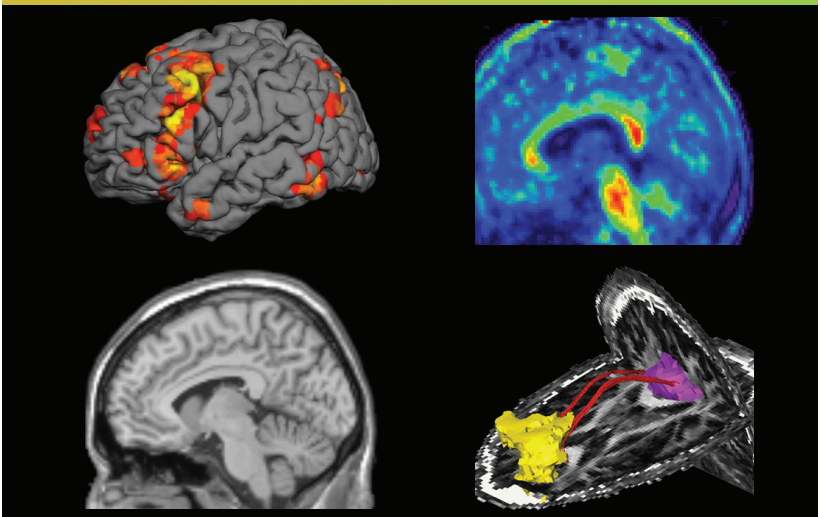
DALLAS-ACC PROGRAM

JANUARY 26-28, 2013

FOUR SEASONS RESORT AND CLUB DALLAS AT LAS COLINAS, TEXAS

SPONSORED BY

THE CENTER FOR VITAL LONGEVITY
THE UNIVERSITY OF TEXAS AT DALLAS



Welcome to the Dallas ACC!

We are delighted to welcome you to the third biennial Dallas Aging and Cognition Conference. The field of the cognitive neuroscience of aging is fast-moving with rapid advances, and we organized this biennial conference to provide a forum for top researchers to exchange their latest findings on a focal topic. We are so pleased to have such a wonderful program and greatly appreciate the contributions of each speaker. This year's meeting has been organized around the broad theme of the subtle but measurable neural degradation that is a part of healthy aging, and the role this degradation plays in cognitive decline and disease. The conference is sponsored by the Center for Vital Longevity at the University of Texas at Dallas with strong support from the Provost's Office. Although the Center is the sponsor of the conference, we thank our many colleagues at the University of Texas Southwestern Medical School who share our research goals and enrich our Center through many wonderful collaborations. We also thank Linda DuBose, April Norambuena, Laura Valdespino and Darla Wade of the Center for Vital Longevity, who have done an outstanding job planning and executing this conference. We also thank the graduate students and postdocs at the Center for their willing, cheerful and very competent assistance.

Our gratitude also is extended to Sandra Thomas, Advisory Council Chair, and our Advisory Council members for their on-going support. Finally, on behalf of all the researchers at the conference, we thank the National Institute on Aging and the Alzheimer's Association for the support of nearly all of the research that will be presented over the next two days. Understanding and slowing the process of cognitive aging is one of the premier scientific challenges facing our society. This conference will, we hope, play a role in moving us toward that goal quickly and with more creativity and innovation than would have occurred otherwise.

Sincerely,
Denise Park and Kristen Kennedy
Conference Organizers

CENTER FOR
VITAL LONGEVITY

THE SCIENCE OF THE AGING MIND

CONFERENCE INFORMATION

CONFERENCE WEBSITE:
http://vitallongevity.utdallas.edu/events/dacc

MEETING LOCATION
The meeting will take place in the Four Seasons Ballroom. The poster sessions will be held in the Ballroom foyer.

PRESENTATIONS

LENGTH OF TALK
Each talk will be 20 minutes, followed by 5 minutes of questions. It is important that talks are kept to this length. The moderator will insist that talks end on time.

