prefrontal Structure and Function Predict Cognitive Functioning in Middle-Age**
Joseph Hennessee, Angela Mueller, Avanti Dey, Denise C. Park,
University of Texas at Dallas
- A-25** **Metabolic Syndrome Risk in Older Adults is Associated with Altered White Matter Microstructure and Reduced Rates of Verbal Learning**
Andrew R. Bender¹, Ilja Demuth², Adrian Rosada², Elisabeth Steinhagen-Thiesen², Simone Kühn³, Sandra Düzel⁴, Ulman Lindenberger⁴
¹*Department of Epidemiology and Biostatistics, Michigan State University*, ²*Lipid Clinic at the Interdisciplinary Metabolism Center, Charité - Universitaetsmedizin Berlin*, ³*University Clinic Hamburg-Eppendorf*, ⁴*Center for Lifespan Psychology, Max Planck Institute for Human Development*

- A-26** **Sensorimotor network segregation declines with age, is linked to GABA, and predicts sensorimotor performance**
Kaitlin E. Cassidy¹, Holly Gagnon¹, Poortata Lalwani¹, Molly Simmonite¹, Bradley Foerster¹, Denise C. Park², Scott J. Peltier¹, Myria Petrou¹, Stephan F. Taylor¹, Daniel H. Weissman¹, Rachael D. Seidler¹, Thad A. Polk¹,
¹University of Michigan - Ann Arbor, ²University of Texas at Dallas
- A-27** **Older adults who modulate BOLD-signal variability more, have higher GABA levels and better fluid processing abilities.**
Poortata S. Lalwani¹, Kaitlin Cassidy¹, Molly Simmonite¹, Douglas Garrett²; Thad A. Polk¹
¹Department of Psychology, University of Michigan, ²Max Planck UCL Centre for Computational Psychiatry and Ageing Research
- A-28** **Vascular risks and cognitive reserve are differentially related to longitudinal cognitive trajectories**
Corinne Pettigrew¹, Anja Soldan¹, Jiangxia Wang², Mei-Cheng Wang², Marilyn Albert¹,
¹Johns Hopkins School of Medicine, ²Johns Hopkins Bloomberg School of Public Health;
- A-29** **Cognitive Reserve modifies the Impact of White Matter Hyperintensities on Cognitive Trajectories**
Anja Soldan¹, Corinne Pettigrew¹, Yuxin Xu², Mei-Cheng Wang², Marilyn Albert¹
¹Johns Hopkins School of Medicine, ²Johns Hopkins Bloomberg School of Public Health;
- A-30** **The role of $\alpha 7$ nicotinic acetylcholine receptors in neuroinflammation-mediated cognitive impairment.**
Ibdanelo Cortez¹, Egidio Ishimwe¹, Caterina Hernandez², ACP; Kelly T. Dineley¹, UTMB
¹UTMB, ²ACP
- A-31** **Cerebellar network contributions to age-related cognitive and motor decline**
Jessica A. Bernard
 Texas A&M University
- A-32** **The potential role of genetics and bilingualism on cognitive control in the aging brain**
Arturo E. Hernandez
 University of Houston
- A-33** **Apparent thinning of visual cortex during childhood is associated with myelination, not pruning**
Vaidehi S. Natu¹, Jesse Gomez², Michael Barnett³, Brianna Jeska⁴, Evgeniya Kirilina⁵, Carsten Jaeger⁵, Zonglei Zhen⁶, Kevin S. Weiner², Nikolaus Weiskopf⁵, Kalanit Grill-Spector⁴
¹ UT Southwestern Medical Center, ² UC Berkeley, ³ University of Pennsylvania, ⁴ Stanford University, ⁵ Max Planck Institute for Human Cognitive and Brain Sciences, ⁶ Beijing Normal University
- A-34** **Refreshing and elaboration are separable processes with distinct impacts on working memory**
Jarrod A. Lewis-Peacock¹, Lea M. Bartsch², Vanessa M. Loaliza³, Lutz Jäncke¹, Klaus Oberauer¹
¹University of Texas at Austin, ²University of Zurich and University Priority Program Dynamics of Healthy Aging, ³University of Essex,
- A-35** **The cognitive benefits of learning multiple real-world skills in older adults**
Rachel Wu¹, Esra Kurum¹, Carla Strickland-Hughes², Annie Ditta¹, George W. Rebok³
¹University of California, Riverside, ²University of the Pacific, ³ Johns Hopkins University

