

CURRICULUM VITA

JULIE ANNA DUMAS

Department of Psychiatry
University of Vermont
UHC Arnold 6
1 South Prospect St
Burlington, VT 05401
(802) 847-2523 office
(802) 847-7889 fax
Julie.Dumas@uvm.edu

EDUCATION

University of North Carolina, Chapel Hill, NC. (1996 - 2002)
Ph.D. in Cognitive Psychology, May 2002
Minor in the Neurobiology Curriculum

University of North Carolina, Chapel Hill, NC. (1999)
M.A. in Cognitive Psychology

University of Virginia, Charlottesville, VA. (1992 - 1996)
B.A. in Psychology and Biology with High Distinction.

CURRENT POSITION

Associate Professor, Research Track, Clinical Neuroscience Research Unit, Department of Psychiatry, University of Vermont College of Medicine, July 2012 – present.

Associate Director, Clinical Neuroscience Research Unit, Department of Psychiatry, University of Vermont College of Medicine, October 2012 – present

PROFESSIONAL EXPERIENCE

Assistant Professor, Research Track, Clinical Neuroscience Research Unit, Department of Psychiatry, University of Vermont College of Medicine, August 2006 – June 2012.

Post-Doctoral Fellow, Clinical Neuroscience Research Unit, Department of Psychiatry, University of Vermont, October 2003 – July 2006.

Research Scholar, Department of Psychology, Middlebury College, Spring 2003-Winter 2004.

Visiting Assistant Professor, Department of Psychology, Middlebury College, Fall 2002, Winter 2003, and Fall 2003.

HONORS AND AWARDS

Top Poster Nominee from the Society for Biological Psychiatry, 2011 for “Estradiol reversal of anticholinergic brain activation in postmenopausal women”. One of 47 selected out of 600 to be considered for the Top Poster Award for Clinical/Translational Research

Advanced Research Institute for Geriatric Psychiatry Scholar, 2011, 2012.

Distinguished Member of the National Society of Collegiate Scholars, 2009.

American College of Neuropsychopharmacology Young Investigator Memorial Travel Award, December 2008.

Barry Lebowitz Early Career Scientist Award, American Association for Geriatric Psychiatry, March 2008.

Summer Research Institute in Geriatric Psychiatry Scholar, July 2006.

International College of Geriatric Psychoneuropharmacology (ICGP) International Junior Investigator Award 2005.

Institute on Aging at the University of North Carolina small research grant 1998.

Frank W. Finger Undergraduate Award 1996. Awarded by the University of Virginia Psychology Department.

RESEARCH INTERESTS

I am interested in the study of the biology underlying age changes in the brain and the corresponding changes in cognition and mood. Specifically, I am interested in using psychopharmacological and functional imaging tools to address questions about age changes in episodic memory, working memory, and attention.

SOCIETY MEMBERSHIP

Psychonomic Society, 2002 - present

Society for Neuroscience, 2004 – present

Cognitive Neuroscience Society, 2007 – present

American Association for Geriatric Psychiatry, 2007 – present

Organization for Human Brain Mapping 2011-present

American Psychological Association, 2004-2006, 2013-present

RESEARCH TRAINING AND SUPPORT

Title: Dietary Saturated and Monounsaturated Fatty Acids and Cognition
Armin Grams, Ph.D. Memorial Research Award
Sponsor: University of Vermont Center on Aging
Dates: 2014-2016
Role: Co-Principal Investigator
TDC: \$50,000

Title: Advanced Research Institute in Geriatric Psychiatry
Sponsor: Weil Cornell Medical College and the National Institute of Mental Health
Dates: 2011, 2012
Role: Participant in program for mentoring young investigators in the field of geriatric psychiatry.

Title: Hormone and Neurotransmitter Interactions in Cognitive Aging
Sponsor: National Institutes of Health/National Institute on Aging
Grant Number: K01 AG030380
Dates: September 2008 - August 2013
Role: Principal Investigator
TDC: \$85,000 per year

Title: Hormone and Neurotransmitter Interactions in Cognitive Aging
Sponsor: National Institutes of Health/National Institute on Aging
Grant Number: K01 AG030380 – 02S1
Dates: September 2009 - August 2010
Role: Principal Investigator
TDC: \$50,000

Title: Cognitive and Emotional Alterations in Geriatric Depression: A Brain fMRI Study
Sponsor: NARSAD Young Investigator Award
Dates: 2008-2010
Role: Principal Investigator
TDC: \$60,000

Title: Estrogen Attenuation of Cholinergic-Induced Alterations in Fronto-Parietal Brain Activation during Working Memory in Older Women
Sponsor: American Federation for Aging Research
Grant Number: 08183
Dates: 2008-2009
Role: Principal Investigator
TDC: \$60,000

Title: Modeling Initial Smoking Abstinence and Relapse Risk
Sponsor: National Institutes of Health/National Institute of Drug Abuse

Grant Number: R01 DA008076
Dates: March 1, 2009 - Feb 28, 2012
Principal Investigator: Stephen Higgins, Ph.D.
Role: Co-Investigator
TDC: \$525,566

Title: The Functional Neuroanatomy of Acute Nicotinic Modulation of Impulsivity in Women
Sponsor: NIH/NIDA
Grant Number: ISTART/R03 DA023460
Dates : 04/01/08-03/31/09
Principal Investigator: Alexandra Potter, Ph.D.
Role : Co-investigator
TDC : \$150,000

Title: Estrogen Effects on Cholinergic Function in Older Women
Sponsor: National Institutes of Health/ National Institute on Aging
Grant Number: NIA R01 AG021476
Dates: September 2009-August 2014
Principal Investigator: Paul Newhouse, M.D.
Role: Co-Investigator
TDC: \$490,000 per year

Title: Estrogen and Cognition in Post-Menopausal Women
Sponsor: NIA, Ruth L. Kirchstein NRSA F32
Grant Number: F32 AG023430
Dates: August 2004 – July 2006
Role: Principal Investigator
Individual Postdoctoral Fellowship
TDC: \$40,000 per year

Title: Clinical Research Loan Repayment Program
Sponsor: National Institutes of Health
Dates: September 2005-September 2007
Role: Clinical Researcher Loan Repayment Recipient

Title: Summer Research Institute in Geriatric Psychiatry
Sponsor: University of California at San Diego and the National Institute of Mental Health
Dates: July 22, 2006 – July 28th, 2006.
Role: Participant in program to provide mentorship to junior investigators in the field of geriatric psychiatry.

