DALLAS
AGING AND
COGNITION
CONFERENCE

February 25 – 27, 2023
Hall Arts Hotel, Dallas

CENTER FOR
VITAL LONGEVITY

Dear Friends,

Thank you for joining us at the 7th Dallas Aging and Cognition Conference (DACC). The DACC program includes a keynote address and presentations focused on four themes. This year's themes include:

• **Predictors and Determinants of Cognitive Decline**
• **Cognitive Development and its Implications for Cognitive Aging**
• **Decision-Making Across the Adult Lifespan**
• **Social and Affective Cognition Across the Adult Lifespan**

For each theme, an invited speaker will present an overview followed by related submitted papers. We would like to thank Kristine Beate Walhovd for delivering our keynote; and Emrah Düzel, Noa Ofen, Gregory Russell Samanez-Larkin, and Elizabeth Kensinger for presenting the overviews. We have allowed plenty of time for interaction and questions with speakers during the conference, and we are sure many provocative discussions will occur over food and drinks in the evening, as well.

It is our great pleasure to host the DACC, and we are so pleased you are here.

Warm wishes,

Chandramallika Basak
Kristen Kennedy
Denise Park
Karen Rodrigue
Michael Rugg
Kendra Seaman
Gagan Wig

Day 1	Saturday, February 25
2:00 – 2:10 p.m.	**Welcome Remarks**
2:15 – 4:30 p.m.	**SESSION 1:** Predictors and Determinants of Cognitive Decline
2:15 – 2:45 p.m.	**How brain function and structure relate to cognitive decline in the predementia stages of Alzheimer's disease** Emrah Düzel, *Otto-von-Guericke University Magdeburg*
2:50 – 3:05 p.m.	**Associations of APOE4 and Alzheimer's disease biomarkers with cortical reinstatement and episodic memory in clinically unimpaired older adults** Anthony D. Wagner, *Stanford University*
3:05 – 3:25 p.m.	Break
3:30 – 3:45 p.m.	**AD genetic risk and cognitive reserve in relationship to long-term cognitive trajectories among cognitively normal individuals** Corrinne Pettigrew, *Johns Hopkins School of Medicine*
3:50 – 4:05 p.m.	**Association of lifestyle activities with functional brain connectivity and relationship to cognitive decline among older adults** Anja Soldan, *Johns Hopkins School of Medicine*
4:10 – 4:25 p.m.	**Modeling cognitive resilience to Alzheimer's disease pathology using longitudinal cognitive trajectories** Rory Thomas Boyle, *Massachusetts General Hospital, Harvard University*
4:30 – 6:00 p.m.	**POSTER SESSION 1** *(see pages 7-9 for details)*
6:00 – 9:00 p.m.	**Welcome BBQ at Klyde Warren Park**

Day 2	Sunday, February 26

8:00 – 9:00 a.m.	Breakfast
9:00 – 11:10 a.m.	**SESSION 2:** Cognitive Development and its Implications for Cognitive Aging
9:00 – 9:30 a.m.	**Memory across the lifespan: developmental cognitive neuroscience approach** Noa Ofen, *Wayne State University*
9:35 – 9:50 a.m.	**Factors influencing executive function maturation in adolescence** Jessica Church-Lang, *The University of Texas at Austin*
9:55 – 10:10 a.m.	Break
10:15 – 10:30 a.m.	**The effect of biological sex and menopause on episodic memory-related brain function across the adult lifespan** Natasha Rajah, *McGill University*
10:35 – 10:50 a.m.	**Cross-species homologies in brain network decline across aging mice and humans** Gagan S. Wig, *The University of Texas at Dallas*
10:55 – 11:10 a.m.	**Iron concentration obscures age group differences in associative learning-related neural activity** Ilana J. Bennett, *The University of California, Riverside*
11:15 a.m. – 12:45 p.m.	Lunch
12:45 – 1:00 p.m.	**National Institute on Aging update** Dr. Jonathan King and Dr. Melissa Trevino, *Division of Behavioral and Social Research, National Institute on Aging*

1 – 3:10 p.m.	**SESSION 3:** Decision-Making Across the Adult Lifespan
1 – 1:30 p.m.	**Motivation and decision making in the aging brain** Gregory Russell Samanez-Larkin, *Duke University*
1:35 – 1:50 p.m.	**Suboptimal decision-making across different types of dementia: dissociable effects of memory and valuation impairments** Zhihao Zhang, *University of Virginia*
1:55 – 2:10 p.m.	Break
2:15 – 2:30 p.m.	**Phishing in the lab and in the wild: older age, APOE4 and cognitive status predict particular susceptibility to online scams** Didem Pehlivanoglu, *University of Florida*
2:35 – 2:50 p.m.	**Quantifying the (dis)connection between cross-sectional and longitudinal brain development** Douglas Garrett, *Max Planck Institute for Human Development*
2:55 – 3:10 p.m.	**Meta-analysis of executive function training: fMRI evidence for differential changes in attentional networks and dorsal striatum** Chandramallika Basak, *The University of Texas at Dallas*
3:15 -3:25 p.m.	Break
3:30 – 4:25 p.m.	**KEYNOTE ADDRESS**
	Set to Change? Lifespan Factors Influencing Brain and Cognition Kristine Beate Walhovd, *University of Oslo*