LOADING YOUR TALK PRIOR TO YOUR SESSION
If you were unable to provide your presentation to us prior to the conference, please stop by the A.V. station to load your talk in the morning before the conference starts or during lunch (for those with afternoon talks). Someone will be available to help you load your talk to a PC.

MEALS

TEXAS BBQ AND CVL OPEN HOUSE
You are invited to an informal welcome dinner at the Center for Vital Longevity from 6:30 p.m. to 10:00 p.m. on Saturday, January 26. All conference attendees are encouraged to come. Vegetarian options will be available. Transportation will be provided back and forth between the Four Seasons and the Center. Shuttles will leave the Four Seasons regularly

between 6:00 p.m. and 8:30 p.m. and return from the center regularly between 8:30 p.m. and 10:00 p.m.

BREAKFAST AND LUNCH

A continental breakfast and hot lunch will be provided for all registered conferees on both Sunday, January 27 and Monday, January 28. Breakfast will be set up in the foyer area of the Ballroom and lunch will be set up in Ballroom section A on Sunday, January 27 and the Pavilion on Monday, January 28. Conference name badges must be worn to meals in order to verify registration.

If you have any questions or need assistance, email our conference managers, April Norambuena (april@utdallas.edu) or Linda DuBose (linda.dubose@utdallas.edu) or call the Center for Vital Longevity at (972) 883-3200.

ORAL PRESENTATIONS
SUNDAY, JANUARY 27

Opening Remarks

8:15 a.m.

Denise C. Park, Ph.D.

Center for Vital Longevity, University of Texas at Dallas

HEALTHY COGNITIVE AGING AND TRANSITIONS TO NEUROPATHOLOGY: I

Moderator: *Kristen Kennedy, Ph.D.*

8:30 - 8:55 a.m.

Clifford R. Jack Jr., M.D., Mayo Clinic

Update on Hypothetical Model of Alzheimer's Disease Biomarkers

8:55 - 9:20 a.m.

Marilyn S. Albert, Ph.D., Johns Hopkins University School of Medicine

Cognitive and CSF Predictors of Time to Onset of Clinical Symptoms Among Cognitively Normal Individuals: The BIOCARD Cohort

9:20 - 9:45 a.m.

Denise Park, Ph.D., Center for Vital Longevity, University of Texas at Dallas

The Adaptive Aging Brain: Amyloid Burden and Cognitive Function

9:45 - 10:15

Break

Moderator: *Sara Haber, Ph.D.*

10:15 - 10:40
Charles DeCarli, M.D., University of California, Davis
Trajectories of Cognitive Aging: Heterogeneity, Connectivity and Cognitive Reserve?

10:40 - 11:05 a.m.
Adam M. Brickman, Ph.D., Columbia University
White Matter and Alzheimer's Disease

11:05 - 11:30 a.m.
Elizabeth C. Mormino, Ph.D., Massachusetts General Hospital and Harvard Medical School
Effects of Age and Beta-Amyloid on Neurodegeneration in Clinically Normal Elderly Individuals

11:30 - 1:00 p.m.
Lunch+Poster Session 1

GAINS AND LOSSES IN COGNITIVE AGING

Moderator: *Preston Thakral, Ph.D.*

1:00 - 1:25 p.m.
Ulman Lindenberger, Ph.D., Max-Planck Institute for Human Development, Center for Lifespan Psychology
Cognitive Intervention in Old Age: Recent Findings and Open Questions

1:25 - 1:50 p.m.
Ian McDonough, Ph.D., Center for Vital Longevity, University of Texas at Dallas
Individual Differences in Neural Recruitment Across the Lifespan Using Multivariate Pattern Analysis

GAINS AND LOSSES IN COGNITIVE AGING (CONTINUED)

1:50 - 2:15 p.m.
Sherry L. Willis, Ph.D., University of Washington
Longitudinal change in cortical thickness: Findings from Seattle Longitudinal Study

2:15 - 2:45 p.m.
Break

Moderator: *Chandramallika Basak, Ph.D.*

2:45 - 3:10 p.m.
Mike Martin, Ph.D., Psychologisches Institut, University of Zurich
Gaining or Maintaining: From Markers of Decline to Markers of Stabilization?