Title: Estrogen Effects on Cholinergic Function in Older Women.
Sponsor: NIA
Grant Number: R01 AG021476
Dates: 2003-2008
Principal Investigator: Paul Newhouse, M.D.

Role: Co-Investigator
TDC: \$250,000 per year

Title: A Brain fMRI Study of Cholinergic Blockade in Normal Post-Menopausal Women.
Sponsor: Fletcher Allen Health Care Trustees Research Fund
Dates: 2003-2005
Principal Investigator: Paul Newhouse, M.D.
Role: Co-Investigator
TDC: \$100,000

Title: Double-Blind, Randomized, Placebo-Controlled, Safety and Scopolamine-Reversal Study of LY593093 in Healthy Volunteers
Sponsor: Lilly
Dates: 2004-2005
Principle Investigator: Paul Newhouse, M.D.
Role: Co-Investigator
TDC: \$120,000

PUBLICATIONS – Peer Reviewed (* indicates UVM student author)

Peng, S.-L., Dumas, J.A., Park, D.C., Liu, P., Filbey, F.M., McAdams, C.J., Pinkham, A.E., Adinoff, B., Zhang, R., Lu, H. (2014). Age-related increase of resting metabolic rate in the human brain. *Neuroimage*, *96*:176-183..

Lomond, K.V., Henry, S.M., Jacobs, J.V., Hitt, J.R., Horak, F.B., Cohen, R.G., Schwartz, D., Dumas, J.A., Naylor, M.R., Watts, R. and DeSarno, M.J. (2013). Protocol to assess the neurophysiology associated with multi-segmental postural coordination. *Physiological Measurement*, *34*, N97-N105.

Seminowicz, D.A., Shpaner, M., Keaser, M.L., Krauthamer, G.M.*, Mantegna, J., Dumas, J.A., Newhouse, P.A., Filippi, C., & Naylor, M.R. (2013). Cognitive behavioral therapy increases prefrontal cortex gray matter in patients with chronic pain. *Journal of Pain*, *14*(12):1573-1584.

Dumas, J.A., Makarewicz, J., Schaubhut, G.L.*, Devins, R., Albert, K.*, Dittus, K. & Newhouse, P.A. (2013). Chemotherapy Altered Brain Functional Connectivity in Women with Breast Cancer: A Pilot Study. *Brain Imaging and Behavior*, *7*(4): 524-532.

Newhouse, P.A., Albert, K.M.*, Astur, R., Johnson, J., Naylor, M.R., & Dumas, J.A. (2013). Tamoxifen Improves Cholinergically-Modulated Cognitive Performance in Postmenopausal Women. *Neuropsychopharmacology*, *38*(13):2632-2643.

Kien, C.L., Bunn, J.Y., Tompkins, C.L., Dumas, J.A., Crain, K.I., Ebenstein, D.B., Koves, T.R., & Muoio, D.M. (2013). Substituting dietary monounsaturated fat for saturated fat is

- associated with increased daily physical activity and resting energy expenditure and with changes in mood. *The American Journal of Clinical Nutrition*, 97, 689-697.
- Dumas, J.A., Kutz, A.M. *, McDonald, B.C., Naylor, M.R., Pfaff, A.C., Saykin, A.J., & Newhouse, P.A. (2013). Increased Working Memory-Related Brain Activity in Middle-Aged Women with Cognitive Complaints. *Neurobiology of Aging*, 34, 1145-1147.
- Cannizzaro, M.S., Dumas, J., Prelock, P., & Newhouse, P.A. (2012). Organizational Structure Reduces Processing Load in the Prefrontal Cortex During Discourse Processing of Written Text: Implications for High-Level Reading Issues After TBI. *Perspectives on Neurophysiology and Neurogenic Speech and Language Disorders*, 22(2), 67-78.
- Dumas, J.A., Kutz, A.M.*, Naylor, M.R., Johnson, J.V., & Newhouse, P.A. (2012). Estradiol altered anticholinergic brain activity during working memory in postmenopausal women. *Neuroimage*, 60, 1394-1403.
- Dumas, J.A., Albert, K.M.*, Naylor, M.R., Sites, C.K, Benkelfat, C., & Newhouse, P.A. (2012). The effects of age and estrogen on stress responsivity in older women. *American Journal of Geriatric Psychiatry*. 20(9):734-743
- Newhouse, P.A., Potter, A.S., Dumas, J.A., & Thiel, C.M. (2011). Functional brain imaging of nicotinic effects on higher cognitive processes. *Biochemical Pharmacology*, 82, 943-951.
- Dumas, J.A. & Newhouse, P.A. (2011). The cholinergic hypothesis of cognitive aging revisited again: Cholinergic functional compensation. *Pharmacology, Biochemistry and Behavior*. 99, 254-261.
- Dumas, J.A., Kutz, A.M.*, Naylor, M.R., Johnson, J.V., & Newhouse, P.A. (2010). Increased memory load-related frontal activation after estradiol treatment in postmenopausal women. *Hormones and Behavior*, 58, 929-935.
- Dumas, J.A., McDonald, B.C., Saykin, A.J., McAllister, T.W., West, J.D., Hynes, M.L., & Newhouse, P.A. (2010). Cholinergic modulation of hippocampal activity during episodic memory encoding in postmenopausal women: A pilot study. *Menopause*, 17(4), 852-859.
- Newhouse, P.A., Dumas, J.A., Wilkins, H.*, Coderre, E.*, Sites, C., Naylor, M.R., Benkelfat, C., & Young, S.N. (2010). Estrogen treatment impairs cognitive performance following psychosocial stress and monoamine depletion in postmenopausal women. *Menopause*, 17(4), 860-873.
- Coderre, E.*, Filippi, C., Newhouse, P., & Dumas, J.A. (2009). Ichi, Ni, 3, 4: Neural representation of kana, kanji, and Arabic numbers in native Japanese speakers. *Brain and Cognition*, 70, 289-296.

