DUARTE, AUDREY L.

Associate Professor School of Psychology Georgia Institute of Technology

I. EARNED DEGREES

Ph.D. Molecular and Cell 2004 University of California at Berkeley (mentor:

Biology: Neurobiology Robert T. Knight)

division

B.S. Neurobiology, Physiology, 1999 University of California at Davis

and Behavior

II. EMPLOYMENT HISTORY

Associate Professor, Psychology, Georgia Institute of Technology 2014 -present

The Goizueta Foundation Early Career Professor, 2011-2014

Georgia Institute of Technology

Adjunct Professor, Biology, Georgia Institute of Technology 2008 -present

Assistant Professor, Psychology, Georgia Institute of Technology 2008 -2014

Post-doctoral Research Fellow, 1/2006-8/2007

MRC-Cognition and Brain Sciences Unit (mentors: Kim Graham & Rik Henson)

Post-doctoral Research Fellow, 8/2004-12/2005

University of California at San Francisco (mentor: Michael Weiner)

Graduate Research Assistant, University of California at Berkeley 1999 -2004

Graduate Teaching Assistant, University of California at Berkeley 2000-2002

III. HONORS AND AWARDS

Cullen Peck Scholar, 2015

Elected member of the Memory Disorders Research Society, 2013

President of Southeastern Workers in Memory, 2013-2014

Goizueta Foundation Early Career Rotating Professor, 2011-2014

Elected member of the International Society for Behavioral Neuroscience, 2009

Thank a Teacher Award recipient, every semester 2009-2014

Summer Institute in Cognitive Neuroscience fellow, 2001

McNair Scholar, U.C. Davis chapter, 1997 - 1999

Kaiser Permanente Health Foundation Scholarship, U.C. Davis, 1997 - 1998

Lillian D. Wells Scholarship, U.C. Davis, 1997 – 1998

IV. RESEARCH, SCHOLARSHIP, AND CREATIVE ACTIVITIES

A. PUBLISHED BOOKS, BOOK CHAPTERS, AND EDITED VOLUMES

A1. Books

The Wiley Handbook on the Cognitive Neuroscience of Memory. June, 2015

Editors: Duarte A., Addis D.R., Barense M.D. Wiley-Blackwell Press.

ISBN: 978-1-118-33259-7

A2. Refereed Book Chapters

No data

A3. Edited Volumes

The Cognitive Neuroscience of Aging and Memory. July, 2015 Editors: Duarte, A and Rajah, M.N. Brain Research Volume 1612, Pages 1-152

B. REFEREED PUBLICATIONS AND SUBMITTED ARTICLES

†mentored post-doctoral research fellow at Georgia Tech *mentored graduate student at Georgia Tech. ‡ mentored undergraduate student at Georgia Tech

B1. Published and Accepted Journal Articles

*Dulas MR, Duarte A. Age-related changes in overcoming proactive interference in associative memory: The role of PFC-mediated executive control processes at retrieval. *Neuroimage*, in press.

*Reaves S., *Graham B., Grahn J., ‡Rabbanifard P., Duarte A. Turn Off the Music! Music Impairs Visual Associative Memory Performance in Older Adults. *The Gerontologist*, in press.

†Gilchrist A.L., Verhaeghen P., Duarte A. Retrospective cues based on object features improve visual working memory performance in older adults. *Aging, Neuropsychology, and Cognition*, 23(2):184-95, (2015).

*Newsome R.N., Pun C., Duarte A., Ferber S., Barense M.D. A retroactive spatial cue improves VSTM capacity in mild cognitive impairment and medial temporal lobe amnesia but not in healthy older adults. *Neuropsychologia*, 77:148-57, (2015).

†Leshikar E.D., *Dulas M.R., Duarte A. Self-referencing enhances recollection in both young and older adults. *Aging, Neuropsychology, and Cognition*, 22:388-412, (2015).

*Weinberg L., [‡]Hasni A., Shinohara M., Duarte A. A single bout of resistance exercise can enhance episodic memory performance. *Acta Psychologica*, 153:13-9, (2014).

*Dulas M.R. and Duarte A. Aging affects the interaction between attentional control and source memory: an fMRI study. *Journal of Cognitive Neuroscience*, 26(12):2653-69, (2014).

†Leshikar E.D. and Duarte A. Medial prefrontal cortex supports source memory for self-referenced materials in young and older adults. *Cognitive, Affective, and Behavioral Neuroscience*, 14(1):236-52. (2014)

Duarte A., [‡] Hearons P., ‡Jiang Y., ‡Delvin M.C., ‡Newsome R.N., Verhaeghen P. Retrospective attention enhances visual working memory in the young but not the old: an ERP Study. *Psychophysiology*, 50(5):465-76, (2013).

*Dulas M.R. and Duarte A. The effect of explicitly directing attention toward item-feature relationships on source memory in the young and old: an ERP study. *Brain Research*, 1500:55-71, (2013).

*Newsome R.N., Duarte A., Barense M.D. Reducing perceptual interference improves visual discrimination in mild cognitive impairment: Implications for a Model of Perirhinal Cortex Function. *Hippocampus*, 22(10): 1990-9, (2012).

‡Newsome R.N., Dulas M.R., Duarte A. The effects of aging on emotion-induced modulations of source retrieval ERPs: Evidence for valence biases. *Neuropsychologia*, 50: 3370-3384, (2012).

[†]Leshikar E.D., Duarte A., Hertzog C. Task-selective memory effects for successfully implemented encoding strategies. *PLoS One*, 7(5) e38160, (2012).