3:10 - 3:35 p.m.
Robert S. Wilson, Ph.D., Rush University Medical Center, Rush Alzheimer's Disease Center
Neural Resilience, Neurodegeneration, and Successful Aging

3:35 - 4:00 p.m.
Jonathan King, Ph.D., National Institutes of Health
Update on the NIA Situation with Respect to Cognitive Aging

ORAL PRESENTATIONS
MONDAY JANUARY 28

ENCODING, RECOLLECTION AND DECISION MAKING

Moderator: *Rachael Elward, Ph.D.*

8:30 - 8:55 a.m.
Emrah Duzel, M.D., University Hospital Magdeburg, University College London
Functional Phenotyping of Encoding Networks in Old Age

8:55 - 9:20 a.m.
Michael Rugg, Ph.D., Center for Vital Longevity, University of Texas at Dallas
Effects of Age on the Neural Correlates of Recollection

9:20 - 9:45 a.m.
Todd Maddox, Ph.D., University of Texas at Austin
Scaffolding Across the Lifespan in Human Decision-Making

9:45 - 10:15 a.m.
Break

AGING, BRAIN NETWORKS & VARIABLITY

Moderator: *Kaoru Nashiro, Ph.D.*

10:15 - 10:40 a.m.
Cheryl Grady, Ph.D., Rotman Research Institute, Baycrest Centre
Age Differences in the Default Network and Their Impact on Self-Relevant Processing

AGING, BRAIN NETWORKS & VARIABILITY (CONTINUED)

10:40-11:05 a.m.
Douglas Garrett, Ph.D., Max-Planck-Institut for Human Development, Center for Lifespan Psychology
Towards a stable view of the variable brain: Findings from the cognitive neuroscience of aging

11:05 - 11:30 a.m.
Gagan Wig, Ph.D., Center for Vital Longevity, University of Texas at Dallas
Parcellating Brain Areas Across the Adult Lifespan

11:30 - 1:00 p.m.
Lunch+Poster Session 2

HEALTHY COGNITIVE AGING AND TRANSITIONS TO NEUROPATHOLOGY:II

Moderator: *Karen Rodrigue, Ph.D.*

1:00 - 1:25 p.m.
Richard J. Caselli, M.D., Mayo Clinic
Cognitive Aging and Preclinical Alzheimer's Disease

1:25 - 1:50 p.m.
Michael D. Devous Sr., Ph.D., UT Southwestern Medical Center
The Impact of Amyloid Burden on Brain Function in Normal Aging

1:50 - 2:15 p.m.
William Thies, Ph.D., Alzheimer's Association
Future Hurdles to Optimum Alzheimer's Treatment

Closing Remarks
2:15 p.m.
Michael Rugg, Ph.D.
Center for Vital Longevity, University of Texas at Dallas

POSTERS: SESSION I
SUNDAY, JANUARY 27, 2013

Posters can be viewed during lunch from 11:30 p.m. to 1:00 p.m.

A-1 ***Relationship of Cognitive Reserve and Cerebrospinal Fluid Biomarkers to Clinical Symptom Onset in Alzheimer's Disease***

Anja Soldan[1], Corinne Allen Pettigrew[1], Shanshan Li[2], Mei-Cheng Wang[2], Abhay Moghekar[1], Richard O'Brien[1], Ola Selnes[1], Marilyn Albert[1]
[1]Department of Neurology, Johns Hopkins University School of Medicine
[2]Department of Biostatistics, Johns Hopkins School of Public Health

A-2 ***Motor Training-Induced Neuroplasticity in Middle Adulthood***

L. Bezzola[1,2], S. Mérillat[1], L. Jäncke[1,2]
[1]University of Zurich, International Normal Aging and Plasticity Imaging Center (INAPIC)
[2]University of Zurich, Department of Psychology, Neuropsychology