Sunday, January 27 Afternoon

Session II

Keynote Address

1:00 pm – 2:00 pm **Successful Memory Aging – What is the Evidence**
Lars Nyberg, Ph.D.
 Umeå University

Session III

Dedifferentiation of Brain Structure and Function with Age

Moderator – Gagan Wig, Ph.D.
 University of Texas at Dallas

2:00 pm – 2:40 pm **Invited Talk: Age-related neural dedifferentiation: Consequences, Scope and Cause**
Thad Polk, Ph.D.
 University of Michigan

2:40 pm - 3:00 pm **Effects of age and cognitive domain on the predictive power of fMRI task activation vs. connectivity**
Christian G. Habeck, Yaakov Stern
 Columbia University

3:00 pm - 3:20 pm **Cortical differentiation, hippocampal integrity, and amyloid burden are linked to individual differences in episodic memory decline with age**
Alexandra N. Trelle¹, Valerie A. Carr², Carolyn Fredericks¹, Wanjia Guo³, Manasi Jayakumar⁴; Marc Harrison¹, Geoff Kerchner¹, Elizabeth C. Mormino¹, Monica Thieu⁴, Anthony D. Wagner¹
¹ Stanford University, ² San Jose State University, ³ Oregon State University, ⁴ Columbia University

3:20 pm - 3:40 pm **Coupled Cognitive Changes in Adulthood: Evidence for Longitudinal Dedifferentiation**
Elliot M. Tucker-Drob¹, Andreas M. Brandmaier², Ulman Lindenberger²
¹ University of Texas at Austin, ² Max Planck Institute for Human Development

3:40 pm - 4:00 pm **Neural differentiation and memory performance in young and older adults**
Joshua D. Koen¹, Nedra Hauck², Michael D. Rugg
¹ University of Notre Dame, ² University of Texas at Dallas