[†]Leshikar E.D., and Duarte A. Medial prefrontal cortex supports source memory accuracy for self-referenced items. *Social Neuroscience*, 7(2):126-45, (2011).

*Dulas M.R. and Duarte A. The effects of aging on material-independent and material-dependent neural correlates of contextual binding. *NeuroImage*. 57:1192-1204, (2011).

*Dulas M.R. and Duarte A. The effects of aging on material-independent and material-dependent neural correlates of source memory retrieval. *Cerebral Cortex*, 22(1):37-50, (2011).

*Dulas M.R., Newsome R.N., Duarte A. The effects of aging on ERP correlates of source memory retrieval for self-referential information. *Brain Research*, 1377:84-100, (2011).

Duarte A., Henson R.N.A., Graham K.S. The effect of stimulus content on the neural correlates of source recollection. *Brain Research*, 1373:110-23, (2011).

Duarte A., Knight R.T., Henson R.N.A., Graham K.S. The orbito-frontal cortex is necessary for temporal context memory. *Journal of Cognitive Neuroscience*, 22(8):1819-31, (2010).

Duarte A., Henson R.N.A., Graham K.S. Neural components of true and false memory in young and older adults. *Neurobiology of Aging*, 31(10):1814-1830, (2010).

Chao L.C., Pa J., Duarte A., Schuff, N., Weiner M.W., Kramer J.H., Miller B.L., Freeman K.M., Johnson J. Patterns of cerebral hypoperfusion in amnestic and dysexecutive MCI. *Alzheimer's Disease and Associated Disorders*, 23(3):245-52, (2009).

Duarte A., Henson R.N., Graham K.S. The effects of aging on the neural correlates of subjective and objective recollection. *Cerebral Cortex*, 18(9): 2169-80, (2008).

Duarte A., Schuff N., Kramer J., Miller B., Weiner M. Volumetric correlates of memory and executive function in normal elderly, mild cognitive impairment and Alzheimer's disease. *Neuroscience Letters*, 406: 60-65, (2006).

Hayasaka S., Du A., Duarte A., Kornak J., Jahng G., Weiner M., Schuff N. A Non-parametric approach for co-analysis of multi-modality brain imaging data and its application to Alzheimer's disease. *NeuroImage* 30(3):768-779, (2006).

Duarte A., Ranganath C., Trujillo C., Knight R.T. Intact recollection memory in high-performing elderly adults: ERP and behavioral evidence. *Journal of Cognitive Neuroscience* 18(1):33-47, (2006).

Duarte A., Ranganath C., Knight R.T. Effects of unilateral prefrontal lesions on familiarity, recollection, and source memory. *Journal of Neuroscience* 25(36):8333-8337, (2005).

Yago E., Duarte A., Wong T., Barcelo F., Knight R.T. Temporal kinetics of prefrontal modulation of the extrastriate cortex during visual attention. *Cognitive Affective & Behavioral Neuroscience* 4(4):609-617, (2004).

Duarte A., Ranganath C., Winward L., Hayward D., Knight R.T. Dissociable neural correlates for familiarity and recollection during the encoding and retrieval of pictures. *Cognitive Brain Research* 18(3):255-272, (2004).

B2. Conference Presentation with Proceedings (Refereed)

No data

B3. Other Refereed Material

No data

B4. Submitted Journal Articles

*Strunk J. and Duarte A. Preparing to remember: neural activity preceding events predicts subsequent memory performance in the young and old. Submitted 8/1/2015.

*Reaves S, Verhaeghen P., Duarte A. Retrospective attention modulates both working and long-term memory visual memory. Submitted 9/28/2015.

‡James, T., *Strunk J., Arndt J., Duarte A. The effects of selective attention on context memory retrieval in the young and old. Submitted 10/11/2015.

C. OTHER PUBLICATIONS AND CREATIVE PRODUCTS

No data

D. PRESENTATIONS

Invited

- Duarte A. (July, 2016). Aging affects how cognitive control resolves proactive interference in associative memory retrieval. International Conference on Memory, Budapest, Hungary.
- Duarte A. (July, 2016). Disentangling cognitive control contributions to age-related associative memory impairments. International Society for Behavioral Neuroscience, Dubrovnik, Croatia.
- Duarte A. (April, 2015). *The role of attention in age-related associative memory impairments*. Center for Vital Longevity, University of Texas at Dallas.
- Duarte A. (March, 2015). *Memory formation and detioration with aging*. Atlanta Science Festival, Fernbank Museum, Atlanta.
- Duarte A. (February, 2015). Just how different are the brains and memories of young and older adults? Georgia Tech Silver Jackets, Georgia Tech.
- Duarte A. (February, 2015). Simple ways to improve your memory. Health and Wellness Seminar, East Cobb Senior Center.
- Duarte A. (December, 2014). The role of attention in age-related associative memory impairments: insights from EEG and fMRI. Department of Psychology, University of Florida.
- Duarte A. (November, 2014). *Beefcake your brain. Pump up your memory.* College of Sciences Presidential Cabinet Research Symposium.
- Duarte A. (October, 2014). Why do we have trouble turning down the noise as we age? And why does this affect our memories? Georgia Tech Homecoming Weekend.