4:30 – 6 p.m.
POSTER SESSION 2
(see pages 9-11 for details)

8:00 – 9:00 a.m.	Breakfast
9:00 – 10:30 a.m.	**POSTER SESSION 3** *(see pages 11-13 for details)*
10:30 – 10:35 a.m.	Break
10:40 a.m. – 12:50 p.m.	**SESSION 4: Social and Affective Cognition Across the Adult Lifespan**
10:40 – 11:10 a.m.	**Emotional memory narratives and networks: How older adults focus on the bright side of past challenges** Elizabeth Kensinger, *Boston College*
11:15 – 11:30 a.m.	**Real-time fMRI based neurofeedback training of selective attention in older adults** Natalie C. Ebner, *University of Florida*
11:35 – 11:50 a.m.	Break
11:55 a.m. – 12:10 p.m.	**Is brain network modularity a biomarker of cognitive plasticity in older adults?** Michelle W. Voss, *University of Iowa*
12:15 – 12:30 p.m.	**Age differences in trust-related decision-making and learning** Marilyn Horta, *University of Florida*
12:35 – 12: 50 p.m.	**Characterizing mechanisms for more positive facial trustworthiness evaluations in later adulthood** Brittany S. Cassidy, *University of North Carolina at Greensboro*
12:55 – 1:00 p.m.	**Closing Remarks**

Poster Session 1

A-1: Disruption of the Default Mode Network Mediates the Association Between Central Arterial Stiffness and Cognitive Function in MCI Patients
Verma, A.[1], Won, J.[2], Zhang, R.[2], [1]*The University of Texas at Dallas,* [2]*Texas Health Presbyterian Hospital Dallas*

A-2: Neural correlates of age-related strategy shifts in navigation behavior
Perez, E., Kunath, J., Barnas, A.J., Boogart, Z., Ebner, N.C., Weisberg, S.M., *University of Florida*

A-3: Age Differences in Mental Health Symptoms During the COVID-19 Pandemic
Fayyaz, A.[1], Rahi, S.[1], Wong, G.[1], Walker, G.[2], Leverett, S.[3], Samanez-Larkin, G.[4], Samanez-Larkin, S.[4], Seaman, K.[1], [1]*The University of Texas at Dallas,* [2]*The University of Texas at El Paso,* [3]*Washington University in St. Louis,* [4]*Duke University*

A-4: Testing the List Composition Effect on the Emotional Enhancement of Memory in Younger and Older Adults
Garcia, S., Ritchey, M., Kensinger, E., *Boston College*

A-5: Age- and Sex-Related Differences in Cognitive Map Recall Following a Spatial Navigation Task
Chargo, A.N.[1], Dahle, C.L.[1], Raz, N.[2,3], Daugherty, A.M.[1], [1]*Wayne State University,* [2]*Stony Brook University,* [3]*Max Planck Institute of Human Development*

A-6: Cognitive and structural predictors of novel task learning, and contextual predictors of daily task performance during the learning period
Smith, E.T., Skolasinska, P., Qin, S., Sun, A., Fishwick, P., Park, D.C., Basak, C., *The University of Texas at Dallas*

A-7: Caudate Iron Concentration Predicts 1-year Cognitive Decline in Aging and Dementia of the Alzheimer's Type
Lee, C.[1], Giordani, B.[2,3], Hampstead, B.[3], Daugherty, A.M.[1, 3], [1]*Wayne State University,* [2]*University of Michigan,* [3]*Michigan Alzheimer's Disease Research Center*

A-8: White and gray matter structural brain properties demonstrate regionally differential coupling in aging corresponding with underlying biology
Hoagey, D., Pongpipat, E., Rodrigue, K., Kennedy, K., *The University of Texas at Dallas*

A-9: OXTR Methylation and Emotional Face Processing in Older Adults
Shoenfelt, A.[1], Pehlivanoglu, D.[1], Lin T.[1], Krol, K.[2], Perkeybile, A.[2], Connelly, J.[2], Ebner, N.C.[1], [1]*University of Florida,* [2]*University of Virginia*

A-10: Older adult mPFC-to-MTL RSFC correlates with emotional memory accuracy and vividness
Daley, R.[1], Ford, J.[2], Kensinger, E.[2], [1]*Gordon College,* [2]*Boston College*

A-11: Dissociating Proactive and Reactive Control in Older Adults
Ball, H.[1], Peper, P.[1], Bugg, J.[2], [1]*The University of Texas at Arlington,* [2]*Washington University in Saint Louis*

