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ACADEMIC APPOINTMENTS

Professor , University of Minnesota, Department of Psychology	2014 - present
Associate Professor , University of Minnesota, Department of Psychology	2008 - 2014
Assistant Professor , University of Minnesota, Department of Psychology	2003 - 2008

Primary Appointment: Associate Director for Practicum and Internship Placement, Clinical Science and Psychopathology Research Program, Dept. of Psychology

Secondary Appointments: Biological Psychopathology Program, Cognitive and Biological Sciences Program, Personality, Individual Differences & Behavior Genetics Program, Dept. Psychology
 Center for Cognitive Sciences
 Graduate Program in Neuroscience
 University of Minnesota School of Medicine, Department of Psychiatry

Director: **Translational Research in Cognitive and Affective Mechanisms laboratory**

My laboratory explores basic cognitive and affective neuroscience, the biological bases of psychopathology, and the measurement of group differences. Methodologies include functional magnetic resonance imaging (fMRI), behavioral genetics (twin and family studies), clinical assessment and cognitive testing. Current research includes (1) Understanding how executive control mechanisms, which are associated with prefrontal cortex functioning, modulate attention, affective processing, social interactions and decision-making; (2) Evaluating how these mechanisms inform us about the genetic and environmental causes of psychoses, like schizophrenia, and impulse control disorders, like drug abuse, and (3) Developing methods to better understand the relationship between brain function and cognition, and impairments in these processes.

EDUCATION

Post-Doctoral Fellowship	2001-2002
Clinical Cognitive Neuroscience Laboratory Western Psychiatric Institute & Clinic, University of Pittsburgh Medical Center Mentor: Cameron Carter, M.D.	
Ph.D.	1994-2001
University of Pittsburgh Clinical Psychology Program, Department of Psychology & Center for the Neural Basis of Cognition; Clinical Internship: Western Psychiatric Institute & Clinic Co-advisors: Michael F. Pogue-Geile, Ph.D. & Cameron Carter, M.D. Dissertation Title: A differential deficit in context processing associated with the genetic liability to schizophrenia: a sibling study.	
B.A.	1986-1990
Amherst College, Amherst, MA Psychology & Philosophy Majors	

AWARDS & HONORS

Ernst Strüngmann Forum on Computational Psychiatry, Delegate & Invited Author (Max Planck Institute & Ernst Strüngmann Foundation, Frankfurt, Germany, July 2015)

Ernst Strüngmann Forum on Schizophrenia, Delegate & Invited Author (Max Planck Institute & Ernst Strüngmann Foundation, Frankfurt, Germany, July 2012)

Schizophrenia Research Forum (schizophrenia.org), Scientific Advisory Board (2011-present)

Francoeur Investigator Award (2009-2010, NARSAD)

NARSAD Sidney R. Baer, Jr. Prize for Psychopathology Research (2008, National Alliance for Research on Schizophrenia and Depression & Sidney R. Baer, Jr. Foundation)

Ernst Strüngmann Forum on Cognitive Coordination in the Brain, Delegate (Max Planck Institute & Ernst Strüngmann Foundation, Frankfurt, Germany, August 2009)

Chronicle of Higher Education Neuroscience in Psychology: Scholars to Watch (10 December 2008)

McKnight Land-Grant Professorship (2006-2008, University of Minnesota)

Young Investigator Award (2005 & 2008, National Alliance for Research on Schizophrenia and Depression)

Smadar Levine Award Runner Up (2001, Society for Research in Psychopathology)

Bassell Award for Excellence in Psychological Research (2000, University of Pittsburgh)

Travel Fellowship, Organization for Human Brain Mapping (2000)

Center for the Neural Basis of Cognition Training Fellowship (1998-1999, National Science Foundation)

MEMBERSHIPS IN PROFESSIONAL SOCIETIES

Behavior Genetics Association
 Cognitive Neuroscience Society
 Organization for Human Brain Mapping
 Society for Neuroscience
 Society for Research in Psychopathology