- Duarte A. (March, 2014). *How does aging influence controlled encoding and retrieval?* Rotman Research Conference, University of Toronto.
- Duarte A. (February, 2014). *Interactions between short and long-term memory in the young and old*. School of Psychology, University of Arkansas.
- Duarte A. (December, 2013). *Memory reactivation for target and competing memories: predictions for aging.* Children's Hospital of Atlanta, Emory University.
- Duarte A. (July, 2013). What can neuroimaging contribute to our understanding of age-related memory changes? Biology and Disorders of Learning and Memory course. Cold Spring Harbor Laboratory, Cold Spring Harbor, New York.
- Duarte A. (June, 2013). *Interactions between attention and memory in the young and the old*. School of Psychology, U.C. Davis.
- Duarte A. (April, 2013). What can we do to alleviate memory impairments in older adults? College of Science Advisory Board annual meeting, Georgia Tech.
- Duarte A. (March, 2013). Attentional control of short and long-term memory in the young and old. Southeastern Workers in Memory (SWIM) conference held at Southeastern Psychological Association conference.
- Duarte A. (March, 2013). How does aging influence the prospective and retrospective attentional control of memory? Center for Aging, Tulane University.
- Duarte A. (November, 2012). The influence of attention on short and long-term memory systems in the young and old. Department of Psychology, Washington University.
- Duarte A. (November, 2012). The influence of attention on short and long-term memory systems in the young and old. Department of Psychology, Brandeis University.
- Duarte A. (June, 2012). What can we do about age-related memory impairments? A neuroscience approach. Target Meeting World Neuroscience Online Conference.
- Duarte A. (April, 2012). What can neuroscience contribute to our understanding of cognitive aging? Overview talk for Cognitive Neuroscience Methods symposium presented at presented at 15th annual Cognitive Aging Conference.
- Duarte A. (2012, January). *Episodic memory, aging and the human brain*. School of Biology, Georgia State University.
- Duarte A. (2011, November). What can we do about age-related impairments in associative memory? School of Psychology, University of Western Ontario, London Ontario, Canada.
- Duarte A. (2011, November). *Episodic memory, aging and the human brain* guest lecture given for Introductory Neuroscience, BMED 4752 at Georgia Tech.
- Duarte A. (2011, September). Brain Connections: Advances in Neuroscience -- Blended Research @ the Library series
- Duarte A. (2011, May). What neural mechanisms support the benefit of explicit item-context binding to source memory performance in older adults? American Psychological Society annual conference, Washington, D.C.
- Duarte A. (2010, December). Aging and the neural systems supporting associative memory. The Aging and Alzheimer Research Axis of the Douglas Mental Health University Institute, Montreal, Canada.

- Duarte A. (2010, March). Aging and the neural systems supporting recollection. Department of Psychology, University of Toronto.
- Duarte A. (2010, January). Age-related changes in stimulus-independent and stimulus-dependent brain activity underlie item and source memory impairments in older adults. Aging and Cognition Conference, University of Texas at Dallas.
- Duarte A. (2009, December). *Aging and the neural systems supporting episodic memory*. Helen Wills Neuroscience Institute, University of California at Berkeley.
- Duarte A. (2009, November). *Aging, recollection and familiarity*. Biomedical and Health Sciences Institute, University of Georgia.
- Duarte A. (2009, May). *Domain general and domain specific recollection: MTL and beyond.* Annual meeting for the International Society for Behavioral Neuroscience.
- Duarte A. (2008, October). *Recollection, familiarity and aging: cognitive and neural variability.* Yerkes Primate Center, Emory University.
- Duarte A. (2008, April). *Recollection, familiarity and aging: cognitive and neural variability.* School of Biology, Georgia Tech.
- Duarte A. (2007, January). A multidisciplinary approach to characterizing human memory in older adults. School of Psychology, Georgia Tech.
- Duarte A. (2007, March). A multidisciplinary approach to characterizing human memory in older adults. Center for Neurobiology of Learning and Memory, University of California at Irvine.
- Duarte A. (2007, March). A multidisciplinary approach to characterizing human memory in older adults. Department of Psychology, Cardiff University
- Duarte A. (2006, April). Dissociations between recollection and familiarity based recognition: evidence from ERPs, aging and prefrontal lesions. Medical Research Council Cognition and Brain Sciences Unit
- Duarte A. (2005, December). Dissociations between recollection and familiarity based recognition: evidence from ERPs, aging and prefrontal lesions. OMNI meeting, Helen Wills Neuroscience Institute, University of California at Berkeley
- Duarte A. (2005, April). Frontal Perfusion Correlates with Episodic Memory Deficits in MCI. Center for Imaging of Neurodegenerative Diseases, San Francisco Veterans Affairs Medical Center
- Duarte A. (2005, March). Frontal Perfusion Correlates with Episodic Memory Deficits in MCI. Annual Research Symposium, Department of Radiology, University of California at San Francisco.
- Duarte A. (2004, July). Edge Conference, University of California at Berkeley

Submitted

- Strunk J. and Duarte A. (April, 2016). *In what way does preparatory cueing support source memory encoding?* Poster to be presented at the 23rd annual meeting for the Cognitive Neuroscience Society.
- Morgan L., Strunk J., Reaves S., Verhaeghen P., Duarte A. (April, 2016). *Aging reduces the benefit of spatial retrocueing on VSTM for complex objects*. Poster to be presented at the 23rd annual meeting for the Cognitive Neuroscience Society.