- 4:00 pm - 4:20 pm** **Developmental coupling of memory performance and brain response is uncoupled in aging**
Patrick J. Pruitt, Jessica M. Hayes, Lingfei Tang, Noa Ofen, Jessica S. Damoiseaux,
Wayne State University
- 4:20 pm – 6:00 pm** **Poster Session II**
- B-1** **Metacognitive Influences on Age Differences in Prospective Remembering: The Role of Self-Selecting Cues**
Hunter Ball¹, Gene Brewer²
¹University of Texas at Arlington, ²Arizona State University
- B-2** **Executive Functioning and the Behavioral Approach System: A Neuropsychological Account of Depressive Symptoms at Midlife**
Janchira K. Charoenworawat, Janelle Foret, Brennan Hickson, Andrea P. Haley
The University of Texas at Austin
- B-3** **Older Latinos' with Type 2 Diabetes: Perspectives of Cognitive Health**
Heather E. Cuevas,
The University of Texas at Austin
- B-4** **Neural Correlates of Vocabulary Knowledge across the Lifespan**
Avanti Dey, Denise C Park
University of Texas at Dallas
- B-5** **Higher levels of cognitive ability and reserve are associated with age-related increases in ventral visual and parahippocampal cortex activity during a face-location associative memory task.**
Abdelhalim Elshiekh¹; Sricharana Rajagopal², Stamatoula Pasvanis², Elizabeth Ankudowich¹, Maria N. Rajah²,
¹McGill University, ²Douglas Mental Health University Institute
- B-6** **The Role of Hippocampal Subfield Volume and Fornix Diffusion in Episodic Memory across the Lifespan.**
Chris M. Foster, David A. Hoagey, Karen M. Rodrigue,
University of Texas at Dallas
- B-7** **Protective effect of Physical Fitness and Psychological Well-being on Cognitive Aging**
Tristyn A. Hall¹, Kevin Ma²; Evan P. Pasha¹, Karen M. Rodrigue³, Denise C. Park³, Rong Zhang¹
¹Institute of Exercise and Environmental Medicine, ²University of Texas Southwestern Medical Center, ³University of Texas at Dallas;
- B-8** **The effect of vascular risk factors on white matter microstructure mediates age-related differences in executive function performance**
David A. Hoagey, Linh T.T. Lazarus, Karen M. Rodrigue, Kristen M. Kennedy,
The University of Texas at Dallas
- B-9** **How Age Moderates the Relationship Between Creative Hobby Participation and Creative Meaning in Middle Aged and Older Adults**
Sarah M. Israel, Courtney J. Bolstad, Carolyn E. Adams-Price,
Mississippi State University
- B-10** **Looking at theta oscillations during item-context binding in the ageing brain**
Anna Karlsson, Myriam C. Sander,
Max Planck Institute for Human Development
- B-11** **Whole-brain substrates of mnemonic discrimination vary with memory status in older adults**
Jenna L. Klippenstein¹, Shauna M. Stark², Craig E.L. Stark², Ilana J. Bennett¹
¹University of California, Riverside, ²University of California, Irvine
- B-12** **Personality, Cognition, and Aging: How and when do personality traits affect executive functioning?**
Shelby D. Leverett, Maria A. Boylan, Ekarin E. Pongpipat, Karen M. Rodrigue, Kristen M. Kennedy,
University of Texas at Dallas
- B-13** **Cerebral capillary endothelial cells lose elasticity upon the deprivation of oxygen-glucose supply**
Alexis F. Mack, Caroline R. Reynolds, Akihiko Urayama,
University of Texas McGovern Medical School
- B-14** **Functional Dedifferentiation of Resting State Networks in Older Adults**
Brigitta Malagurski, Franziskus Liem, Jessica Oschwald, Susan Méryllat, Lutz Jäncke
University Research Priority Program "Dynamics of Healthy Aging", University of Zurich,
- B-15** **Fewer Generation Constraints Enhance Memory for Self-Generated Information Differently for Younger Adults and Older Adults**
Matthew P. McCurdy¹, Wolfgang Viechtbauer², Andrea N. Frankenstein¹, Allison M. Sklenar¹, Eric D. Leshikar¹
¹University of Illinois at Chicago, ²Maastricht University