GRANTS

Current Grants

1. R01 National Institute of Mental Health, “Cognitive Neuroscience Task Reliability & Clinical Applications.” \$600,000 direct costs. **A.W. MacDonald, III, Principal Investigator.** August 2013 – June 2017 (R01MH084861).
2. R21 National Institute of Mental Health, “The Eye: A Window on Schizophrenia.” \$275,000 direct costs. R. Miller, Principal Investigator. **A.W. MacDonald, III, Co-Investigator and Project Director.** April 2013 – March 2015 (R21MH100622).
3. R01 National Institutes of Health. “Psychological and Cognitive Mechanisms Underlying Sexual Compulsivity and HIV Risk.” \$818,000 direct costs. M. Miner, Principal Investigator. **A.W. MacDonald, III, Co-Investigator.** July 2011 – November 2014 (NCE) (R01MH094229).

Grants Submitted & Pending Resubmission

1. R01 National Institute of Mental Health. “Relating emerging psychosis genes to cognitive systems in

a child clinical cohort.” A. Doyle, Principal Investigator. **A. W. MacDonald, III**, Co-Investigator. To be resubmitted June 2014.

2. R01 National Institute of Mental Health. “Neural circuitry of non-suicidal self-injury.” C. Schulz, Principal Investigator. **A.W. MacDonald, III**, Co-Investigator. To be resubmitted June 2014.
3. R01 National Institute of Mental Health. “Neural Basis of Psychopathology, Addictions and Sleep Disorders Study Section.” A. Dombrovski, Principal Investigator. **A.W. MacDonald, III**, Co-Investigator. Score: 31 (17th %ile). Funding decision pending.

Grants Completed

1. Merit Review, Clinical Science Research and Development, Department of Veterans Affairs. “Genetic and time-frequency aspects of neural phenotypes in schizophrenia.” \$650,000 direct costs. S.R. Sponheim, Principal Investigator. **A.W. MacDonald, III, Co-Investigator**. April 2010 -- March 2014.
2. Merit Review, Department of Veterans Affairs. “Remediation of working memory in schizophrenia.” \$750,000 direct costs. Tasha Nienow, Principal Investigator. **A.W. MacDonald, III, Co-Investigator**. January 2010 – December 2013.
3. R21 National Institute of Drug Abuse, “Neuroanatomical basis of anti-drug message processing.” \$750,000 direct costs. **A.W. MacDonald, III & M.C. Yzer, Co-Principal Investigators**. September 2007 – April 2013 (NCE) (R21DA024430).
4. R01 National Institute of Mental Health. “Cognitive Neuroscience Task Reliability & Clinical Applications.” \$260,000 direct costs. **Angus MacDonald, III, Principal Investigator**. Multi-site study. September 2008 – September 2012 (NCE) (R01MH084861)
5. R01 National Institute of Mental Health. “Cognitive Neuroscience Task Reliability & Clinical Applications.” \$200,000 additional direct costs. **Angus MacDonald, III, Principal Investigator**. Multi-site study. ARRA-funded Competitive Revision of R01MH084861. July 2010 – June 2012 (NCE) (R01MH084861-03S1)
6. R21 National Institute of Mental Health. “Imaging the impact of glutamate liability genes in schizophrenia.” \$275,000 direct costs. **A.W. MacDonald, III, Principal Investigator**. February 2008 – November 2011 (NCE) (R21MH079262).
7. R01 National Institute of Mental Health, “White Matter Abnormalities in Schizophrenia” \$2,500,000 total direct costs. K.O. Lim, Principal Investigator, **A.W. MacDonald, III, Co-Investigator**. October 2005 – September 2010. (R01MH060662).
8. P20 National Institute of Drug Abuse, “Center for the Study of Impulsivity in Addiction.” \$2,000,000 total direct costs, \$200,000 direct core costs. K.O. Lim, Principle Investigator. **A.W. MacDonald, III, Director** of the Neurocognitive and Behavioral Core. September 2007 – June 2012 (NCE). (P20DA024196)
9. National Alliance for Research in Schizophrenia and Affective Disorders (NARSAD), Young Investigator and Francoeur Investigator Awards. “The Neural Basis of Paranoia in Schizophrenia”