- Corbett B., Weinberg L., Duarte A. (April, 2016). *The effect of unexpected negative events on encoding*. Poster to be presented at the 23rd annual meeting for the Cognitive Neuroscience Society.
- James T., Strunk J., Arndt J., Duarte A. (April, 2016). *The effects of selective attention on source memory retrieval in the young and old.* Poster to be presented at the 23rd annual meeting for the Cognitive Neuroscience Society.
- Strunk J. and Duarte A. (April, 2016). *Pre and Post stimulus Subsequent Memory Effects in the Young and Old: A Time Frequency Analysis*. Poster to be presented at the 17th annual meeting for the Cognitive Neuroscience Society.
- Morgan L., Strunk J., Reaves S., Verhaeghen P., Duarte A. (April, 2016). *Spatial retrocueing benefits on VSTM diminishes with aging*. Poster to be presented at the 17th annual meeting for the Cognitive Neuroscience Society.
- Corbett B., Weinberg L., Duarte A. (April, 2016). *The effect of expectation on negative and neutral events on memory in younger and older* adults. Poster to be presented at the 17th annual meeting for the Cognitive Neuroscience Society.
- Hassan Z., Gilchrist A., Verhaeghen P., Duarte A. (April, 2016). *Retrospective Attention Enhances Visual Working Memory Performance in the Young and Old.* Poster to be presented at the 17th annual meeting for the Cognitive Neuroscience Society.
- *Weinberg L., and Duarte A. (April, 2015). *How acute stress during consolidation affects memory for negative materials with different arousal levels.* Poster presented at the 22nd annual meeting for the Cognitive Neuroscience Society.
- *Reaves S., and Duarte A. (April, 2015). *Visual representations across memory systems and aging*. Poster presented at the 22nd annual meeting for the Cognitive Neuroscience Society.
- *Reaves S., Strunk J., Verhaeghen P., and Duarte A. (September, 2014). *Visual representations across memory systems*. Poster presented at the 54th annual meeting for the Society for Psychophysiologial Research.
- *Strunk J. and Duarte A. (September, 2014). *Influence of proactive control on subsequent memory performance*. Poster presented at the 54th annual meeting for the Society for Psychophysiologial Research.
- *Strunk J., ‡James T., and Duarte A. (September, 2014). *The effects of selective attention on source memory retrieval in the young and old.* Poster presented at the 54th annual meeting for the Society for Psychophysiologial Research.
- *Reaves S., *Graham B., Grahn J., ‡Rabbanifard P., Duarte A. (April, 2014). *Turn off the music! Music impairs visual associative memory performance in older adults.* Poster presented at the 16th annual Cognitive Aging Conference.
- *Dulas M.R. and Duarte A. (April, 2014). Age-related changes in overcoming proactive interference in associative memory: the role of VLPFC-mediated post-retrieval selection. Poster presented at the 16th annual Cognitive Aging Conference.
- *Strunk J. and Duarte A. (April, 2014). *Age-related shifts in cognitive control strategy underlie episodic memory deficits*. Poster presented at the 16th annual Cognitive Aging Conference.
- *Weinberg, L., Hasni A., Shinohara M., and Duarte A. (April, 2014). *A single bout of resistance exercise can enhance episodic memory performance*. Poster presented at the 21st annual meeting of the Cognitive Neuroscience Society.

- *Dulas M.R. and Duarte A. (April, 2014). *Post-retrieval selection modulates processing of retrieved associations to overcome interference in memory*. Poster presented at the 21st annual meeting of the Cognitive Neuroscience Society.
- *Dulas M.R. and Duarte A. (November, 2013). Aging affects the interaction between attentional control and source memory: an fMRI study. Poster presented at the 43rd annual meeting of the Society for Neuroscience.
- *Reaves S., *Strunk J., Verhaeghen P., and Duarte A. (November, 2013). *Retrospective attention facilitates both short and long term-memory: support for a single memory system.* Poster presented at the 43rd annual meeting of the Society for Neuroscience.
- Arndt J. and Duarte A. (November, 2013). *The influence of selective attention at encoding on post-retrieval monitoring*. Poster presented at the 43rd annual meeting of the Society for Neuroscience.
- [†]Gilchrist A., Duarte A., Verhaeghen P., Solanki R. (November, 2013). *Effects of feature-based retrospective cues on working memory in adult aging*. Poster presented at the 54th annual meeting of the Psychonomic Society.
- *Shin J., Duarte A., Hu X. (April, 2013). Correction of Long-term Physiological Noise Effects Increases the Reproducibility of Resting-State Networks. Poster presented at the 21st annual meeting of the International Society for Magnetic Resonance in Medicine.
- [†]Leshikar E.D. and Duarte A. (October, 2012). *Medial prefrontal cortex supports source memory for self-referenced materials in young and older adults*. Poster presented at the 42nd annual meeting of the Society for Neuroscience.
- *Dulas M.R. and Duarte A. (October, 2012). *Age-related alterations in post-retrieval monitoring with and without directed attention at encoding: An fMRI Study.* Poster presented at the 42nd annual meeting of the Society for Neuroscience.
- ‡Donohue M.R. and Duarte A. (April, 2012). The effects of selective attention on associative memory in young versus older adults. Poster presented at 15th annual Cognitive Aging Conference.
- *Dulas M.R., Jiang Y., Duarte A. (April, 2012). *The effect of explicitly directing attention toward item-feature relationships on source memory in the young and old: an fMRI study.* Poster presented at 15th annual Cognitive Aging Conference.
- [†]Leshikar E.D. and Duarte A. (April, 2012). *Self-referencing supports source memory in young and older adults*. Poster presented at 15th annual Cognitive Aging Conference.
- #Hearons P., Duarte A., Verhaeghen P. (April, 2012) Retrospective attention enhances visual working memory in the young but not the old: an ERP study. Poster presented at 15th annual Cognitive Aging Conference.
- *Graham B., Grahn J., Duarte A. (April, 2012). *Young and alder adults' recognition memory during music listening*. Poster presented at 15th annual Cognitive Aging Conference.
- *Newsome R.N. Pun C., Ferber S., Duarte A., Barense M.D. (2012, March). *Use of a retro-cue disproportionately enhances VSTM performance in amnestic Mild Cognitive Impairment patients, relative to young and older adults.* Poster presented at the 21st annual Rotman Research Conference: Mild Cognitive Impairment, Toronto, Ontario, Canada.
- *Newsome R.N., Duarte A., and Barense, M.D. (2011, June). *Reducing perceptual interference improves performance in mild cognitive impairment patients*. Poster presented at the Canadian Psychological Association Annual Meeting. Toronto, ON, Canada.