- B-16** **Investigating the effects of spaced vs. massed training on cognitive training outcome in older adults**
Seung M. Moon¹, Martin Buschkuehl², Chelsea M. Parlett-Pelleriti³, Michelle Evans⁴, Patricia A. Reuter-Lorenz⁴, Priti Shah⁴, John Jonides⁴, Susanne Jaeggi¹,
University of California, Irvine, ² MIND Research Institute, Irvine, ³ Chapman University, Orange, ⁴ University of Michigan, Ann Arbor
- B-17** **The Effects of Language Usage on Self-Reference Memory**
Nishaat S. Mukadam¹, Wanbing Zhang¹, Andrew E. Budson², Angela Gutches¹
¹ Brandeis University, ² VA Boston Healthcare System;
- B-18** **Prestimulus subsequent memory effects: An EEG time frequency-analysis in young and older adults**
Kim Nguyen¹, Nedra Hauck², Erin D. Horne², Joshua D. Koen¹, Michael D. Rugg²
¹ University of Notre Dame, ² University of Texas at Dallas
- B-19** **Dopamine D2 receptor gene polymorphism predicts learning in older adults**
Jessica R. Petok¹, Emily Patterson¹, Annika Awad¹, Simon Bergford¹, Mark A. Gluck², Kathryn Ziegler-Graham¹
¹ St. Olaf College, ² Rutgers University - Newark
- B-20** **Not compensating for it? Lower functional asymmetry in older adults during retrieval does not reflect contralateral over-activation and is unrelated to memory decline**
James M. Roe¹, Norway; Didac Vidal-Piñeiro¹, Markus H. Sneve¹, Kristiina Kompus², Douglas N. Greve³, Kristine B. Walhovd¹, Anders M. Fjell¹, René Westerhausen¹,
¹ Center for Lifespan Changes in Brain and Cognition, Department of Psychology, University of Oslo, ² Department of Biological and Medical Psychology, University of Bergen, ³ Athinoula A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Boston;
- B-21** **Relationships between health factors and recognition in young adults**
James D. Schaeffer¹, Cory Newell², Catherine Spann³, George Siemens², Angela Liegey Dougall²
¹ Stephen F. Austin State University, ² University of Texas at Arlington, ³ University of Colorado Boulder
- B-22** **Examining the impact of specific game factors in game-based cognitive training: a meta-analysis of randomized controlled trials in young and old.**
Evan T. Smith, Chandramallika Basak,
University of Texas at Dallas
- B-23** **AGE-RELATED SUSCEPTIBILITY IN CYBER SOCIAL-ENGINEERING ATTACKS**
Paul Talty, Tian Lin, Harold Rocha, Huizi Yang, Donovan Ellis, Sandeep Dommaraju, Melis Muradoglu, Devon Weir, Adam Soliman, Daniela Oliveira, Natalie C. Ebner
University of Florida
- B-24** **Ultrahigh resolution diffusion imaging of fornix integrity and episodic memory in aging**
Anu Venkatesh, Jason Langley, Xiaoping Hu, Ilana J. Bennett
University of California, Riverside
- B-25** **Regional brain volumes and white matter connectivity evince substantial aging-related gradients**
Colin R. Buchanan¹, Stuart J. Ritchie², Simon R. Cox¹, Colin R. Buchanan¹, Mark E. Bastin¹, Ian J. Deary¹, Elliot M. Tucker-Drob³
¹ University of Edinburgh, ² King's College London, ³ University of Texas
- B-26** **The effect of repetitive mild traumatic brain injury on tau pathology**
George A. Edwards III, Nico M. Dinamarca, Claudio Soto, Ines Moreno-Gonzalez,
University of Texas Health Science Center in Houston
- B-27** **REELIN-SIGNALING IN ALZHEIMER'S DISEASE AND AGING**
Florian Plattner, Austin Marckx, Lea Naestle, Katja Fritschle, Rachel Thomas, Connie Wong, Inga Theresa Pohlkamp, Catherine Wasser, Xunde Xian, Murat Durakoglugil, Joachim Herz,
UT Southwestern Medical Center
- B-28** **Examining plasticity of sensory cortex in older adults using macular degeneration as a model**
Kristina M. Visscher, Matthew Defenderfer, Leland Fleming, Mandy K Biles, P. D. Stewart, Sara Sims,
University of Alabama
- B-29** **Different amyloid beta conformational strains induce distinct patterns of brain amyloidosis in animal models of Alzheimer's disease.**
Ruben Gomez-Gutierrez¹, Carlos Kramm², Claudio Soto, Rodrigo Morales,
¹ University of Malaga and University of Texas Health Science Center at Houston, ² University of Texas Health Science Center at Houston
- B-30** **Health & Brain Vulnerability in Midlife**
Andreana P. Haley
University of Texas at Austin
- B-31** **Stroke-induced fibrosis impairing the perivascular glymphatic A β clearance was restored by transforming growth factor- β inhibition**
Akihiko Urayama¹, Matthew D. Howe¹, J. Weldon Furr¹, Yashasvee Munshi¹, Meaghan A. Roy-O'Reilly¹, Michael E. Maniskas¹, Lauren H. Sansing², Louise D. McCullough¹, Akihiko Urayama¹
¹ University of Texas McGovern Medical School, ² Yale University School of Medicine
- B-32** **Relationship between cortical thickness estimates, in-scanner head motion, and cognitive performance**
Marianne de Chastelaine, Brian E. Donley, Kristen M. Kennedy, Michael D. Rugg
University Of Texas At Dallas;

B-33 **The effects of cardiovascular risks on brain activation in older adults during an executive control task: an fMRI study**
Shuo Qin, Chandramallika Basak
University of Texas at Dallas

B-34 **Cortical Reinstatement in Young and Older Adults**
Paul F. Hill, Danielle R. King, Michael D. Rugg
University of Texas at Dallas