- Maki, P.M. & Dumas, J.A. (2009). Mechanisms of action of estrogen in the brain: Insights from human neuroimaging and psychopharmacological studies. *Seminars in Reproductive Medicine*, 27, 250-259.
- Dumas, J., Saykin, A., McAllister, T., McDonald, B., Hynes, M., & Newhouse, P. (2008). Nicotinic versus muscarinic blockade alters verbal working memory performance and brain activation patterns in older women. *American Journal of Geriatric Psychiatry*, 16, 272-282.
- Coderre, E.*, Filippi, C., Newhouse, P., & Dumas, J. (2008). The Stroop effect in kana and kanji scripts in native Japanese speakers: An fMRI study. *Brain and Language*, 107, 124-132.
- Dumas, J., Hancur-Bucci, C., Naylor, M., Sites, C., & Newhouse, P. (2008). Estrogen interacts with the cholinergic system to affect verbal memory in post-menopausal women: Evidence for the critical period hypothesis. *Hormones and Behavior*, 53, 159-169.
- Dumas, J. A. & Hartman, M. (2008). Adult age differences in the access and deletion functions of inhibition. *Aging, Neuropsychology, and Cognition*, 15: 330-357.
- Newhouse, P, Dumas, J., Hancur-Bucci, C., Naylor, M., Sites, C., Benkelfat, C., & Young, S. (2008). Estrogen administration negatively alters mood following monoaminergic depletion and psycho-social stress in post-menopausal women. *Neuropsychopharmacology*. 33, 1514-1527.
- Dumas, J., Hancur-Bucci, C., Naylor, M., Sites, C., & Newhouse, P. (2006). Estrogen treatment effects on anticholinergically-induced cognitive dysfunction in post-menopausal women. *Neuropsychopharmacology*, 31, 2056-2078.
- Dumas, J., Edgren, C., & Newhouse, P. (2006). Estrogen therapy after menopause: Role in normal cognition and Alzheimer's disease. *Aging Health*, 2, 955-966
- Dumas, J., Salerno, J., & Newhouse, P. (2006). The role of estrogen in the development of age-related cognitive impairment and dementia. *Psychiatric Times*.
- Dumas, J. & Hartman, M. (2003). Adult age differences in temporal and item memory. *Psychology and Aging*, 18, 573-586.
- Hartman, M., Dumas, J., & Nielsen, C. (2001). Age differences in updating working memory: Evidence from the delayed-matching-to-sample test. *Aging, Neuropsychology, and Cognition*, 8, 14-35
- Willingham, D. B., & Dumas, J. A. (1997). Long-term retention of a motor skill: Implicit sequence knowledge is not retained after a one year delay. *Psychological Research*, 60, 113-119.

PUBLICATIONS – Invited Editorial

Dumas, J.A. (2013). Lifetime Hormone Exposure and Cognition in Postmenopausal Women with Breast Cancer. *Menopause*, 20(9): 883-885.

PUBLICATIONS – Book Review

Dumas, J.A. (2008). Clearing up the confusion on estrogen in the brain? A first step. *Sex Role*, 60(5), 444-446.

INVITED LECTURES

Cognitive Issues Surrounding Breast Cancer Therapy, October 4, 2013, 16th Annual Breast Cancer Conference, sponsored by the Vermont Cancer Center, Burlington, VT. Co-panelist with Patricia O'Brien, M.D., Kim Dittus, M.D., & Owen Drudge, Ph.D.

Cognitive Issues Surrounding Breast Cancer Therapy, October 7, 2011, 14th Annual Breast Cancer Conference, sponsored by the Vermont Cancer Center, Burlington, VT. Co-panelist with Patricia O'Brien, M.D. and Kim Dittus, M.D.

Cholinergic Systems and Aging, September 2008, Dementia Conference sponsored by the University of Vermont College of Medicine, Burlington, VT

Nicotinic versus Muscarinic Blockade Alters Verbal Working Memory Performance and Brain Activation Patterns in Older Women. Paper presented at the Award Winner session for the Barry Lebowitz Early Career Scientist Award at the annual meeting of the American Association for Geriatric Psychiatry, Orlando, FL.