- Duarte A. (2011, June). The role of directed attention on associative memory encoding and retrieval. Talk given at presented at the Annual International Society for Behavioral Neuroscience conference, Verona, Italy.
- *Newsome R.N. Pun C., Ferber S., Duarte A., Barense M.D. (2011, November). *Attentional selection improves visual short-term memory performance in MCI patients*. Poster presented at the 41st annual meeting of the Society for Neuroscience.
- [†]Leshikar E.D., *Holder J., Duarte A., Hertzog C. (2011, November). *Task-dependent activation supports subsequent memory for successful encoding strategy use.* Poster presented at the 41st annual meeting of the Society for Neuroscience.
- *Dulas M.R. and Duarte A. (2011, November). *Directed encoding of item-feature associations reduces dorsolateral prefrontal contributions to source memory retrieval.* Poster presented at the 41st annual meeting of the Society for Neuroscience.
- *Newsome, R.N., Duarte A., and Barense, M.D. (2011, March). *Perceptual processing impairments in MCI patients are related to perceptual interference*. Poster presented at the 18th annual Cognitive Neuroscience Society meeting.
- *Dulas M.R., Jiang Y., Duarte A. (2011, March). The influence of directed attention on source memory retrieval in the young and old: an ERP study. Poster presented at the 18th annual Cognitive Neuroscience Society meeting.
- [†]Leshikar E.D., Duarte A. (2010, October). *Medial prefrontal cortex supports accurate source memory retrieval for items encoded under self-reference*. Poster presented at the 40th annual meeting of the Society for Neuroscience.
- [†]Leshikar E.D., Duarte A. (2010, November). *Medial prefrontal cortex supports accurate source memory encoding for items encoded under self-reference*. Poster presented at the 51st annual meeting of the Psychonomic Society.
- Duarte A. (2010, June). Frontal Activity Changes at Study and Test Underlie Domain General Source Memory Impairments in Older Adults. Poster presented at the American Federation for Aging Research Grantee Conference.
- *Dulas M.R., Duarte A. (2010, April). *Effects of aging on material general and material-specific source memory retrieval*. Poster presented at 14th annual Cognitive Aging Conference.
- *Dulas M.R., Duarte A. (2010, April). *The effects of explicit item-feature binding on source memory performance*. Paper presented at 14th annual Cognitive Aging Conference.
- ‡Newsome R., Duarte A. (2010, April). Age differences in associative memory: The influence of emotional stimuli. Poster presented at 14th annual Cognitive Aging Conference.
- Duarte A. (2010, March). Frontal Activity Changes at Study and Test Underlie Domain General Source Memory Impairments in Older Adults. Poster presented at the 20th annual Rotman Research Institute Conference, University of Toronto.
- #Worden K., Duarte A. (2010, March). Can induced negative mood amplify the negativity bias? Poster presented at annual Georgia Tech Undergraduate Research Opportunities Program Symposium.
- *Dulas M.R., Duarte A. (2010, February). Effects of aging on material-general and material-specific source memory retrieval. Poster presented at Georgia Tech Research and Innovation Conference.
- *Newsome R., Duarte A. (2010, February). *The effects of emotion on associative memory in younger adults*. Poster presented at the Georgia Tech Undergraduate Research Symposium

- ‡Newsome R., Dulas M., Duarte A. (2009, October). The effects of self-referential processing on source memory in young and older adults: Behavioral and ERP evidence. Poster presented at the 39th annual meeting of the Society for Neuroscience.
- *Dulas M.R., Duarte A. (2009, October). *Effects of aging on domain general and domain specific source memory*. Poster presented at the 39th annual meeting of the Society for Neuroscience.
- ‡Newsome R., Dulas M.R., Duarte A. (2009, February). The effects of aging on self-referential processing. Poster presented at the Georgia Tech Undergraduate Research Symposium
- Duarte A., Henson R.N., Graham K.S. (2007, March). *Neural components of spatial and temporal source memory in healthy young and older adults.* Poster presented at the 14th annual meeting of the Cognitive Neuroscience Society.
- Duarte A., Henson R.N., Graham K.S. (2006, October). *The effects of aging on the neural correlates of subjective and objective recollection*. Paper presented at the autumn meeting of the British Neuropsychological Society.
- Duarte A., Henson R.N., Graham K.S. (2006, October). Fractionating the neural correlates of subjective and objective recollection in older adults. Paper presented at the 36th annual meeting of the Society for Neuroscience.
- Chao L.L., Schuff N., Duarte A., Buckley S.T., Kornak J., Kramer J.H., Yaffe B.L., Miller B. L., Weiner M.W. (February, 2006). *Predicting cognitive decline in MCI and healthy aging with structural and perfusion MRI and MRS*. Paper presented at the International Conference on Alzheimer's Disease and Related Disorders.
- Duarte A., Hayasaka S., Du A., Schuff N., Jahng G., Kramer J., Miller B., Weiner M. (October, 2005). *Functional correlates of memory deficits in Mild Cognitive Impairment*. Poster presented at the 35th annual meeting of the Society for Neuroscience.
- Duarte A., Hayasaka S., Du A., Schuff N., Jahng G., Kramer J., Miller B., Weiner M. (2005, June). Frontal hypoperfusion correlates with episodic memory deficits in Mild Cognitive Impairment. Poster presented at the International Conference on the Prevention of Dementia.
- Hayasaka S., Schuff N., Kornak J., Studholme C., Cardenas-Nicolson V., Du A., Duarte A., Weiner M. (2005, March). *Identifying Regional Patterns of Concordance and Dissociation between Gray Matter Loss and Hypoperfusion among Alzheimer's Disease Patients*. Poster presented at the 13th annual meeting of the International Society for Magnetic Resonance in Medicine.
- Duarte A., Ranganath C., Knight R.T. (2004, August). Frontal lesions impair recognition memory: a reconciliation of lesion and fMRI findings. Paper presented at the 1st annual Bay Area Memory Meeting.
- Duarte A., Ranganath C., Trujillo C., Knight R.T. (2004, April). *Prefrontal cortex supports recollection and familiarity-based recognition: evidence from patients with unilateral prefrontal lesions.* Poster presented at the 11th annual meeting of the Cognitive Neuroscience Society.
- Duarte A., Ranganath C., Winward L., Knight R.T. (2003, October). *Aging affects the neural correlates of recollection and familiarity during encoding and retrieval*. Poster presented at the 33rd annual meeting of the Society for Neuroscience.
- Duarte A., Ranganath C., Winward L., Knight R.T. (2002, October). *Dissociable neural correlates for recollection and familiarity*. Paper presented at the annual retreat of the Helen Wills Neuroscience Institute, University of California at Berkeley.