Monday, January 28 Morning

8:30 am – 9:50 am Poster Session III

C-1 **Case Study: A Multidisciplinary Approach to Diagnosis of Posterior Cortical Atrophy**
Anne R. Carlew, Emily Sandlin, Ashley Gardner, K. Chase Bailey,
UT Southwestern Medical Center

C-2 **Subjective cognitive decline reflects actual memory decline and functional deficits in the hippocampus**
Xi Chen¹, Zhang Jingting¹, Michelle E. Farrell², Denise C. Park¹
¹ *University of Texas at Dallas*, ² *Department of Neurology, Massachusetts General Hospital*

C-3 **Evidence for age-consistent valence encoding mechanisms despite a behavioral positivity effect**
Ryan T. Daley¹, Holly J. Bowen², Eric C. Fields³, Katelyn R. Parisi³, Angela H. Gutches⁴, Elizabeth A. Kensinger¹
¹ *Boston College*, ² *Southern Methodist University*, ³ *Boston College / Brandeis University*, ⁴ *Brandeis University*

C-4 **Using MTurk for Memory and Aging Studies: Concerns about Validity and Generalizability**
Kelly A. Durbin, Sara N. Gallant, Nicole E. Friedlich, Yanrong Li, Mara Mather,
University of Southern California

C-5 **Age Differences in Episodic Memory are Eliminated in Stories of Personal Conflict**
Lisa Emery, Olivia Godfrey, Tiffany Hoeffler, Chris Ahlawat, Madison Anderson, Kirsten Temple,
Appalachian State University

C-6 **Neural precursors derived from embryonic and mesenchymal stem cells ameliorate Parkinson's disease pathology.**
Nazaret Gamez Ruiz, George Edwards III, Enrique Armijo Fuentes, Carlos Kramm Barria, Rodrigo Morales, Claudio Soto, Ines Moreno Gonzalez,
University of Texas Health Science Center at Houston

C-7 **Individual differences in neural pattern similarity during encoding relate to memory performance in putatively healthy older adults**
Marc B. Harrison¹, Valerie A. Carr², Carolyn Fredericks¹, Wanja Guo³, Manasi Jayakumar⁴, Geoffrey Kerchner¹, Elizabeth Mormino¹, Monica Thieu⁴, Ali N. Trelle¹, Anthony D. Wagner¹,
¹ *Stanford University*, ² *San Jose State University*, ³ *University of Oregon*, ⁴ *Columbia University*

C-8 **Post-retrieval monitoring effects in young and older adults under single and dual task conditions**
Erin D. Horne, Marianne de Chastelaine, Michael D. Rugg
University of Texas at Dallas

C-9 **Losing money and motivation: Younger and older adults' response to loss incentive in a working memory task**
Hyesue Jang, Cindy A. Lustig
University of Michigan

C-10 **Behavioral and neural effects of performing a dual motor and cognitive task: a study in elderly brains**
Krystal M. Kirby¹, Sreekrishna Ramakrishnapillai¹, Robert M. Brouillette², Jeffery N. Keller², Alyssa DeVito², John P. Berstein², Arend W. Van Gemmert¹, Owen T. Carmichael²
¹ *Louisiana State University*, ² *Pennington Biomedical Research Center*

C-11 **Age differences in self-control during delay of gratification**
Bidhan Lamichhane, Todd S. Braver,
Psychological & Brain Sciences Department, Washington University in Saint Louis

C-12 **Want but I Can't? Older Adults' Information Search in Decision Making Process: The Roles of Self-Relevance and Cognitive Load**
Meijia Li, Huamao Peng, Lingling Ji,
Institute of Developmental Psychology, Beijing Normal University

C-13 **Differential age effects of self-reported sleep quality on cognition**
Prathyusha D. Mahasamudram, Marci M. Horn, Karen M. Rodrigue, Kristen M. Kennedy
University of Texas at Dallas.