A-12: Analyzing Direct Effects of Various Demographic Factors Between Cognitively Normal Hispanics and Non-Hispanic Whites on Boston Naming Test Performance
Devora, P.V.[1], Motes, M.M.[1], Hilsabeck, R.C.[2], Gonzales, M.M.[3], DeToledo, J.[4], Maestre, G.[5], Hart, J.[1,6], [1]*The University of Texas at Dallas,* [2]*The University of Texas at Austin,* [3]*The University of Texas Health Science Center San Antonio,* [4]*Texas Tech University Health Science Center,* [5]*The University of Texas Rio Grande Valley,* [6]*The University of Texas Southwestern Medical Center*

A-13: Neural Correlates Underlying Cultural Differences in Memory Specificity in Older Adults
Cho, I.[1], Leger, K.[1], Valoumas, I.[1], Goh, J.O.S.[2], Gutchess, A.[1], [1]*Brandeis University,* [2]*National Taiwan University*

A-14: Graph theoretical analysis demonstrates the impact of cortical network segregation on reward-based learning in older age
Chen, H.-Y.[1], Hsu, M.[2], Jagust, W.J.[2], Berry, A.S.[1], [1]*Brandeis University,* [2]*University of California, Berkeley*

A-15: Microstructural properties of brain networks underlie age-related differences in fluid cognition
Merenstein, J., Zhao, J., Madden, D., *Duke University Medical Center*

A-16: What prevents low-income Latinx older adults from staying cognitively engaged via novel skill learning?
Rodriguez, T. M., Wu, R., *University of California, Riverside*

A-17: Older adults' increased sensory recruitment during protracted memory trials: Age differences in when — not whether — sensory regions are recruited
Ford, J.[1], Williams, S.[1], Kennedy, K.[2], Kensinger, E.[1], [1]*Boston College,* [2]*The University of Texas at Dallas*

A-18: Recollection effects in entorhinal cortex predict longitudinal memory change in a sample of cognitively healthy older adults
Kidwai, A., Hou, M., de Chastelaine, M., Rugg, M., *The University of Texas at Dallas*

A-19: Transient and sustained fMRI recollection effects are age-invariant
Hou, M., de Chastelaine, M., Rugg, M., *The University of Texas at Dallas*

A-20: Recollection effects in entorhinal cortex predict longitudinal memory change in a sample of cognitively healthy older adults
de Chastelaine, M.[1], Srokova, S.[1], Hou, M.[1], Kidwai, A.[1], Kafafi, S.[2], Racenstein, M.[1], Rugg, M.[1], [1]*The University of Texas at Dallas,* [2]*University of Notre Dame*

A-21: Age and retrieval-related scene reinstatement: moderating effects of cortical thickness
Olivier, J., Srokova, S., Rugg, M., *The University of Texas at Dallas*

A-22: Age-related Differences in Hippocampal Subfield Volumes Across the Lifespan: A Meta-analysis
Homayouni, R., Canada, K., Saifullah, S., Foster, D., Thill, C., Daugherty, A., Ofen, N., *Wayne State University*

A-23: Effect of vascular burden and menopause status on episodic memory
Kearley, J., Rajah, M. N., *McGill University*

A-24: Using sparse partial least square correspondence analysis (sPLS-CA) to examine genetics associations to the brain and cognitive decline in Alzheimer's Disease
Yu, J.[1,2], Guillemot, V.[3,4], Beaton, D.[5], Abdi, H.[6] [1]*Campbell Family Mental Health Institute,* [2]*Centre for Addiction and Mental Health,* [3]*Bioinformatics and Biostatistics Hub,* [4]*Université Paris Cité,* [5]*St. Michael's Hospital, Unity Health,* [6]*The University of Texas at Dallas*

A-25: Future technology for future me: Lack of continuity to the future self is associated with reduced acceptance of camera-based AAL technologies among older adults
Tham, N.A.Q., Brady, A-M., Dinsmore, J. *Trinity College Dublin, Ireland*

A-26: The Effect of Time Pressure on Skewed Gambling Preference across Adulthood
Garza, C., Reddy, S., Naraharasetti, S., Nguyen, N., Robinson, H. Seaman, K., *The University of Texas at Dallas*

A-27: Independent effects of Alzheimer's disease dementia severity and aging on functional brain network organization at rest
Zhang, Z., Chan[1], M., Han, L.[1], Carreno, C.[1], Winter-Nelson, E.[1], Wig, G.S.[1,2], [1]*The University of Texas at Dallas,* [2]*The University of Texas Southwestern Medical Center*

A-28: Carotid Arterial Stiffness and Cerebral Blood Flow Pulsatility Index Mediate the Association between Age and White Matter Free Water
Shan, K.[1,2], Won, J.[1,2], Tarumi, T.[3], Zhang, R.[1,2] [1]*The University of Texas Southwestern Medical Center,* [2]*Texas Health Presbyterian Hospital,* [3]*National Institute of Advanced Industrial Science and Technology, Japan*