- Duarte A., Ranganath C., Winward L., Knight R.T. (2002, October). *Hemispheric asymmetries in frontal processing during memory encoding*. Poster presented at the 32nd annual meeting of the Society for Neuroscience.
- Duarte A., Ranganath C., Winward L., Knight R.T. (2002, October). *Hemispheric asymmetries in frontal processing during memory encoding and retrieval*. Poster presented at the annual meeting of the Minority in Neuroscience Fellowship Program and American Psychological Association.
- Duarte A., Ranganath C., Hayward D., Knight R.T. (2002, April). *Neurophysiological correlates of episodic memory for lateralized objects*. Poster presented at the 9th annual meeting of the Cognitive Neuroscience Society.
- Duarte A., Ranganath C., Hayward D., Knight R.T. (2001, October). *Lateralized frontal activity during memory encoding*. Poster presented at the annual meeting of the Minority in Neuroscience Fellowship Program and American Psychological Association.
- Knight R.T., Herrmann C.S., Padilla M., Duarte A., Soltani M., Pellouchoud E., Edwards E. (2001, April). *Stimulus dependence of human gamma band activity*. Poster presented at the 8th annual meeting of the Cognitive Neuroscience Society.
- Duarte A., Griffiths D.P., Clayton N.S. (1999, August). *Observational learning and food storing in Scrub Jays*. Paper presented at the McNair Scholars Undergraduate Research Conference, University of California at Davis.
- Duarte A., Griffiths D.P., Clayton N.S. (1999, January). *Observational learning and food storing in Scrub Jays*. Paper presented at the National Conference on Undergraduate Research, University of Rochester.

E. GRANTS AND CONTRACTS

E1. As Principal Investigator

Research training grant in cognitive aging, Co-Program Director

National Institute of Aging, Institutional Training Grant – T32

2015-2020

\$2,459,535 direct and indirect costs

The influence of attention on associative memory in the young and old, Principal Investigator

National Science Foundation, Research Grant

2011 - 2015

\$410,692 direct and indirect costs.

Norepinephrine release with exercise and memory function in elderly adults, Co-Principal

Investigator

Emory University, Pilot Grant

2012 - 2013

\$25,000 direct costs. No indirect costs allowed.

The effects of aging on associative memory, Principal Investigator

American Federation for Aging Research, Research Grant

2009 - 2012

\$75,000 direct costs. No indirect costs allowed.

Prediction of Cognitive Decline with MRI and MRS, Post-doctoral Research Fellow

National Institute of Aging; research supplement award

University of California at San Francisco

2005 - 2006

\$35,568 direct costs. No indirect costs allowed.

Perfusion MRI and episodic memory in MCI, Post-doctoral Research Fellow

Veterans Affairs Research Enhancement Award Program

2004 - 2005

\$35.568 direct costs. No indirect costs allowed.

San Francisco Veterans Affairs Medical Center

Neuroscience scholars program, Pre-doctoral Research Fellow

National Institute of Neurological Disorders and Stroke

2001 - 2004

\$58,896 direct costs. No indirect costs allowed.

E2. As Co-Investigator

Aging and varieties of cognitive control, Co-Investigator

National Institute of Aging, Research Project Grant - R01

2010 - 2016

\$1,114,596 direct and indirect costs.

Functional recruitment underlying the use of effective memory mediators, Co-Investigator

GSU/GT Center for Advanced Brain Imaging Seed Grant

2010 - 2011

\$10,000 direct costs. No indirect costs allowed.

Aging and varieties of cognitive control, Short-Term Project Award, Co-Investigator

National Institute of Aging, High Priority Short-Term Project Award - R56

2009 - 2010

\$469,271 direct and indirect costs.

Research training grant in cognitive aging, Core Faculty Preceptor

National Institute of Aging, Institutional Training Grant – T32

2009 - 2014

\$2,257,040 direct and indirect costs.