The Cholinergic Hypothesis of Cognitive Aging Revisited Again: Insights from Estrogen Studies in Older Women, January 2008, Psychiatry Grand Rounds, University of Vermont College of Medicine, Burlington, VT

Estrogen and Cognition in Postmenopausal Women, October 2007, Psychiatry Grand Rounds, Maine Medical Center, Portland, ME

Functional Imaging and Dementia: The State of the Art, September 2007, Dementia Conference sponsored by the University of Vermont College of Medicine, Stowe, VT

Normal Cognitive Aging and Mild Cognitive Impairment, September 2006, Dementia Conference sponsored by the University of Vermont College of Medicine, Burlington, VT

PRESENTATIONS (* indicates UVM student author)

Dumas, J.A., Makarewicz, J., Naylor, M.R., & Newhouse, P.A. (2013). COMT genotype interacted with dopaminergic stimulation to modulate working memory-related brain activation in

- postmenopausal women. Poster presented at the 44th Annual meeting of the Society for Neuroscience, San Diego, CA.
- Newhouse, P.A., Albert, K., Astur, R., Johnson, J.V., Naylor, M.R., & Dumas, J.A. (2013). Tamoxifen produces estrogen-like agonist effects on cholinergically mediated learning in postmenopausal women. Poster presented at the 44th Annual meeting of the Society for Neuroscience, San Diego, CA.
- Zurkovsky, L., Dumas, J.A., Woodward, N.D., & Newhouse, P. (2013). Cognitive complaints after menopause correlate with functional connectivity of the frontal cortex and medial temporal lobe. Poster presented at the 44th Annual meeting of the Society for Neuroscience, San Diego, CA.
- Dumas, J.A. (2013). Estrogen modulation of emotional processing in pre- and post menopausal women. Symposium presentation at the 68th Annual Convention, Society for Biological Psychiatry, San Francisco, CA.
- Zurkovsky, L., Dumas, J.A., Woodward, N.D., & Newhouse, P. (2013). Cognitive complaints after menopause correlate with functional connectivity of the medial temporal lobe. Poster presented at the 68th Annual Convention, Society for Biological Psychiatry, San Francisco, CA.
- Dumas, J.A. (2013). Cholinergic and dopaminergic contributions to normal cognitive aging. Symposium presentation at the Annual Meeting of the American Association for Geriatric Psychiatry, Los Angeles, CA.
- Dumas, J.A. (2013). Hormone and Neurotransmitter Interactions in the Brain: Effects on Cognition and Brain Activation in Postmenopausal Women. Paper presented at the 41st Annual Meeting of the International Neuropsychological Society, Waikoloa, HI.
- Dumas, J.A., Broadwell, C., Soung, J., Casson, P., Naylor, M.R., & Newhouse P.A. (2012). Prior hormone therapy use in postmenopausal women reduced working memory-related brain activation. Paper presented at the 43rd Annual meeting of the Society for Neuroscience, New Orleans, LA.
- Kamkwalala, A.R., Kellar, K., Aisen, P., White, H., Wesnes, K., Pfaff, A., Dumas, J.A., Howard, D., Levin, E., Newhouse, P., (2012). Nicotine Treatment of Mild Cognitive Impairment (MCI): Open Label Follow-Up of Double-Blind Phase. Poster presented at the 43rd Annual meeting of the Society for Neuroscience, New Orleans, LA.
- Shpaner, M., Seminowicz, D., Keaser, M., Mantangna, J., Dumas, J.A., Filippi, C. Lieberman, G., & Naylor, M.R. (2012). Anatomical and functional changes following cognitive behavioral therapy in patients with chronic musculoskeletal pain. Poster presented at the 43rd Annual meeting of the Society for Neuroscience, New Orleans, LA.

- Newhouse, P.A., Kutz, A.*, Pfaff, A.*, McDonald, A., Saykin, A., West, J., Devins, R., Casson, P., Naylor, M.R., & Dumas, J.A. (2012). Estradiol treatment increases cortical gray matter in healthy postmenopausal women. Poster presented at the 67th Annual Convention, Society for Biological Psychiatry, Philadelphia, PA.
- Dumas, J.A., Carstens, K.*, & Potter, A. (2012). Nicotine Decreased Activation in the Brain Regions Involved in Emotional Processing in Non-Smoking Adults. Poster Presented at the 2012 Annual Meeting of the Cognitive Neuroscience Society, Chicago, IL.
- Dumas, J.A. (2012). The Cholinergic Hypothesis of Aging Revisited Again: A Cholinergic Theory of Aging, Cognition and Disease. Paper presented at the Annual Meeting of the American Association for Geriatric Psychiatry, Washington, DC.
- Dumas, J.A., Kutz, A.M.*, Pfaff, A.*, Naylor, M.R., Casson, P., & Newhouse P.A. (2011). Increased frontal activation during working memory performance in postmenopausal women with cognitive complaints. Paper presented at the 42nd Society for Neuroscience Annual Meeting, Washington, DC.
- Carstens, K.*, Potter, A.S., Newhouse, P.A., & Dumas, J.A. (2011). Nicotine Increases Activation in the Anterior Insular Cortex during Emotional Encoding Task in Non-Smoking Adults. Poster presented at the 42nd Society for Neuroscience Annual Meeting, Washington, DC.
- Newhouse, P.A., Kutz, A.*, Pfaff, A.*, McDonald, A., Saykin, A., West, J., Devins, R., Casson, P., Naylor, M., & Dumas, J.A. (2011). Estradiol treatment increases cortical gray matter in healthy postmenopausal women. Poster presented at the 42nd Society for Neuroscience Annual Meeting, Washington, DC.
- Kutz, A.M.*, Newhouse, P.A., & Dumas, J.A. (2011). Brain activation during emotional processing in geriatric depression. Poster presented at the 25th annual meeting of the Society for Research in Psychopathology, Boston, MA.
- Naylor, M.R., Krauthamer, G.M., Dumas, J., Lieberman, G.*, McCallion, E.*, Perelman, H.*, Filippi, C., & Newhouse, P. (2011) Functional and structural neuroanatomical effects of cognitive behavioral therapy. Paper presented at the 15th World Congress of Psychiatry, Buenos Aires, Argentina.
- Dumas, J.A., Kutz, A.M.*, Naylor, M.R., Johnson, J.V., & Newhouse, P.A. (2011) Estradiol reversal of anticholinergic-related brain activation in postmenopausal women. Poster presented at the 17th annual meeting for the Organization for Human Brain Mapping, Quebec, QC, Canada.
- Albert, K.M.*, Dumas, J.A., Kelly, B., Dittus, K., & Newhouse, P.A. (2011). Working memory-related brain activity increases following breast cancer chemotherapy. Poster presented at the 17th annual meeting for the Organization for Human Brain Mapping, Quebec, QC, Canada.