A-29: Brain Morphometry in Older Adults Using Extremely Rapid Structural Scans
Elliott, M.[1], Hanford, L.[1], Hamadeh, A.[2], Hilbert, T.[3], Kober, T.[3], Dickerson, B.[1,4], Mair, R.[1], Eldaief, M.[4], Buckner, R.[1], [1]*Harvard University,* [2]*Baylor College of Medicine,* [3]*Siemens Healthcare,* [4]*Massachussetts General Hospital*

A-30: Does the cost of cognitive effort differ among younger and older adults? A multimethod approach
Crawford, J., Brough, R.E., Eisenstein, S.A., English, T., Peelle, J.E., Braver, T.S., *Washington University in St. Louis*

A-31: Affective responses to daily physical activity in younger and older adults
Stojanovic, M., Braver, T., Head, D., *Washington University in St. Louis*

A-32: Processing the COVID-19 Pandemic: How Negative Affect Influenced the Centrality of the Event Across the Adult Lifespan
Pham, J.Q., Bowen, H.J., *Southern Methodist University*

A-33: Sex Steroid Hormones and Subcortical Brain Volumes in Aging Females and Males
Magalhães, T. N. C., T. Jackson, T. B., Ballard, H. K., Hicks, T. H., Cox, S. J., Herrejon, I., Denny, G., Bernard, J. A., *Texas A&M University*

A-34: Long-Term Cognitive Gains From Learning Three New Skills Simultaneously in Older Adults
Ferguson, L.[1], Sain, D.[1], Kürüm, E.[1], Rebok, G.[2], Wu, R.[1], [1]*University of California, Riverside,* [2]*Johns Hopkins University*

A-35: The Effects of Age and Income on Discounting of Delayed Rewards
Wan, H., Green, L., Myerson, J., Strube, M., Hale, S., *Washington University in St. Louis*

A-36: Brain-Wide and AD-Risk Genetic Expression: A Descriptive Study
Hobbs, D., McCullough, A., Millar, P., Gordon, B. *Washington University in St. Louis*

Poster Session 2

B-1: Investigating age-related impairments in associative binding
Pauley, C.[1], Karlsson, A.[2], Sander, M.[1] [1]*Max Planck Institute for Human Development,* [2]*Humboldt University of Berlin*

B-2: Changes in brain functional network organization in mild cognitive impairment during a cognitive task
Požar, R.[1,2,3], Kero, K.[4], Martin, T.[5], Giordani, B.[6,7], Kavcic, V.[4,8], [1]*University of Primorska,* [2]*Andrej Marusic Institute,* [3]*University of Ljubljana,* [4]*Wayne State University,* [5]*Kennesaw State University,* [6]*University of Michigan,* [7]*Michigan Alzheimer's Research Center,* [8]*International Institute of Applied Gerontology*

B-3: Sex Hormones as Predictors of Cognitive Performance in Aging
Hicks, T.H.[1], Magalhães, T.N.C.[1], Ballard, H.K.[2], Denny, G.[1], Jackson, T.B.[1], Cox, S.[1], Herrejon, I.[1], Bernard, J.A.[1], [1]*Texas A&M University,* [2]*Rice University*

B-4: Longitudinal Executive Function Skills in Youth: Relations to Age, Puberty, and ADHD
Porter, B.M.[1], Roe, M.A.[1], Mitchell, M.E.[2], Church, J.A.[1], [1]*The University of Texas at Austin,* [2]*University of North Carolina at Chapel Hill*

B-5: Aging-related Differences in BOLD Modulation and its Relation to Cognitive Control: A Longitudinal fMRI study
Lung, T.-C., Pongpipat, E., Rodrigue, K., Kennedy, K., *The University of Texas at Dallas*

B-6: Decision-making and learning under uncertainty across adulthood
Korem, N.[1], Duek, R.[2], Metviner, S.[1], Grubb, M.[3], Levy, I.[1], [1]*Yale University School of Medicine,* [2]*Ben Gurion University of the Negev,* [3]*Trinity College Dublin, Ireland*

B-7: Functional Cerebellar-Basal Ganglia Networks and their Role in Cognitive and Motor Processes Across the Adult Lifespan
Herrejon, I., Denny, G., Cox, S., Magalhaes, T., Bernard, J., *Texas A&M University*

B-8: Four-year age-related cortical thinning is modified synergistically by inflammation, beta-amyloid, and hypertension
Edwards, V., Pongpipat, E., Miranda, G., Kennedy, K., Rodrigue, K., *The University of Texas at Dallas*

B-9: Age Differences in Perceptual Generalization of Trust Learning
Lilly, L.[1], Cassidy, B.[2], Cooper, J.[3], Seaman, K.[1], [1]*The University of Texas at Dallas,* [2]*University of North Carolina at Greensboro,* [3]*Emory University*

B-10: Brain-Wide and AD-Risk Genetic Expression: A Descriptive Study
Hobbs, D., McCullough, A., Millar, P., Gordon, B., *Washington University in St. Louis*