E3. As Senior Personnel or Contributor

No data

E4. Proposals Submitted but Not Funded

Aging and components of cognitive control in associative memory, Principal Investigator

National Institute of Aging- Research Project Grant – R01

2016-2020

\$1,467,467 direct and indirect costs.

Submitted 2/2016

Pending

Aging and components of cognitive control in associative memory, Principal Investigator

National Institute of Aging- Research Project Grant – R01

2015-2018

\$1,147,752 direct and indirect costs.

Scored at 25th percentile but not funded

Cognitive control of associative memory in the young and old, Principal Investigator

National Science Foundation, Research Grant

2015-2018

\$582,153 direct and indirect costs.

Scored as "Highly competitive" but not funded

Aging and varieties of cognitive control, Co-Investigator

Principal Investigator: Paul Verhaeghen

National Institute of Aging, Research Project Grant - R01

2015 - 2020

\$2,165,668 direct and indirect costs.

Resubmitted 3/2016

Mapping parietal lobe function: episodic retrieval and coordinate-based processing, Co-

Investigator

Principal Investigator: Mark Wheeler

National Institute of Neurological Disorders and Stroke- Research Project Grant – R01

2015-2018

\$1,109,755 direct and indirect costs

Unscored, not resubmitted

Mapping parietal lobe function: episodic retrieval and coordinate-based processing, Co-

Investigator

Principal Investigator: Mark Wheeler

National Science Foundation, Research Grant

2015-2018

\$750,000 direct and indirect costs

Unscored, not resubmitted

F. OTHER SCHOLARLY AND CREATIVE ACCOMPLISHMENTS

No data

G. SOCIETAL AND POLICY IMPACTS

The broader impacts of my work are clear. Twenty percent of the world's population will be over the age of 60 by 2030. It is therefore of great importance to understand the neurocognitive processes that underlie age-related memory impairments so that we can develop targeted interventions to ameliorate these impairments. In my lab we conduct research to identify the mechanisms underlying memory impairments and conduct intervention studies using exercise and cognitive methods.

H. OTHER PROFESSIONAL ACTIVITIES

No data

V. TEACHING

A. COURSES TAUGHT

A. COURSES	TAUGHI		
Spring, 2016	Psyc 8020/8080	Neurocognitive models of aging	9 Students
Spring, 2016	Psyc 3020	Biopsychology, Undergraduate	27 Students
Fall, 2015	Psyc 4100	Behavioral Pharmacology	25 Students
Fall, 2015	Psyc 6041	Topics in Cognitive Aging	12 Students
Spring, 2015	Psyc 6013	Biopsychology, Graduate	10 Students
Spring, 2015	Psyc 6041	Topics in Cognitive Aging	10 Students
Fall, 2014	Psyc 3020	Biopsychology, Undergraduate	28 Students
Fall, 2014	Psyc 6041	Topics in Cognitive Aging	11 Students
Spring, 2014	Psyc 4100	Behavioral Pharmacology	40 Students
Spring, 2014	Psyc 6041	Topics in Cognitive Aging	7 Students
Fall, 2013	Psyc 3020	Biopsychology, Undergraduate	37 Students
Fall, 2013	Psyc 6041	Topics in Cognitive Aging	15 Students
Spring, 2013	Psyc 6013	Biopsychology, Graduate	19 Students
Spring, 2013	Psyc 6041	Topics in Cognitive Aging	10 Students
Fall, 2012	Psyc 3020	Biopsychology, Undergraduate	56 Students
Fall, 2012	Psyc 6041	Topics in Cognitive Aging	12 Students
Spring, 2012	Psyc 4100	Behavioral Pharmacology	25 Students
Spring, 2012	Psyc 6041	Topics in Cognitive Aging	12 Students
Fall, 2011	Psyc 3020	Biopsychology, Undergraduate	36 Students
Spring, 2011	Psyc 3020	Biopsychology, Undergraduate	35 Students
Fall, 2010	Psyc 3020	Biopsychology, Undergraduate	37 Students
Spring, 2010	Psyc 4100	Behavioral Pharmacology	54 Students

Fall, 2009 Psyc 8020/8080 Cognitive Neuroscience of 11 Students

Aging Seminar, Graduate

B. INDIVIDUAL STUDENT GUIDANCE

B1. PhD Students

Taylor James, B.S. Advised since Fall, 2015 Jonathan Strunk, M.S. Advised since Fall, 2011

M.S. thesis "Age-related changes in preparation for encoding" completed Spring, 2015.

Michael Dulas, Ph.D. Graduated Summer, 2014

Ph.D. thesis "Age-related changes in overcoming proactive interference in associative memory: the role of VLPFC-mediated post-retrieval selection" completed Summer, 2014.

Current Position: Post-doctoral fellow at University of Illinois, Urbana-Champaign

B2. M.S. Students

Lisa Weinberg, M.S. Graduated Fall, 2015

M.S. thesis "How acute stress during consolidation affects memory for negative materials with different arousal levels" completed Fall, 2015.

Sarah Reaves, M.S. Graduated Spring, 2015

M.S. thesis "The effect of retrospective attention on memory systems" completed Spring, 2015.