- Naylor, M.R., Krauthamer, G.M.*, Seminowicz, D., Dumas, J.A., Mantegna, J., Perelman, H.*, McCallion, E.*, Filippi, C., Newhouse, P.A. (2011). Structural and Functional Treatment Effects of Cognitive Behavioral Therapy in Chronic Pain. Poster presented at the 17th annual meeting for the Organization for Human Brain Mapping, Quebec, QC, Canada.
- Dumas, J.A., Kutz, A.M.*, Naylor, M.R., Johnson, J.V., & Newhouse, P.A. (2011) Estradiol reversal of anticholinergic-related brain activation in postmenopausal women. Poster presented at the 66th Annual meeting of the Society of Biological Psychiatry, San Francisco, CA. Poster nominated for **Top Poster Award**: one of 47 out of 600 nominated for the clinical/translational award.
- Dumas, J.A. & Newhouse, P.A. (2011). Working memory in geriatric depression: Aberrant activation of emotion-related brain areas. . Poster presented at the 66th Annual meeting of the Society of Biological Psychiatry, San Francisco, CA.
- Newhouse, P.A., Kutz, A.M.*, Naylor, M.R., & Dumas, J.A. (2011). Responsivity of postmenopausal women to estradiol induced brain changes in emotional circuitry. Poster presented at the 66th Annual meeting of the Society of Biological Psychiatry, San Francisco, CA.
- Albert, K.M.*, Dumas, J.A., Kelly, B., Dittus, K., & Newhouse, P.A. (2011). Working memory-related brain activity increases following breast cancer chemotherapy. Poster presented at the 66th Annual meeting of the Society of Biological Psychiatry, San Francisco, CA.
- Dumas, J.A. (2011) Hormone and Neurotransmitter Interactions in the Brain: Effects on Brain Activity and Cognition in Older Women. Paper presented at the Annual Meeting of the American Association for Geriatric Psychiatry, San Antonio, TX.
- Dumas, J.A., Kutz, A.M.*, Pfaff, A.C.*, Naylor, M.R., Johnson, J.V., Newhouse, P.A. (2010). Estradiol decreases scopolamine-induced activation in the frontal lobes during a working memory task in postmenopausal women. Poster presented at the 41st Society for Neuroscience Annual Meeting, San Diego, CA.
- Newhouse, P.A., Kutz, A.M.*, Pfaff, A.C.*, Naylor, M.R., Johnson, J.V., Dumas, J.A. (2010) Estradiol treatment alters brain activation following nicotinic blockade in postmenopausal women. Poster presented at the 41st Society for Neuroscience Annual Meeting, San Diego, CA.
- Kutz, A.M.*, Dumas, J.A., Newhouse, P.A. (2010). Estradiol administration increases activation in areas associated with emotional processing in post-menopausal women. Poster presented at the 41st Society for Neuroscience Annual Meeting, San Diego, CA.
- Albert, K.*, Dumas, J.A., Kelly, B.K., Dittus, K.L., Newhouse, P.A. (2010). Breast cancer chemotherapy alters brain activity during working memory. Poster presented at the 41st Society for Neuroscience Annual Meeting, San Diego, CA.

- Dumas, J.A., Kutz, A.M.*, Pfaff, A.C.*, & Newhouse, P.A. (2010). Estrogen Modulation of Frontal Lobe Circuitry During Verbal Working Memory in Older Women. Poster Presented at the 2010 Annual Meeting of the Cognitive Neuroscience Society, Montreal, QC, Canada.
- Kutz, A.M.*, Broadwell, C., Wilkins, H.L.*, Pfaff, A.C.*, Newhouse, P.A., & Dumas, J.A. (2010). Estradiol Modulates Emotional Memory Encoding in Young Women. Poster Presented at the 2010 Annual Meeting of the Cognitive Neuroscience Society, Montreal, QC, Canada.
- Broadwell, C.E., Wilkins, H.L.*, Kutz, A.M.*, Newhouse, P. A., Dumas, J.A. (2010). The Effects of Hormone Variation During the Menstrual Cycle on Emotional Memory. Poster presented and President's Presenters Award Winner at the Annual Meeting of the Society for Gynecologic Investigation. Orlando, FL.
- Dumas, J.A. & Newhouse, P.A. (2009). Working Memory and Emotional Processing in Geriatric Depression: An fMRI Study. Poster Presented at the 40th Annual Meeting of the Society for Neuroscience, Chicago, IL.
- Kutz, A.M.*, Newhouse, P.A., & Dumas, J.A. (2009). Age Difference in Memory for Emotional Information: The Effect of Encoding Instructions and Emotional Valence. Poster Presented at the 40th Annual Meeting of the Society for Neuroscience, Chicago, IL.
- Naylor, M.R., Krauthamer, G.M., Dumas, J.A., Filippi, C.G., & Newhouse, P.A. (2009). fMRI Investigates Treatment Response to CBT in Patients with Chronic Pain. Poster Presented at the 40th Annual Meeting of the Society for Neuroscience, Chicago, IL.
- Dumas, J.A., Kutz, A.M.*, Edgren, C.E., & Newhouse, P.A. (2009). Estrogen Modulation of Frontal Lobe Circuitry During Verbal Working Memory in Older Women. Poster Presented at the 2009 American Federation for Aging Research Grantee Conference, Santa Barbara, CA.
- Dumas, J.A. (2009). Hormones, Neurotransmitters, and Cognitive Aging: A New Hypothesis. Paper presented at the 14th International Congress of the International Psychogeriatric Association, Montreal, ON, Canada
- Singh, P, Quick, A., Dumas, J.A., Filippi, C.G., Lenox, S., Tandan, R. (2009). Longitudinal Changes in Brain Activation on fMRI in ALS in Response to Finger Tapping and Word Generation Tasks. Poster presented at the 61st Annual Meeting of the American Academy of Neurology.
- Kutz, A.M.*, Newhouse, P.A., & Dumas, J.A. (2009). Emotion Aids Attentional Processes in Binding Source and Item Information in Older Adults. Poster Presented at the 2009 Annual Meeting of the Cognitive Neuroscience Society, San Francisco, CA.