B-11: Striatal, not just hippocampal, volume relates to associative memory in younger and older adults
Page, A., Alcaraz-Torres, A., Sun, A., Bennett, I., *University of California, Riverside*

B-12: Distinguishing recollection precision from success in healthy older adults and mild cognitive impairment: A pilot study
Sanchez, D., Garren, J., Ekstrom, A.D., Hill, P.F., *University of Arizona*

B-13: Age differences in spatial memory are mitigated during naturalistic navigation
Bermudez, S.[1], Hill, P.F.[1], McAvan, A.S.[2], Garren, J.D.[1], Ekstrom, A.D.[1], [1]*University of Arizona,* [2]*Vanderbilt University*

B-14: Cardiovascular Reactivity Among Older Adults Reflects Greater Metabolic Burden of Key Hub Regions
Pipoly, M.[1], Jain, S.[1], DuBose, L.E.[1,2], Pierce, G.L.[1], Voss, M.G.[1], [1]University of Iowa, [2]University of Colorado, Denver

B-15: Associations among geospatial environmental complexity, regional brain morphometry and spatial cognition across the Alzheimer's disease spectrum
Shin, N., Rodrigue, K., Yuan, M., Kennedy, K. The University of Texas at Dallas

B-16: Examining the effects of age on neural differentiation at the level of individual stimulus items
Aktas, A.[1], Srokova, S.[1], Koen, J.[2], Rugg, M.[1] [1]The University of Texas at Dallas, [2]University of Notre Dame

B-17: Fluid biomarkers of neuroinflammation relate to hippocampal volume in mild cognitive impairment
Zavradyan, G., Bennett, I.J., University of California, Riverside

B-18: Age effects across NODDI metrics suggest differential aging of subcortical gray matter microstructure
Greenman, D., Bennett, I., University of California, Riverside

B-19: Changes in Hippocampal Volumes Are Associated with Age and Episodic Memory Performance: A Longitudinal Analysis
Brackins, T., Rajaram, S., Richmond, L. Stony Brook University

B-20: Childhood Disadvantage Moderates Late Midlife Default Mode Network Cortical Microstructure and Visual Memory Association
Tang, R., Elman, J., Franz, C., Kremen, W. University of California San Diego

B-21: Global Functional Connectivity of the Cognitive Control Network to understand age-related decline in mixing costs
Madero, B., Sodoma, M., Oehler, C., Hazeltine, E., Voss, M., University of Iowa

B-22: Dopaminergic Genetic Influence on Longitudinal Change in Cortical Thickness and Age-Associated Executive Function Performance
Miranda, G. G., Pongpipat, E.E., Gonen, C., Rodrigue, K.M., Kennedy, K.M., The University of Texas at Dallas

B-23: The effects of age on neural differentiation are moderated by global cortical thickness
Srokova S., Aktas, A., Rugg. M., The University of Texas at Dallas

B-24: The Role of Inflammation on Aging-Induced Cerebral Microbleeds and Associated Cognitive Impairments
Zotter, S.[1,2], Xie, S-L.[2], Kendall, K.[1], Stone, H.[1], Pineda, M.[1], Kajuluri, L.[2], Seabra, P.[2], Kantak, K.[2], Zikopoulos, B.[2], Seta, F.[2], Cornwell, E.[1,2], Morgan, K.[2], [1]Gordon College, [2]Boston University

B-25: Hippocampal blood flow differs with preclinical Alzheimer's Disease stage in females but not males
Sanchez, D., Bennett, I., University of California, Riverside

B-26: Belief in the efficacy of mnemonic strategies is linked to memory across development
Canada, K.L., Homayouni, R., Kroening, S., Ofen, N., Wayne State University

B-27: Revisiting the Effects of Age on Affective Working Memory in an Online Lifespan Sample
Sarver, K.A.[1], Frank, C.C.[2], Mann Bryant, J.L.[3], Iordan, A.D.[1], Reuter-Lorenz, P.A.[1], [1]University of Michigan, [2]The University of Texas at Dallas Mann Bryant, [3]Columbia University Irving Medical Center

B-28: The Role of Memory for Positive Information in Skewed Decision Making Across the Lifespan
Frank C. C.[1], Shrestha, N.[1], Hagi, L.[1], Vijayaraghavan, G.[1], Blake, I.[2], Chinn, M.[3], Nygaard, K.[1], Pillai, S.[1], Seaman, K.L.[1], [1]The University of Texas at Dallas, [2]William James College, [3]Texas Women's University

B-29: Adherence to Cognitive Training Session Frequency Influences Learning Rates in Healthy Older Adults
Andreo, M., Sierra, F., Smith, E., Skolasinska, P., Basak, C., The University of Texas at Dallas

B-30: Predictors of Learning Rates in Older Adults
Sierra, F., Andreo, M., Skolasinska, P., Smith, E., Sherard, H., Basak, C., The University of Texas at Dallas

B-31: Neural activity underlying negative emotional encoding reflects habitual emotion regulation, particularly in older age
Seraji, M., Duarte, A., The University of Texas at Austin