- \$60,000 direct costs. **A.W. MacDonald, III, Principal Investigator.** July 2008 – June 2010.
10. Merit Review, Department of Veterans Affairs. “Neural Phenotype-Genotype Associations in Schizophrenia.” \$799,400 total direct expenses, approx \$200,000 total site specific direct costs. S.R. Sponheim, Principal Investigator, **A.W. MacDonald, III, Co-Investigator and Site Project Director.** April 2005 – March 2010.
 11. R01 National Institute of Mental Health, “Cognitive Neurogenetics of Schizophrenia.” \$1,000,000 direct expenses, approx. \$140,000 total site specific direct costs. C.S. Carter, Principal Investigator, **A.W. MacDonald, III, Co-Investigator.** December 2003 – November 2008 (R01MH066629).
 12. National Alliance for Research in Schizophrenia and Affective Disorders (NARSAD), Young Investigator Award. “The Genetic and Neural Basis of Paranoia: A Functional MRI Study in Twins.” \$60,000 total direct costs. **A.W. MacDonald, III, Principal Investigator.** July 2005 – June 2007.
 13. R24 National Institute of Mental Health, “Aberrant Cortical Dynamics in Schizophrenia.” \$725,000 total direct expenses, approx. \$142,000 total site specific direct costs. S.R. Sponheim, Principal Investigator, **A.W. MacDonald, III, Co-Investigator and Site Project Director.** July 2004 – June 2007. (R24MH069675)
 14. Clinical Research Feasibility Funding (CRFF). University of Minnesota General Clinical Research Center. “Changes in Cortical Activation with Cognitive Rehabilitation in Schizophrenia.” \$40,000 total direct costs. **A.W. MacDonald, III, Principal Investigator.** December 2003 – November 2005.
 15. Grant-in-Aid of Research, Artistry and Scholarship, University of Minnesota, “Advanced Methods for Dissociating Cognitive Control Mechanisms in fMRI.” \$25,000 total direct costs. **A.W. MacDonald, III, Principal Investigator.** July 2003 – December 2005.
 16. NCCR, Biomedical Informatics Research Network (BIRN). “Functional Imaging Research in Schizophrenia Testbed – FIRST BIRN.” \$1,000,000 total site specific direct costs. S.G. Potkin, Principal Investigator, K.O. Lim, Site Project Director, **A.W. MacDonald, III, Co-Investigator.** October 2002 – November 2005.

PUBLICATIONS

Peer-reviewed Articles (* indicates student/trainee/staff first-authors)

1. Harrow, M., **MacDonald, A.W., III**, Sands, J.R., & Silverstein, M.L. (1995). Vulnerability to delusions over time in schizophrenia, schizoaffective and bipolar and unipolar affective disorders: A multi-follow-up assessment. *Schizophrenia Bulletin*, 21, 95-109. PMID: 7770745
2. August, G.A., Realmuto, G.M., Crosby, R.D., & **MacDonald, A.W., III** (1995). Community-based multiple-gate screening of children at-risk for conduct disorder. *Journal of Abnormal Child Psychology*, 23, 521-544. PMID: 7560560
3. August, G.A., Realmuto, G.M., **MacDonald, A.W., III**, Nugent, S.M., & Crosby, R. (1996). Prevalence of ADHD and comorbid disorders among elementary school children screened for