C-14 **Age-Related Activation Differences in the Subcomponents of the Unity-Diversity Model of Executive Functioning: An ALE Meta-Analysis**
Ted Maldonado, Michael J. Imburgio, Joseph M. Orr, Jessica A. Bernard,
Texas A&M University

C-15 **Age-related changes in aspects of the rest-activity cycle and their relationship to associative memory performance**
Megan C. McMahon, Laura Gandy, Athula Pudhiyidath, Alison R. Preston, David M. Schnyer,
The University of Texas at Austin

C-16 **Electrophysiological differences between young and older adults during attention capture using the P3a and DRN**

- Cassandra Morrison**, Farooq Kamal, Kenneth Campbell, Vanessa Taler
University of Ottawa
- C-17** **Cognitive complaints and memory performance in elderly veterans with TBI versus those with TBI and PTSD**
Catherine E. Munro¹, Christian LoBue², Nyaz Didehbani², Denise C. Park³, C. Munro Cullum²
¹ *University of Texas at Dallas / University of Texas Southwestern*, ² *University of Texas Southwestern*, ³ *University of Texas at Dallas*
- C-18** **Effects of fronto-cerebellar white matter degradation on executive function performance across the lifespan**
Alyssa N. Ortega, David A. Hoagey, Karen M. Rodrigue, Kristen M. Kennedy
University of Texas at Dallas
- C-19** **Examination of the relationship among n-back functional connectivity, task performance, and cortical thickness across the adult lifespan**
Ekarin E. Pongpipat, Chris M. Foster, Maria A. Boylan, Kristen M. Kennedy, Karen M. Rodrigue,
The University of Texas at Dallas
- C-20** **The effect of nonagenarians on age-related white matter integrity declines**
Michael A. Rupp¹, Dana E. Greenia², Maria M. Corrada³, Claudia H. Kawas⁴, Ilana J. Bennett¹
¹ *University of California, Riverside*, ² *Institute for Memory Impairments and Neurological Disorders, University of California, Irvine*, ³ *Department of Neurology, University of California, Irvine*, ⁴ *Department of Epidemiology, University of California, Irvine*;
- C-21** **Effects of predictability, switching and updating on fronto-parietal fMRI activation in healthy aging.**
Paulina A. Skolasinska, Shuo Qin
University of Texas at Dallas
- C-22** **Role of allocentric processing and regional brain volumes in route reversal**
Marta Stojanovic, Hannah R. Maybrier, Taylor R. Hendershott, Denise Head
Washington University in St. Louis
- C-23** **Age-related degradation of optic radiations differentially predict visual and non-visual executive functions**
Patricio M. Viera Perez, David A. Hoagey, Karen M. Rodrigue, Kristen M. Kennedy,
The University of Texas at Dallas
- C-24** **Effect of Self-Imagination for Older Adults and aMCI Patients**
Wanbing Zhang¹, Hunter Johndro¹, Andrew E. Budson², Angela Gutchess¹
¹ *Brandeis University*, ² *VA Boston Healthcare System*;
- C-25** **Social Engagement and Cognitive Effort Expenditure for Rewards Can Predict Age-Related Cognitive Functioning**
Kaileigh A. Byrne, Erin A. Newell
Clemson University
- C-26** **Resting-state functional connectivity of left posterior STG in older and younger adults**
Victoria Gertel, Haoyun Zhang, Michele Diaz,
Pennsylvania State University
- C-27** **Carotid Stiffening is Independently Associated with Brain Amyloid- β in Patients with Mild Cognitive Impairment**
Evan P Pasha¹, Evan P Pasha¹, Elmer Rutjes², Tsubasa Tomoto¹, Takashi Tarumi¹, C. Munro Cullum¹, Rong Zhang¹
¹ *UT Southwestern Medical Center*, ² *Radboud University*
- C-28** **Oscillatory activity during encoding and hippocampal subfield volume predict subsequent memory in younger and older adults**
Myriam C. Sander¹, Myriam C. Sander¹, Verena R. Sommer¹, Yana Fandakova¹, Attila Keresztes¹, Thomas H. Grandy¹, Yee Lee Shing², Markus Werkle-Bergner¹
¹ *Max Planck Institute for Human Development*, ² *Goehte University*
- C-29** **Cohort Effects in White Matter Integrity: Seattle Longitudinal Study**
Sherry L. Willis, Paul R. Robinson, Enkjin Ulziibaatar, K. Warner Schaie
University of Washington
- C-30** **Methods and Effect of Implementing the Interdisciplinary Intervention Model for Preventing Postoperative Delirium and Functional Decline in Older Adults**
Yanyan Wang¹, Jirong Yue², Kathy Richards¹
¹ *The University of Texas at Austin*, ² *West China Hospital of Sichuan University*
- C-31** **Identification of a novel AIF3 isoform in brain - new insights of neurodegeneration**
Yingfei Wang
UT Southwestern
- C-32** **Slow Wave Sleep and REM Sleep Change Dynamically with Aging: A Framework for Cognitive Trajectories**
Michael Scullin, Chenlu Gao
Baylor University
- C-33** **The implications of depression in measuring billing fraud in Japan**
Satoshi Watanabe¹, Hirohide Shibutani², Daisuke Ueno³, Yasuhiro Daiku⁴
¹ *Akita Prefectural University*, ² *Aomori University*, ³ *Kyoto Prefectural University of Medicine*, ⁴ *Osaka University*
- C-34** **Effects of Aerobic Exercise on Working Memory Networks from a Single Session to 12-Week Intervention**
Matthew Sodoma, Bess Glickman, Timothy B. Weng, Rachel C. Cole, Phillip G. Schmid, Gardar Sigurdsson, Vincent A. Magnotta, Gary L. Pierce, Michelle W. Voss