B-32: Evaluation of classification approaches for distinguishing brain states predictive of episodic memory performance from electroencephalography
Mirjalili, S., Duarte, A., The University of Texas at Austin

B-33: GABA Declines Longitudinally with Age
Zuppichini, M.D.[1], Hamlin, A.M.[2], Zhou, V.[1], Kim, E.[1], Polk, T.[1], [1]University of Michigan, [2]The University of Texas at Austin

B-34: The Effects of Age and Financial Fraud Victimization on Affective Well-Being During the Second Year of the COVID-19 Pandemic
Nolte, J.[1], Hanoch, Y.[2], Wood, S.[3], Hengerer, D.[4], Liu, M.[5], [1]Cornell University, [2]University of Southampton Business School, [3]Scripps College, [4]Claremont Graduate University, [5]Purdue University School of Nursing

B-35: Increased Neural Differentiation and Executive Function after a Single Session of Aerobic Exercise in Older Adults
Purcell, J.[1], Won, J.[1], Callow, D.[1], Wiley, R.[2], Weiss, L.[1], Alfini, A.[3], Carson Smith, J.[1] [1]University of Maryland, [2]University of North Carolina at Greensboro, [3]Johns Hopkins University School of Medicine

B-36: Individual-specific change in Alzheimer's disease vulnerable brain regions across healthy adult life is associated with genetic risk for AD
Roe, J.M., Vidal-Piñeiro, D., Leonardsen, E.H., Sørensen, Ø., Grydeland, H., Pan, M., Walhovd, K.B., Fjell, A. M., Wang, Y., University of Oslo

Poster Session 3

C-1: Double Jeopardy: Age and depression interactions on cognition and brain volume
Niu, Z., Haley, A., Clark, A., Duarte, A., The University of Texas in Austin

C-2: Cross-species homologies in patterns of large-scale functional brain network decline across aging mice and humans
Winter-Nelson, E.[1], Bergmann, E.[2], Chan, M.Y.[1], Han, L.[1], Klausner, S.[1], Kavushansky, A.[2], Asleh, J.[2], Li, Y.[3], Murdy, T.[3], Zhang, S.[3], Harris, J.A.[4], Febo, M.[5], Kaczorowski, C.[3], Kahn, I.[6], Wig, G.S.[1,7], [1]The University of Texas at Dallas, [2]Technion - Isreal Institute of Technology, [3]The Jackson Laboratory, [4]Allen Institute for Brain Science, [5]University of Florida, [6]Columbia University, [7]The University of Texas Southwestern Medical Center

C-3: Dementia risk factors predict individual differences in cognitive function
Hennessee, J., Katen, C., Monier, S., Park, D., The University of Texas at Dallas

C-4: Age-related differences in arousal-enhanced memory effects modulated by emotion regulation
Lee, K., Duarte, A., The University of Texas at Austin

C-5: Working memory training in mild cognitive impairment: A multimodal imaging investigation
Xie, K., Babu, H.J., Hampstead, B.M., Reuter-Lorenz, P.A., Iordan, A.D., University of Michigan

C-6: Influence of Incentive Type on Skewed Decision Making
Pillai, S., Wong, G., Fayyaz, A., Rahi, S., Gonzalez, S., Seaman, K., The University of Texas at Dallas

C-7: Relations between conscientiousness, cortical thickness, and cognition across the lifespan in the Dallas Lifespan Brain Study
Monier, S., Smith, E., Hennessee, J., Park, D., The University of Texas at Dallas

C-8: Stroop performance in cognitively normal adults predicts future dementia
Clemens, S., McKay, N., Zacks, J., Balota, D., Gordon, B., Washington University in St. Louis

C-9: Chronic intranasal oxytocin dissociates the experience of pain and stress in older adults
Wright, K.[1], Lin, T.[1], Feifel, D.[2], Cruz-Almeida,Y.[1], Ebner, N.C.[1], [1]University of Florida, [2]University of California, San Diego

C-10: Baseline Subjective Memory Complaints Predict Four-Year Cortical Thinning
Horn, M., Kennedy, K., Miranda, G., Pongpipat, E., Rodrigue, K., The University of Texas at Dallas

C-11: Aging and individual differences in cognitive performance: Role of white matter lesions and cardiorespiratory fitness
Jain, S., Baller, K., Springer, J., Madero, B., Sodoma, M., Oehler, C., Daniels, W., Armstrong, M., Gimblet, C., Nuckols, V., Muellerleile, M., Nagarajan, N., Bjarnason, T., Harb, N., Pierce, G., Voss, M., *University of Iowa*

C-12: Episodic memory in older adults is improved with aerobic exercise and supported by subiculum and entorhinal cortex volume
Polk, S. E.[1], Fandakova, Y.[1], Berron, D.[2,3], Köhncke, Y.[1], Kleemeyer, M.M.[1], Düzel, S.[1,4], Brandmair, A.M.[1,5], Kühn, S.[1], Lindenberger, U.[1], Wenger, E.[1], *[1]Max Planck Institute for Human Development, [2]Otto-von-Guericke University Magdeburg, [3]German Center for Neurodegenerative Diseases, [4]Charité – Universitätsmedizin Berlin, [5]MSB Medical School Berlin*