- disruptive behavior. *Journal of Abnormal Child Psychology*, 24, 571-595. PMID: 8956085
4. August, G.A., **MacDonald, A.W., III**, Realmuto, G.M., & Skare, S.S. (1996). Hyperactive and aggressive pathways: effects of demographic, family and child characteristics on children's adaptive functioning. *Journal of Clinical Child Psychology*, 25, 341-351.
 5. Carter, C.S., **MacDonald, A.W., III**, Botvinick, M., Ross, L.L., Stenger, V.A., Noll, D. & Cohen, J.D. (2000). Parsing executive processes: strategic versus evaluative functions of the anterior cingulate cortex. *Proceedings of the National Academy of Sciences*, 97, 1944-1948. PMID: 26541
 6. Aizenstein, H.J., **MacDonald, A.W., III**, Stenger, V.A., Larson, J.K., Ursu, S., Nebes, R.D., Carter, C.S. (2000). Complementary category learning systems identified using event-related fMRI. *Journal of Cognitive Neuroscience*, 12, 977-987. PMID: 11177418
 7. **MacDonald, A.W., III**, Cohen, J.D., Stenger, V.A., & Carter, C.S. (2000). Dissociating the role of the dorsolateral prefrontal cortex and anterior cingulate cortex in cognitive control. *Science*, 288, 1835-1838. PMID: 10846167
 8. Barch, D.B., Carter, C.S., Sabb, F.W., **MacDonald, A.W., III**, Noll, D.C., Braver, T.S., & Cohen, J.D. (2001). Selective deficits in pre-frontal cortex function in medication - naive patients with schizophrenia. *Archives of General Psychiatry*, 58, 280-288. PMID: 11231835
 9. **MacDonald, A.W., III**, Pogue-Geile, M.F., Debski, T.T., & Manuck, S. (2001). Genetic and environmental influences on schizotypy: A community-based twin study. *Schizophrenia Bulletin*, 27, 47-58. PMID: 11215549
 10. Carter, C.S., **MacDonald, A.W., III**, Ross, L.L., Stenger, V.A. (2001). Anterior cingulate cortex and impaired self-monitoring of performance in schizophrenia: an event-related fMRI study. *American Journal of Psychiatry*, 158, 1423-1428. PMID: 11532726
 11. **MacDonald, A.W., III**, & Carter, C.S. (2002). Cognitive experimental approaches to investigating impaired cognition in schizophrenia: a paradigm shift. *Journal of Experimental and Clinical Neuropsychology*, 24, 873-882. PMID: 12647766
 12. Barch, D.M., Carter, C.S, **MacDonald, A.W., III**, Braver, T.S., Cohen, J.D. (2003). Context processing deficits in schizophrenia: diagnostic specificity, four-week course, and relationship to clinical symptoms. *Journal of Abnormal Psychology*, 112, 132-143. PMID: 12653421
 13. **MacDonald, A.W., III**, Pogue-Geile, M.F, Johnson, M.K. & Carter, C.S (2003). A specific deficit in context processing in the unaffected siblings of patients with schizophrenia. *Archives of General Psychiatry*, 60, 57-65. PMID: 12511173
 14. **MacDonald, A.W., III**, & Carter, C.S. (2003). Event-related fMRI study of context processing in the dorsolateral prefrontal cortex of patients with schizophrenia. *Journal of Abnormal Psychology*, 112, 689-697. PMID: 14674880
 15. Kerns, J.G., Cohen, J.D., **MacDonald, A.W., III**, Cho, R.Y., Stenger, V.A., & Carter, C.S. (2004). Anterior cingulate conflict monitoring and adjustments in control. *Science*, 303, 1023-1026. PMID:

14963333

16. Holmes, A.J.* , **MacDonald, A.W., III**, Carter, C.S., Barch, D.M., Stenger, V.A., Cohen, J.D. (2005). Prefrontal functioning during context processing in schizophrenia and major depression: an event-related fMRI study. *Schizophrenia Research*, 76, 199-206. PMID: 15949653
17. Kerns, J.G., Cohen, J.D., **MacDonald, A.W, III**, Johnson, M.K., Stenger, V.A., Aizenstein, H.J., Carter, C.S. (2005). Decreased conflict and error-related activity in the anterior cingulate cortex in schizophrenia. *American Journal of Psychiatry*, 162, 1833-1839. PMID:16199829
18. Snitz, B.E., **MacDonald, A.W., III**, Cohen, J.D., Becker, T., Carter, C.S. (2005). Lateral and medial hypofrontality in first-episode schizophrenia: Functional activity in a medication-naïve state and effects of short-term atypical antipsychotic treatment. *American Journal of Psychiatry*, 162, 2322-2329. PMID: 16330597
19. **MacDonald, A.W., III**, Goghari, V.M., Hicks, B.M., Flory, J.D., Carter, C.S., Manuck, S.B. (2005). A convergent-divergent approach to context processing, general intellectual, functioning, and the genetic liability to schizophrenia. *Neuropsychology*, 19, 814-821. PMID: 16351357
20. Snitz, B.E., **MacDonald, A.W., III**, Carter, C.S. (2006). Cognitive deficits in unaffected first-degree relatives of schizophrenia patients: A meta-analytic review of putative endophenotypes. *Schizophrenia Bulletin*, 32, 179-194. PMCID: PMC2632195
21. Brambilla, P., **MacDonald, A.W., III**, Sassi, R.B., Johnson, M.K., Mallinger, A.G., Carter, C.S., & Soares, J.C. (2007). Context processing performance in bipolar disorder patients. *Bipolar Disorders*, 9, 230-237. PMID: 17430297
22. Goghari, V.M.* , Rehm, K., Carter, C.S., **MacDonald, A.W., III** (2007). Regionally specific cortical thinning and grey matter abnormalities in the healthy relatives of schizophrenia patients. *Cerebral Cortex*, 17, 415-424. PMID: 16547347
23. **MacDonald, A.W., III**, Carter, C.S., Flory, J.D., Ferrell, R.E., Manuck, S.B. (2007). COMT Val158Met and executive control: a test of the benefit of specific deficits to translational research. *Journal of Abnormal Psychology*, 116, 306-312. PMID: 17516763
24. Goghari, V.M.* , Rehm, K., Carter, C.S., **MacDonald, A.W., III** (2007). Sulcal thickness as a vulnerability indicator for schizophrenia. *British Journal of Psychiatry*, 191, 229-233. PMID: 17766763
25. Goghari, V.M.* & **MacDonald, A.W., III** (2008). Effects of varying the experimental design of a cognitive control paradigm on behavioral and functional imaging outcome measures. *Journal of Cognitive Neuroscience*, 20, 20-35. PMID: 17919074
26. Becker, T.M.* , Kerns, J.G., **MacDonald, A.W., III**, Carter, C.S. (2008). Prefrontal dysfunction in first-degree relatives of schizophrenia patients during a Stroop task. *Neuropsychopharmacology*, 33, 2619 – 2625. PMID: 18216774
27. **MacDonald, A.W., III** (2008). Building a clinically-relevant cognitive task: Case study of the AX

- paradigm. *Schizophrenia Bulletin*, 34, 619-628. PMID: 2632443
28. **MacDonald, A.W., III**, Thermenos, H.W., Barch, D.M., & Seidman, L.J. (2009). Imaging genetic liability to schizophrenia: A systematic review of fMRI studies of patients' non-psychotic relatives. *Schizophrenia Bulletin*, 35, 1142-1162. PMID: 2762618
 29. Barch, D.M., Berman, M.G., Engle R., Jones, J.H., Jonides, J., **MacDonald, A.W., III**, Nee, D.E., Redick, T.S., Sponheim, S.R. (2009). CNTRICS final task selection: working memory. *Schizophrenia Bulletin*, 35, 136-152. PMID: 2643954
 30. **MacDonald, A.W., III** & Kang, S.S. (2009). Misinterpreting schizophrenia relatives' impairments. *American Journal of Medical Genetics B: Neuropsychiatric Genetics*, 150B, 443-444. PMID: 18561246
 31. Johnson, M.K.*, Rustichini, A., **MacDonald, A.W., III** (2009). Suspicious personality predicts behavior on a social decision-making task. *Personality and Individual Differences*, 47, 30-35.
 32. **MacDonald, A.W., III** & Schulz, S.C. (2009). What we know: findings that every theory of schizophrenia should explain. *Schizophrenia Bulletin*, 3, 493-508. Translated into Spanish in *Schizophrenia Bulletin, Spanish excerpted Edition*. PMID: 2669587
 33. Goghari, V.*, **MacDonald, A.W., III** (2009). The neural basis of cognitive control: response selection and inhibition. *Brain & Cognition*, 71, 72-83. PMID: 290505
 34. Camchong, J.*, Lim, K.O., Sponheim, S.R., **MacDonald, A.W., III** (2009). Frontal white matter integrity as an endophenotype for schizophrenia: Diffusion tensor imaging in monozygotic twins and patients' nonpsychotic relatives. *Frontiers in Human Neuroscience*, 3, 1-6. PMID: 2773169
 35. Goghari, V.*, Sponheim, S.R., **MacDonald, A.W., III** (2010). The functional neuroanatomy of symptom dimensions in schizophrenia: A qualitative and quantitative review of a persistent question. *Neuroscience & Biobehavioral Reviews*, 34, 468-486. PMID: 2813961
 36. Jones, J.A.H.*, Sponheim, S.R., **MacDonald, A.W., III** (2010). The dot pattern expectancy (DPX) task: reliability and replication of deficits in schizophrenia. *Psychological Assessment*, 22, 131-141. PMID: 20230159
 37. Kang, S.S.* & **MacDonald, A.W., III** (2010). Limitations of true score variance to measure discriminating power: Psychometric simulation study. *Journal of Abnormal Psychology*, 119, 300-306. PMID: 2869469
 38. Haut, K.M.*, Lim, K.O., **MacDonald, A.W., III** (2010). Prefrontal cortical changes following cognitive training in patients with chronic schizophrenia: effects of practice, generalization and specificity. *Neuropsychopharmacology*, 35, 1850-1859. Featured on MDLinx.com; *NPP* "Top Ten" download list. PMID: 3055638
 39. Haut, K.M.*, **MacDonald, A.W., III** (2010). Persecutory delusions and the perception of trustworthiness in unfamiliar faces in schizophrenia. *Psychiatry Research*, 178, 456-60. PMID: 20569994