A-3 ***Differential Relationships of Amyloid Burden and Memory Retrieval Formats Across the Adult Lifespan.***

Gerard N. Bischof[1], Karen M. Rodrigue[1], Kristen M. Kennedy[1], Michael D. Devous, Sr[1,2], Denise C. Park[1]
[1]Center for Vital Longevity, School of Behavioral and Brain Sciences, University of Texas at Dallas
[2]Department of Radiology, UT Southwestern Medical Center

A-4 ***Age Differences in Neural Activation Affects History-Dependent Decision-Making***

Marissa A. Gorlick[1], Darrell A. Worthy[2], Akram Bakkour[1], Jessica A. Cooper[1], Jeanette Mumford[1], Russell A. Poldrack[1], W. Todd Maddox[1]
[1]University of Texas at Austin
[2]Texas A&M University

POSTERS: SESSION I (CONTINUED)

A-5 ***Elevated CRP as a Mechanism Relating Central Adiposity to Diminished N-Acetyl-Aspartate***

Mitzi M. Gonzales[1], Takashi Tarumi[2], Hirofumi Tanaka[2], Andreana P. Haley[1]

[1]Department of Psychology, University of Texas at Austin

[2]Department of Kinesiology, University of Texas at Austin

A-6 ***Content-Selective Cortical Reinstatement Effects in Older and Younger Adults***

Tracy H. Wang[1], Jeffrey D. Johnson[2], Unal Sakoglu[3], Michael D. Rugg[1]

[1]Center for Vital Longevity, The University of Texas at Dallas

[2]University of Missouri

[3]Texas A&M University - Commerce

A-7 ***Effects of Apolipoprotein E on Working Memory in Young and Middle Aged Adults.***

Marci Horn, Gerard Bischof, Denise C. Park

Center for Vital Longevity, University of Texas at Dallas

A-8 ***Meta-Analysis of Amyloid-Cognition Relations in Cognitively Normal Older Adults***

Trey Hedden[1,2,] Hwamee Oh[4], Alayna P. Younger[1,3], Tanu A. Patel[4]

[1]Athinoula A. Martinos Ctr. for Biomed. Imaging, Dept. of Radiology, Massachusetts Gen. Hosp.

[2]Dept. of Radiology, Massachusetts Gen. Hosp., Harvard Medical School

[3]Dept. of Psychiatry, Massachusetts Gen. Hosp., Harvard Medical School

[4]Helen Wills Neuroscience Institute, University of California, Berkeley

POSTERS: SESSION I (CONTINUED)

A-9 ***Name That Tune: Evoked Emotion's Influence on Recognition Memory***
S. Parks, S.M. Clancy Dollinger, E. Hlaing, C. Dinius
Southern Illinois University at Carbondale

A-10 ***How Did You Sleep Last Night? Neuropsychological Consequences of Self Reported Sleep Problems in Later Adulthood***
Ei Ei Hlaing, Stephanie Clancy Dollinger, Sherrie L. Parks, Cassandra J. Dinius
Department of Psychology, Southern Illinois University Carbondale

A-11 ***Working Memory Workout: Increases in Resting State Network Connectivity Due to Working Memory Training***
Kaoru Nashiro, Chandramallika Basak
Center for Vital Longvevity, University of Texas at Dallas

A-12 ***Modeling the Effects of Scaffolding in Human Decision Making***
Jessica Cooper[1], Darrell Worthy[2], W. Todd Maddox[1]
[1]University of Texas at Austin
[2]Texas A&M University

A-13 ***Sleep-Dependent Digit Span Training in the Synucleinopathies***
Michael K. Scullin, Lynn Marie Trotti, Donald L. Bliwise
Department of Neurology, Emory University School of Medicine

POSTERS: SESSION I (CONTINUED)

A-14 ***The Zurich Longitudinal Healthy Aging Brain (I-HAB) Database Project: Design and Analyses of MRI Data Reliability***