C-13: To Med or Not to Med? - is machine learning the answer to predict hypertension medication intake in aging?
Hallal, S.[1], Qin, S.[2], Basak, C.[1], *[1]The University of Texas at Dallas, [2]National University of Singapore*

C-14: The Midlife Brain and Environment Study: A longitudinal brain imaging study investigating the health, environment, and lifestyle factors that moderate brain and cognitive aging
Klausner, S.[1], Seale, M.[1], Sullins, C.[1], Rayanki, A.[1], Nguyen, L.[1], Winter-Nelson, E.[1], Zhang, Z.[1], Chan, M.[1], Carreno, C.[1], Munson, M.[1], Lakhanpal, S.[2], Jaiswal, S.[2], Reingle-Gonzalez, J.[3], Park, D.[1], Wig, G.S.[1,2], *[1]The University of Texas at Dallas, [2]The University of Texas Southwestern Medical Center, [3]Meadows Mental Health Policy Institute*

C-15: Age-differences in neurovascular coupling underlie working memory demand-dependent BOLD effects
Zhao, Y.[1], Abdelkarim, D.[2], Tuner, M.[1], Liu, P.[3], Hazel, K.[3], Thomas, B.[4], Spence, J.[1], Lu, H.[3], Rypma, B.[1], *[1]The University of Texas at Dallas, [2]University of Illinois Urbana-Champaign, [3]Johns Hopkins University, [4]The University of Texas Southwestern Medical Center*

C-16: Investigating the neurophysiological mechanisms of memory recognition in the developing brain
Vahidi, P.[1], Johnson, E.[2], Yin, Q.[1], Asano, E.[3], Ofen, N.[1], *[1]Wayne State University, [2]Northwestern University Feinberg School of Medicine, [3]Children's Hospital of Michigan*

C-17: Age-related differences in EEG Oscillatory Subsequent Memory Effects
Kafafi, S., Foley, M., Pichot, R.E., Henreckson, D., Koen, J.D., *University of Notre Dame*

C-18: Changes in the Neural Dynamics Underlying Verbal Working Memory Performance with Healthy Aging
Guo, L., Virlley, M., White, M., Rossetti, H., Cullum, M., Maldjian, J., Berry, J., Davenport, E., Proskovec, A., *The University of Texas Southwestern Medical Center*

C-19: Menopause influences the white matter correlates of spatial context memory at midlife
Lissaman, R.[1,2], Rajagopal, S.[1], Aziz, H.[1], Khayyat, L.[1], Young, R.[1], Crestol, A.[1], Pasvanis, S.[1], Rajah, N.[1,2], *[1]Douglas Research Centre, [2]McGill University*

C-20: An Examination of Associative Memory using Functional Near Infrared Spectroscopy
Moss, C.[1], Di Rita, V.[1], Schumer, M.[1], Crowley, S.[1,2], Iordan, A.[1], Reuter-Lorenz, P.[1], Hampstead, B.[1,2], *[1]University of Michigan, [2]Mental Health Service, Veteran Affairs Ann Arbor Healthcare System*

C-21: Chronic intranasal oxytocin modulates salience and default mode network with behavioral benefits in older adults
Liu, P., Lin, T., Ebner, N.C., *University of Florida*

C-22: Comparing the Cognitive and Neurovascular Effects of Cognitive Training and Combined Cognitive and Mindfulness Meditation Training
Skolasinska, P., Evans, J., Smith, E., Basak, C., *The University of Texas at Dallas*

C-23: Spatial navigation detriments in older adults: A role for visual attention?
Barnas, A., **Ebner, E., Weisberg, S.,** *University of Florida*

C-24: Functional lateralization in Alzheimer's disease (AD): TheVirtualBrain (TVB) Computational Approach
Wang, Y.[1], Arbabyazd, L.[2], McIntosh, A.R.[3], Ritter, P.[4], Jirsa, V.[2], Solodkin, A.[1], *[1]The University of Texas Dallas, [2]Institut de Neurosciences des Systèmes, [3]Simon Fraser University, [4]Charité – Universitätsmedizin*

C-25: Effects of Computerized Cognitive Training on Task-Switching Performance and Associated Brain Regions
Sherard, G.[1], Skolasinska, P.[1], Qin, S.[1], Ray, N.[1], Lee, H.[2], Voss, M.[2], Basak, C.[1], *[1]The University of Texas at Dallas, [2]University of Iowa*

C-26: Enhancing Allocentric Representations and Temporal Sequencing Mitigates Age-Related Impairment in Route Reversal
Maybrier, H., Stojanovic, M., Levine, T.F., Head, D., *Washington University in St. Louis*