University of Iowa

Session IV **The Healthy Brain in Transition to Disease**

Moderator – Chandramallika Basak, Ph.D.
The University of Texas at Dallas

- 9:50 am - 10:10 am **Invited Talk: Varieties of Human Memory and their Brain Networks: From Neurodegenerative Disease to Normal Aging to Superaging**
Brad Dickerson, M.D.
Massachusetts General Hospital and Harvard University
- 10:10 am - 10:30 am **Cerebrovascular, structural, and functional contributions to age-related cognitive decline**
Monica Fabiani, Gabriele Gratton,
University of Illinois at Urbana-Champaign
- 10:30 am - 10:50 am **Cognitive Mapping Ability Predicts Longitudinal Cognitive Decline**
Taylor R. Hendershott¹, Samantha L. Allison², Marta Stojanovic¹, Tammie L. Benzinger¹, John C. Morris¹, Denise Head¹
¹ Washington University, ² University of Wisconsin-Madison,
- 10:50 am - 11:10 am **Converging Evidence for an Ability Discrepancy to Detect Risk for Alzheimer’s Disease**
Ian M. McDonough
The University of Alabama
- 11:10 am – 11:45 AM **Lunch Break**

Monday, January 28 Afternoon

Session IV **The Social and Emotional Underpinnings of Neurocognitive Aging**

Moderator – Kristen Kennedy, Ph.D.
The University of Texas at Dallas

- 11:45 am – 12:15 pm **Invited Talk: Age differences in how the locus coeruleus influences attention**
Mara Mather, Ph.D.
University of Southern California
- 12:15 pm – 12:45 pm **Invited Talk: Social Influences on Neurocognitive Aging**
Angela Gutches
Brandeis University
- 12:45 pm – 1:05 pm **The influence of catecholamine function on reward-related memory in aging**
Anne S. Berry, Theresa M. Harrison, A.J. Whitman, Kaitlin N. Swinnerton, Ming Hsu, William J. Jagust
UC Berkeley
- 1:05 pm – 1:25 pm **The role of the dorsomedial prefrontal cortex (dmPFC) in reducing memory negativity in older adults:**
Jaclyn H. Ford, Elizabeth A. Kensinger
Boston College
- 1:25 pm – 1:45 pm **Motivation and decision making in the aging brain**
Kendra L. Seaman, Gregory R. Samanez-Larkin
Duke University
- 1:45 pm – 1:55 pm **Wisdom**
Richard Nisbett, Ph.D.
The University of Michigan
- 1:55 pm **Closing Remarks**
Denise C. Park, Ph.D.
The University of Texas at Dallas