- Dumas, J.A. (2009). Aging, Sex Steroids, and Circuits: Hormonal Effects on Brain Activity Associated with Cognitive and Emotional Processes. Paper presented at the annual meeting of the American Association for Geriatric Psychiatry, Honolulu, HI
- Dumas, J. Saykin, A., McAllister, T., McDonald, B., Hynes, M., West, J., & Newhouse, P. (December, 2008). Cholinergic Modulation of Hippocampal Activity During Episodic Memory Encoding in Older Women. Poster presented at the 47th Annual Meeting of the American College of Neuropsychopharmacology, Scottsdale, AZ.
- Dumas, J.A., Coderre, E.L.*, Edgren, C.L., Naylor, M.R., Johnson, J., & Newhouse, P.A. (November 2008). Tamoxifen Reverses Impairments from Cholinergic Blockade in Postmenopausal Women: A Comparison of Explicit and Implicit Memory. Poster presented at the 31st Annual Meeting of the Society for Neuroscience, Washington, DC.
- Newhouse, P.A., Dumas, J.A., Coderre, E.L.*, Edgren, C.L., Naylor, M.R., Johnson, J., & Astur, R. (November 2008). Tamoxifen Treatment Improves Visual-Spatial Learning using the Virtual Morris Water Maze following Cholinergic Blockade in Postmenopausal Women. Poster presented at the 31st Annual Meeting of the Society for Neuroscience, Washington, DC.
- Wilkins, H.L.*, Dumas, J.A., Coderre, E.*, Sites, C., Naylor, M.R., Benkelfat, C., Young, S., & Newhouse, P.A. (November 2008). Estrogen Impairs Cognition After Psychosocial Stress in Postmenopausal Women. Poster presented at the 31st Annual Meeting of the Society for Neuroscience, Washington, DC.
- Dumas, J. & Newhouse, P. (March 2008). The Effects of Menopause on Cholinergic Functioning and Cognitive Aging. Paper presented at the annual meeting of the American Association for Geriatric Psychiatry, Orlando, FL
- Dumas, J., Edgren, C., Coderre, E.L.*, Naylor, M., Johnson, J., & Newhouse, P. (November 2007). Estradiol Interacts with the Cholinergic System to Affect Verbal Memory in Postmenopausal Women: Evidence for the Critical Period Hypothesis. Poster presented at the 30th Annual Meeting of the Society for Neuroscience, San Diego, CA
- Newhouse, P. Dumas, J.A., Edgren, C., Coderre, E.L.*, Naylor, M. & Johnson, J. (November 2007). Estradiol With or Without Progesterone Effects on Cholinergic-Related Cognitive Performance in Older Women. Poster presented at the 30th Annual Meeting of the Society for Neuroscience, San Diego, CA
- Dumas, J. (October 2007). Estrogen-Neurotransmitter Interaction Effects in Cognition and Mood in Postmenopausal Women. Paper presented at the 7th Annual Meeting of the International College of Geriatric Psychoneuropharmacology, San Diego, CA.
- Dumas, J. & Newhouse, P. (May 2007). The Cholinergic Hypothesis of Cognitive Aging Revisited Again: A Cholinergic Theory of Cognitive Aging and Disease. Paper presented at the 62nd Annual Meeting of the Society for Biological Psychiatry, San Diego, CA.