C-27: Hemodynamic response variability and its relationship to behavior in younger and older adults
Taylor, M.B., Turner, M.P., West, K., Abdelkarim, D.H., Zhao, Y., Spence, J., Rypma, B., *The University of Texas at Dallas*

C-28: Task-Based Functional Connectivity and Network Segregation of the Useful Field of View (UFOV) fMRI task
Kraft, J.N.[1], Hausman, H.K.[1], Hardcastle, C.[1], Albizu, A.[1], O'Shea, A.[1], Evangelista, N.D.[1], Boutzoukas, E.M.[1], Van Etten, E.J.[1], Bharadwaj, P.K.[1], Smith, S.G.[2], DeKosky, S.[1], Porges, E.[1], Hishaw, G.A.[3], Wu, S.[1], Alexander, G.[1,3], Marsiske, M.[1], Cohen, R.[1], & Woods, A.J.[1], *[1]University of Florida, [2]University of Arizona, [3]Arizona Alzheimer's Consortium*

C-29: Biomarkers predict decline in subjective memory, attention, and spatial navigation ability in preclinical Alzheimer disease
Levine, T.F.[1], Dessenberger, S.[1], Allison, S.L.[2], Head, D.[1,3], *[1]Washington University, St. Louis, [2]Neurosciences Institute at Intermountain Medical Center, [3]Charles F. and Joanna Knight Alzheimer Disease Research Center*

C-30: GABA Locus coeruleus structure and catecholamine synthesis capacity interact to predict cognitive function
Chen, H-Y.[1], Parent, J.H.[1], Ciampa, C.J.[1], Dahl, M.J.[2,3], Hämmerer, D.[4], Maass, A.[5], Winer, J.R.[6], Inglis, B.[6], Jagust, W.J.[6,7], Betts, M.J.[5,8,9], Berry, A.S.[1,7], *[1]Brandeis University, [2]Max Planck Institute for Human Development, [3]University of Southern California, [4]Psychological Institute, University of Innsbruck, [5]Deutsches Zentrum für Neurodegenerative Erkrankungen, [6]University of California, Berkeley, [7]Lawrence Berkeley National Laboratory, Berkeley, [8]Institute of Cognitive Neurology and Dementia Research, Otto von Guericke University,[9]University of Magdeburg*

C-31: A neural mechanism of cognitive reserve: The case of bilingualism
Stevens, W.D.[1], Khan, N.[1], Anderson, J.A.E.[2], Grady, C.I.[3,4], Bialystok, E.[1,3], *[1]York University, [2]Carleton University, [3]Rotman Research Institute at Baycrest Hospital, [4]University of Toronto*

C-32: Midfrontal low-frequency oscillations reflect interference costs in young adults but not in middle-aged or older adults
Cole, R.C., Espinosa, A.I., Yeager, B.E., Narayanan, N.I, *University of Iowa*

C-33: The Moderating Effect of Large Neutral Amino Acids on Neuropsychological Performance in Middle-Aged Adults at Cardiovascular Risk
Youn, C.[1], Strasser, B.[2], Fuchs, D.[3], Tanaka, H.[1], Haley, A.P.[1], *[1]The University of Texas at Austin, [2]Sigmund Freud University, Vienna, [3]Medical University of Innsbruck*

C-34:Do Indices of Working Memory Updating from Behavioral and Neural Data Differ between Healthy Older Adults with vs. without Biomarkers of Alzheimer's Disease?
Chang, M-C., Koen, J., Xie, Z., Henrickson, D., Xu, C., Rose, N., *University of Notre Dame*

C-35: Do changes in grey matter volume predict cognition? Testing predictions of the STAC model using parallel growth curve modeling
Smith, E.T.[1], Hennessee, J.P.[1], Wig, G[1,2], Frank, S.[1], Gonzalez, H.[2], Bacci, J.[1], Chan, M.[1], Carreno, C.A.[1], Hertzog, C.[3], Park, D.C.[1], *[1]The University of Texas at Dallas, [2]The University of Texas Southwestern Medical Center, [3]Georgia Institute of Technology*

C-36: Age-related reduction in neural activation and neural specificity in visual encoding
Chen, X.[1,2], Varghaese, L.[1], Jagust, J.W.[1,2], *[1]University of California, Berkeley, [2]Lawrence Berkeley National Laboratory*

Asche Award

Sallie P. Asche was one of CVL's very first supporters. She was a founding member of the Center's Advisory Council and a close friend of both Mary Susan Barnhill, who played a role in the development of CVL, and Denise Park, CVL's founding director.

Sallie cared immensely about making the world a better place, supporting the sciences, and understanding how scientists, through research, could learn to cure disease. Sallie will forever be a part of the advances CVL scientists are making. In her honor, the Sallie P. Asche Travel Award is given to a limited number of graduate students and postdoctoral scholars to cover registration and provide an additional $500 to be used for air, taxi, and hotel, at the awardee's discretion. This year, award funds were supplemented by the Pomberg and Hammer Family Opportunity Fund.

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