Current Position: Research Scientist at University of Florida

Brittany Graham, M.S. Graduated Fall, 2011

M.S. thesis "Mechanisms supporting recognition memory during music listening" completed Fall, 2011

B3. Undergraduate Students

Gemariah Valencia Advised since Summer, 2015 Catherine Stephens Advised since Summer, 2015

Zain Hassan Graduated Fall, 2015 **Brittany Corbett** Graduated Spring, 2015 Graduated Spring, 2015 Taylor James Lauren Morgan Graduated Spring, 2015 Sindhuja Surapaneni Graduated Spring, 2015 Jack Kuhns Graduated Spring, 2015 Graduated Spring, 2015 Neda Norouzi Graduated Spring, 2015 Darshna Patel Graduated Spring, 2015 Shekinah Phillips Belinda Jivapong Graduated Spring, 2015 An Do Graduated Spring, 2014 Graduated Spring, 2014 Parissa Rabbanifard Preety Bhardwai Graduated Spring, 2014 Behetrin Mohammed Graduated Spring, 2014 Shruti Chandramouli Graduated Spring, 2013 Graduated Spring, 2013 Lydia Maleknia Graduated Spring, 2013 Jessica Zuo Meghan Rose Donohue Graduated Spring, 2012 Yusuf Uddin Graduated Spring, 2012 Colin Blenis Graduated Spring, 2012 Mary Courtney Delvin Graduated Spring, 2012 Graduated Spring, 2012 Trang Nguyen Lindsey Threlkeld Graduated Spring, 2012

Kelly Bailey	Graduated Spring, 2011	
Benjamin Tsui	Graduated Spring, 2011	
Dina Dunn	Graduated Spring, 2011	
Yashu Jiang	Graduated Spring, 2010	
Kendell Worden	Graduated Spring, 2010	
Adarsh Shetty	Graduated Spring, 2010	
Rachel Newsome	Graduated Spring, 2010	

B4. Service on Thesis/Dissertation Committees

Dissertation Committees (2 students), 2015

Dissertation Committees (1 student), 2014

Dissertation Committees (4 students), 2010 – 2011

Master's Committees (2 students), 2015

Master's Committees (6 students), 2012 – 2013

Master's Committees (2 students), 2010 – 2011

Master's Committee (1 student), 2009-2010

Preliminary Exam Committees (1 student), 2014

Preliminary Exam Committees (1 student), 2012

Preliminary Exam Committees (3 students), 2010 – 2011

Preliminary Exam Committees (3 students), 2009 – 2010

Preliminary Exam Committees (2 students), 2008 – 2009

B5. Mentorship of Postdoctoral Fellows/Visiting Scholars

Visiting Scholars

Jason Arndt, Ph.D. Advised 2012-2013 Associate Professor of Psychology at Middlebury College

Postdoctoral Fellows

Amanda Gilchrist, Ph.D. Advised 2012-2013

Current Position: Assistant Professor of Psychology at Cottey College

Eric Leshikar, Ph.D. Advised 2009- 2011

Current Position: Assistant Professor of Psychology at University of Illinois, Chicago

C. OTHER TEACHING ACTIVITIES

I redeveloped the undergraduate Behavioral Pharmacology elective course that had not been taught for many years. I incorporated topics from neuroscience to culture and law and it is one of the most popular electives in our department taken by students from the colleges of science and engineering.

I am working to develop the first School of Psychology summer camp for high school students.

VI. SERVICE

A. PROFESSIONAL CONTRIBUTIONS

Review Activities

Journals

Aging, Neuropsychology, and Cognition, Editor in Chief

Brain and Cognition

Brain Research

Cerebral Cortex

Cortex

Frontiers, Editorial Board

Journal of Experimental Psychology: Applied

Journal of Experimental Psychology: Learning and Memory

Journal of Cognitive Neuroscience

Journal of Neuroscience
NeuroImage, **Editorial Board**Neurobiology of Aging
Neuropsychologia
Neuroscience Letters
Perspectives on Psychological Science
Psychology and Aging
PLoS One

Granting agencies

National Science Foundation

Panelist, Interdisciplinary Behavioral and Social Sciences Micro Panel

Professional Meetings Organized

North Georgia Regional Memory Meeting (NGRAMM). Atlanta, Georgia. September, 2016.

North Georgia Regional Memory Meeting (NGRAMM). Atlanta, Georgia. September, 2015.

Course instructor of *Biology and Disorders of Learning and Memory*. Cold Spring Harbor Laboratory, Cold Spring Harbor, New York. July, 2013.

International Society for Behavioral Neuroscience annual conference. Half Moon Bay, California. June, 2012

Cognitive Aging Conference. Atlanta, Georgia. April, 2010, 2012, 2014, 2016

Membership in Professional Societies

Southeastern Workers in Memory

Psi Chi, Faculty Advisor

Atlanta chapter Society for Neuroscience

Center for Behavioral Neuroscience

Society for Neuroscience

Cognitive Neuroscience Society

Phi Sigma Honor Society

Sigma XI

B. PUBLIC AND COMMUNITY SERVICE

Atlanta Society for Neuroscience Georgia Tech Representative, 2010-present Grand Awards Judge, Intel International Science and Engineering Fair, Atlanta GA, 2008 – 2009 Judge, Siemens Math, Science and Technology competition, GA Tech, 2008 – 2009

C. INSTITUTE CONTRIBUTIONS

College of Sciences B.S. Neuroscience Curriculum Committee, 2015

Cognition and Brain Sciences Faculty Search Committee, 2014

NeuroX Task Force, 2014

College of Sciences Diversity Committee, 2012

CABI Director Faculty Search Committee, 2011-2012

CABI Operations Committee, 2010-present

Cognition and Brain Sciences Faculty Search Committee, 2012-2013

Chair's Advisory Committee, 2009 – 2010, 2012

Colloquium Speaker Series Coordinator, 2010 –2012

Cognitive Aging Faculty Search Committee, 2010-2011

Graduate Admissions Committee, 2008 – 2010

School of Psychology Awards Committee, 2008 – 2009