S. Merillat[1], S. Hirsiger[1], L. Bezzola[1], T. Madhyastha[4], T. Grabowski[4,5,6], L. Jäncke[1,2], M. Martin[1,3]

[1]International Normal Aging and Plasticity Imaging Center, University of Zurich

[2]Division of Neuropsychology, University of Zurich

[3]Division of Gerontopsychology, University of Zurich

[4]Integrated Brain Imaging Center, University of Washington

[5]Department of Radiology, University of Washington

[6]Department of Neurology, University of Washington

A-15 ***Stability Across Age and Associative Memory Performance in the Engagement of a Core Network Supporting Recollection***

de Chastelaine, M., Mattson, J.T., Wang, T.H., & Rugg, M.D.

Center for Vital Longevity, University of Texas at Dallas

A-16 ***Memory for Self and Other in Alzheimer's disease***

Nicole M. Rosa[1], Andrew E. Budson[2, 3], Rebecca G. Deason [2,3]Angela H. Gutchess[1]

[1] Brandeis University

[2] Boston University School of Medicine

[3] Boston VA Healthcare System

A-17 ***Amygdalo-Hippocampal Plasticity in a Rat Model of Tinnitus: Implications for Aging and Alzheimer's Disease***

M.R. Kapolowicz, L.T. Thompson

University of Texas at Dallas

B-1 ***The Benefits of an Implementation Intention Encoding Strategy on Prospective Memory for Very Mild Alzheimer's Disease Patients***

J. Lee[1], J. Shelton[2], M. Scullin[3], M. McDaniel[1]
[1]Washington University in St. Louis
[2]Lee University
[3]Emory University

B-2 ***Aging and the Associative Deficit: Neural Correlates of Item and Associative Encoding***
Cristina Saverino[1,3], Cheryl L. Grady[1,2,3]
[1]Department of Psychology, University of Toronto
[2]Department of Psychiatry, University of Toronto
[3]Rotman Research Institute, Baycrest

B-3 ***Reflexive and Reflective-System Learning Across the Lifespan.***
Kirsten Smayda[1], Han-Gyol Yi[1], Bharath Chandrasekaran[1], W. Todd Maddox[2]
[1]Communication Sciences and Disorders, University of Texas at Austin
[2]Psychology, University of Texas at Austin

B-4 ***The Role of Attentional Control in Working Memory Training in Elderly: Determining the Best Training Strategy***
Chandramallika Basak, Margaret O'Connell
Center for Vital Longevity, University of Texas at Dallas

B-5 ***Relationship of Cognitive Reserve and Cerebrospinal Fluid Biomarkers to Clinical Symptom Onset in Alzheimer's Disease***
Anja Soldan [1], Corinne Allen Pettigrew [1], Shanshan Li [2], Mei-Cheng Wang [2], Abhay Moghekar [1], Richard O'Brien [1], Ola Selnes [1], Marilyn Albert [1]
[1]Department of Neurology, Johns Hopkins University School of Medicine
[2]Department of Biostatistics, Johns Hopkins Bloomberg School of Public Health

B-6 ***Daytime Sleepiness is Associated with Decreased Default-Mode Network Connectivity in Both Young***

and Cognitively Intact Elderly Subjects

AM Ward[1,2,3,5], DG McLaren[1,3,5,6], AP Schultz[1,3,5], J Chhatwal[1,2,3,5], BP Boot[1,2,3,5,7], T Hedden[1,4,5], RA Sperling[1,2,3,5,7]

[1]Athinoula A Martinos Center for Biomedical Imaging
[2]Department of Neurology, Brigham and Women's Hospital
[3]Department of Neurology, Massachusetts General Hospital
[4]Radiology, Massachusetts General Hospital
[5]Harvard Medical School
[6]GRECC, Edith Nourse Rogers Memorial Veterans Hospital
[7]Center for Alzheimer Research and Treatment

B-7 ***Individual Differences in Functional Activation are Related to Episodic Memory Errors in Old Age***