- Dumas, J. Saykin, A., McAllister, T., McDonald, B., Hynes, M., West, J., & Newhouse, P. (May, 2007). Muscarinic and Nicotinic Cholinergic Modulation of Verbal Episodic Memory Encoding-Induced Activity in Older Women. Poster presented at the 62nd Annual Meeting of the Society for Biological Psychiatry, San Diego, CA
- Newhouse, P., Dumas, J., Naylor, M., & Johnson, J. (May, 2007) Hormonal Modulation of Cholinergic System-Related Cognitive Function after Menopause. Paper presented at the 62nd Annual Meeting of the Society for Biological Psychiatry, San Diego, CA
- Newhouse, P. Dumas, J., Naylor, M., Edgren, C., & Johnson, J. (May 2007). Estradiol Dose May Be Important in Determining Cognitive Performance in Older Women. Poster presented at the 62nd Annual Meeting of the Society for Biological Psychiatry, San Diego, CA.
- Coderre, E.L.*, Filippi, C., Newhouse, P., Dumas, J. (May 2007). A Brain fMRI Study of Language Processing in Native Japanese Speakers. Poster presented at the Annual Meeting of the Cognitive Neuroscience Society, New York, NY.
- Dumas, J. & Newhouse, P. (March, 2007). Hormones, the Cholinergic System, and Cognitive Aging: A New Hypothesis. Paper presented at the 20th Annual Meeting of the American Association for Geriatric Psychiatry, New Orleans, LA.
- Dumas, J. Saykin, A., McAllister, T., McDonald, B., Hynes, M., West, J., & Newhouse, P. (October, 2006). Muscarinic and Nicotinic Cholinergic Modulation of Verbal Episodic Memory Encoding-Induced Activity in Older Women. Poster presented at the 36th Annual Meeting of the Society for Neuroscience, Atlanta, GA.
- Newhouse, P., Dumas, J. Edgren, C. & Naylor, M. (October, 2006). Differential Estradiol Dose Effects on Cognitive Performance After Anticholinergic Challenge in Older Women. Poster presented at the 36th Annual Meeting of the Society for Neuroscience, Atlanta, GA.
- Dumas, J. Saykin, A., McAllister, T., McDonald, B., Hynes, M., Flashman, L., & Newhouse, P. (May, 2006). Muscarinic and Nicotinic Blockade Alters Verbal and Spatial Working Memory Performance and Brain Activation Patterns in Older Women. Poster presented at the 61st Annual Meeting of the Society of Biological Psychiatry, Toronto, ON.
- Dumas, J. Saykin, A., McAllister, T., McDonald, B., Hynes, M., Flashman, L., & Newhouse, P. (November, 2005). Muscarinic and Nicotinic Blockade Alters Working Memory Performance and Brain Activation Patterns in Older Women. Poster presented at the 35th Annual Meeting of the Society for Neuroscience, Washington, DC.
- Newhouse, P., Dumas, J., Naylor, M., Salerno, J., Hancur-Bucci, C., & Johnson, J. (November, 2005). Estrogen Agonist and Antagonist Effects on Anti-Cholinergic Induced Cognitive Dysfunction in Post-Menopausal Women. Poster presented at the 35th Annual Meeting of the Society for Neuroscience, Washington, DC.

- Dumas, J., Saykin, A., McAllister, T., McDonald, B., Hynes, M., Flashman, L., & Newhouse, P. (November, 2005). Muscarinic and Nicotinic Blockade Alters Spatial Working Memory Performance and Brain Activation Patterns in Older Women. Poster presented at the 5th Annual Meeting of the International College of Geriatric Psychoneuropharmacology, Pittsburgh, PA.
- Dumas, J.A. & Hartman, M. (November, 2005). A time-accuracy study of age differences in perception and working memory. Poster presented at the 46th Annual Meeting of the Psychonomic Society, Toronto, ON.
- Dumas, J.A., Hancur-Bucci, C.A., Naylor, M.R., & Newhouse, P.A. (May, 2005). Muscarinic versus nicotinic antagonist effects on cognitive performance in older women. Poster presented at the 60th Annual Meeting of the Society of Biological Psychiatry, Atlanta, GA.
- Dumas, J.A., Hancur-Bucci, C.A., Naylor, M.R., & Newhouse, P.A. (October, 2004). The differential role of nicotinic and muscarinic systems in cognition in older women. Poster presented at the 34th Annual Meeting of the Society for Neuroscience, San Diego, CA.
- Hartman, M., McCabe, J., Dumas, J., & Stratton, B. (April, 2004). Age differences in working memory updating for repeated versus unique stimuli.
- Arndt, J. & Dumas, J. (November, 2003). The contribution of perceptual mechanisms to the spacing effect. Poster presented at the 44th meeting of the Psychonomic Society, Vancouver, BC, Canada.
- Dumas, J. & Hartman, M. (November, 2002). The effects of irrelevant information on age differences in working memory. Poster presented at the 43rd meeting of the Psychonomic Society, Kansas City, MO.
- Dumas, J. & Hartman, M. (November, 2001). Age differences in temporal and item memory. Poster presented at the 42nd Annual Meeting of the Psychonomic Society, Orlando, FL.
- Dumas, J. & Hartman, M. (April, 2000). The relationship between age differences in temporal and item memory. Poster presented at the Cognitive Aging Conference, Atlanta, GA.
- Dumas, J. & Hartman, M. (November, 1999). Age differences in the speed of working memory. Poster presented at the 40th Annual Meeting of the Psychonomic Society, Los Angeles, CA.
- Dumas, J., Nielsen, C., & Hartman, M. (November, 1998). Age differences on a delayed response task: Testing the frontal lobe hypothesis. Poster presented at the 39th Annual Meeting of the Psychonomic Society, Dallas, TX.

Dumas, J. A. & Hartman, M. (April, 1998). Age differences in frontal lobe function: Evidence from the delayed-matching-to-sample task. Poster presented at the Cognitive Aging Conference, Atlanta, GA.

Willingham, D. B., & Dumas, J. A. (November, 1996). Retention of implicit learning across a one-year delay. Paper presented at the 37th Annual Meeting of the Psychonomic Society, Chicago, IL.

SERVICE – LOCAL UVM

University of Vermont Undergraduate Research Advisory Committee Fall 2010 – present
University of Vermont MRI Center for Biomedical Imaging Advisory Group – Summer 2007-present
University of Vermont College of Medicine Space Committee 2012 – present

SERVICE – NATIONAL

Co-leader of the Developing Your Research Career Breakfast Seminar for young investigators interested geriatric psychiatry at the annual meeting of the American Association of Geriatric Psychiatry 2011, 2012.