Yana Fandakova, Ulman Lindenberger, Yee Lee Shing
Center for Lifespan Psychology, Max Planck Institute for Human Development, Berlin, Germany

B-8 ***Functional Connectivity in the Executive Function Network is Associated with Personality Traits from the NEO PI-R***

Micaela Y. Chan, Ian M. McDonough, Denise C. Park
Center for Vital Longevity, School of Behavioral and Brain Sciences, University of Texas at Dallas

B-9 ***Dissociating Neural Effects of Aging and β-amyloid Deposition: A Multivariate Analysis During an fMRI Face Task***

Jenny R. Rieck[1], Karen M. Rodrigue[1], Kristen M. Kennedy[1], Michael D. Devous Sr[2], Denise C. Park [1]
[1]Center for Vital Longevity, School of Behavioral and Brain Sciences, University of Texas at Dallas
[2]Department of Radiology, University of Texas Southwestern Medical Center, Dallas, TX

B-10 ***The Relationship Between Sleep-Wake Cycles and Associative Memory Performance in Older Adults***

POSTERS: SESSION II (CONTINUED)

S. Sherman, A. Reeves, S. Witkowski, D. Schnyer
University of Texas at Austin

B-11 ***Exploring the Limits of Complexity Measures for the Analysis of Age Differences in Neural Signals***
T. H. Grandy[1], D. D. Garrett[1,2], U. Lindenberger[1], M. Werkle-Bergner[1]
[1]Center for Lifespan Psychology, Max Planck Institute for Human Development, Berlin, Germany
[2]Max Planck Societies-University College London Initiative for Computational Psychiatry and Ageing Research (ICPAR)

B-12 ***Late Life Cognitive Activity is Associated with Greater Diffusion Anisotropy in Brain White Matter***
K. Arfanakis[1,2], R.S. Wilson[2], C.M. Barth[1], A.K. Vasireddi[1], S. Zhang[1], D.A. Fleischman[2], D.A. Bennett[2]
[1]Department of Biomedical Engineering, Illinois Institute of Technology
[2]Rush Alzheimer's Disease Center, Rush University Medical Center

B-13 ***Effects of Electroacupuncture on Cocaine-Induced Neurotoxicity***
Y.H. Chen, B. Ivanic
Graduate Institute of Acupuncture Science, China Medical University, Taichung, Taiwan

B-14 ***Determining Terminal Decline in Patients suffering from Dementia***
Alyssa A.S. Ingle, PLPC, Kajal Kaul, Chris Mahan, Christine David
School of Professional Psychology at Forest Institute

POSTERS: SESSION II (CONTINUED

B-15 ***Age Differences in Prefrontal Activity During Supra-Capacity Working Memory Performance***

V.K. Daliparthi[1], T.P. Weaver[1], N.A. Hubbard[1], B. Rypma[1,2]
[1]University of Texas at Dallas
[2]University of Texas Southwestern Medical Center

B-16 ***Movement-Paired Vagus Nerve Stimulation Improves Motor Recovery Following Endothelin-1 Ischemic Brain Damage***

N. Khodaparast, S.Hays, A. Sloan, T. Fayyaz, D. Hulsey, M. Pantoja, T. Vu, N. Alam, R. Rennaker, M.P. Kilgard
University of Texas at Dallas

B-17 ***Connectivity Via Skype: Does It Enhance Communication for Residents of a Retirement Community?***

Elizabeth Buell, Jodi Seligman, Penelope Boettiger, Iris Fung, Carol Cokely
University of Texas at Dallas

B-18 ***Engaging Activities Enhance Neural Recruitment: Evidence from The Synapse Project***

Sara Haber, Ian McDonough, Denise C. Park
Center for Vital Longevity, University of Texas at Dallas

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The Center for Vital Longevity would like to offer a special thank you to ***Richard H. Collins*** for his support of the 2013 DACC Conference events.

Center for Vital Longevity
1600 Viceroy Drive, Suite 800
Dallas, TX 75235
vitallongevity.utdallas.edu