Research Committee member for the American Association for Geriatric Psychiatry 2007-present

SERVICE – PEER REVIEW

Grants and Awards

Alzheimer's Association Grant Reviewer 2008, 2009, 2010, 2011, 2012

American Association for Geriatric Psychiatry Annual Meeting Abstract Reviewer 2008, 2009, 2010, 2011

American Association for Geriatric Psychiatry Young Investigator Award Selection Committee 2009, 2010, 2011, 2012

***Ad Hoc* Reviewer for the Following Journals**

Aging Health, American Journal of Psychiatry, Biological Psychiatry, Brain Imaging and Behavior, Brain Research, Hormones and Behavior, International Journal of Geriatric Psychiatry, International Psychogeriatrics, Industrial Health, Journal of Experimental Psychology: Learning, Memory, and Cognition, Menopause, Neurobiology of Aging, Neurochemical Research, Neuroimage, Neuropsychologia, Neuropsychopharmacology, Neuroscience Letters, Psychological Science, Psycho-Oncology, Psychopharmacology, Sex Roles

TEACHING EXPERIENCE

Winter 2013: Neurobiology and Neuropsychology of Memory, Lecture to 3rd and 4th year Psychiatry Residents, Neuroscience course, University of Vermont College of Medicine

Winter 2012: Neurobiology and Neuropsychology of Memory, Lecture to 2nd and 4th year Psychiatry Residents, Neuroscience course, University of Vermont College of Medicine

Fall: 2010: Neurobiology and Neuropsychology of Memory, Lecture to 2nd year Psychiatry Residents, Neurobiology course, University of Vermont College of Medicine

Spring 2010: Neural Substrates of Aging and Cognition, Lecture to Neurology Residents and Neuroscience Graduate Students in the Basic Science of Neurological Diseases 2010 course on Alzheimer's Disease, University of Vermont College of Medicine

Fall: 2009: Neurobiology and Neuropsychology of Memory, Lecture to 2nd year Psychiatry Residents, Neurobiology course, University of Vermont College of Medicine

Fall 2008: Neurobiology and Neuropsychology of Memory, Lecture to 2nd year Psychiatry Residents, Neurobiology course, University of Vermont College of Medicine

Fall 2007: The Neurobiology and Neuropsychology of Memory, Lecture to 2nd year Psychiatry Residents, Neurobiology course, University of Vermont College of Medicine.

Fall 2006: The Neurobiology and Neuropsychology of Memory, Lecture to 2nd year Psychiatry Residents, Neurobiology course, University of Vermont College of Medicine.

Fall 2005: Amino Acid and Neuropeptide Neurotransmitters, Lecture to 2nd year Psychiatry Residents, Neurobiology course, University of Vermont College of Medicine.

Fall 2004: Amino Acid and Neuropeptide Neurotransmitters, Lecture to 2nd year Psychiatry Residents, Neurobiology course, University of Vermont College of Medicine.

Fall 2003: Amino Acid and Neuropeptide Neurotransmitters, Lecture to 2nd year Psychiatry Residents, Neurobiology course, University of Vermont College of Medicine.

Fall 2003: Biological Basis of the Mind, Instructor, Middlebury College

Winter 2003: Animal Cognition, Instructor, Middlebury College

Fall 2002: Adulthood and Aging, Instructor, Middlebury College

Spring 2001, 2000: Medical Neurobiology, Lab Teaching Assistant, University of North Carolina at Chapel Hill

Fall 1999 and Spring 2000: Introduction to Cognitive Psychology, Instructor, University of North Carolina at Chapel Hill

Fall 1998 and Spring 1999: Introduction to Cognitive Psychology, Teaching Assistant, University of North Carolina at Chapel Hill

Fall 1997 and Spring 1998: Introduction to Psychology, Teaching Assistant, University of North Carolina at Chapel Hill

MENTORING EXPERIENCE

Cecily Stokes-Prindle – Summer 2004: RUBY Grant Recipient, University of Vermont: “Gonadal Hormones and Cognition: How Age-Related Changes in Gonadal Hormone Levels Affect Cognitive Ability”

Emily L. Coderre – Summer 2005 – Helix Summer Grant Recipient, University of Vermont: “An Investigation of Gender Differences in Spatial Cognition: Allocentric versus Egocentric Processing”

Emily L. Coderre – 2006 URECA! award recipient, University of Vermont: “Brain fMRI Study of Language Processing in Native Japanese Speakers”

Heather L. Wilkins – 2006-2007 senior thesis, University of Vermont: “Effects of Menstrual Cycle Phase on Memory for Emotional Information”.

Megan Newhouse – 2008-2009 URECA! Award recipient, University of Vermont: “The Effects of Negative Emotion on Perceived Exertion During Exercise”

Talaya McCright-Gill – 2008-2009 URECA! Award recipient, University of Vermont: “Brain Processing of Emotional Information in Transgender Individuals”.

Amanda M. Kutz – 2008 HELiX Summer Internship, University of Vermont. “Content and Context Memory for Emotional Information: A Brain fMRI study in Older and Younger Adults”.

Amanda M. Kutz – 2009-2010 URECA! Award Recipient, University of Vermont. “Age Differences in the Effects of Arousal in Emotion Memory: An fMRI Study”.

Kelly Carstens – 2009 APLE Award, University of Vermont “The Effects of Nicotine on Emotional Memory.”

Kelly Carstens – 2009 Fall CW Link Mini-Grant Award, University of Vermont “The Effects of Nicotine on Emotional Memory.”

Christina Broadwell, M.D. – 2010 President’s Presenter Award from the Society for Gynecologic Investigation for “The Effects of Menstrual Cycle Phase on Attention and Memory for Emotional Information”.

Ariel D. Bailey – 2011-2012 URECA! Award recipient, University of Vermont. “Subjective Cognitive Impairment in Episodic Memory: A Brain fMRI Study”.

Jennifer Trimble – 2013 Summer Research Student, University of Vermont. “Lifetime Estrogen Exposure, Dopaminergic Functioning, and Cognition in Postmenopausal Women”.