40. Camchong, J.*, **MacDonald, A.W., III**, Bell, C., Mueller, B.A., Lim, K.O. (2011). Altered functional and anatomical connectivity in schizophrenia. *Schizophrenia Bulletin*, 37, 640-650. PMID: 3080691
41. Kang, S.S.*, Sponheim, S.R., Chafee, M.V., & **MacDonald, A.W., III** (2011). Disrupted functional connectivity for controlled visual processing as a basis for impaired spatial working memory in schizophrenia. *Neuropsychologia*, 49, 2836–2847. PMID: 3156358
42. Yzer, M.C., Vohs, K.D., Luciana, M., Cuthbert, B.N., & **MacDonald, A.W., III** (2011). Affective antecedents of the perceived effectiveness of antidrug advertisements: an analysis of adolescents' momentary and retrospective evaluations. *Prevention Science*, 12, 278-288. PMID: 21499729
43. Camchong, J.*, **MacDonald, A.W., III**, Nelson, B., Bell, C., Mueller, B.A., Specker, S., Lim, K.O. (2011). Frontal hyperconnectivity related to delayed discounting and reversal learning task performance in cocaine subjects. *Biological Psychiatry*, 69, 1117-1123. PMID: 3090521
44. Goghari, V., **MacDonald, A.W., III**, Sponheim, S.R. (2011). Temporal lobe structures and facial emotion recognition in schizophrenia patients and non-psychotic relatives. *Schizophrenia Bulletin*, 37, 1281-1284. doi: 10.1093/schbul/sbq046 PMID: 3196942
45. Carter C.S., Minzenberg M., West R., **MacDonald A.W., III** (2012). CNTRICS imaging biomarker selections: Executive control paradigms. *Schizophrenia Bulletin*, 38, 34-42. PMID:22114099
46. Taylor, S.F., & **MacDonald, A.W., III**. (2012). Brain mapping biomarkers of socio-emotional processing in schizophrenia. *Schizophrenia Bulletin*, 38, 73-80. PMID: 3245598
47. Ragland, J.D., Ranganath, C., Barch, D. M., Gold, J.M., Haley, B., **MacDonald, A.W, III**, Silverstein, S. M., Strauss, M.E., Yonelinas, A.P., Carter, C.S. (2012). Relational and Item-Specific Encoding (RISE): Task development and psychometric characteristics. *Schizophrenia Bulletin*, 38, 114-124. PMID: 3245591
48. Silverstein, S.M., Keane, B.P., Barch, D.M., Carter, C.S., Gold, J.M., Kovacs, I., **MacDonald, A.W., III**, Ragland, J.D. (2012). Optimization of a measure of visual integration for use in schizophrenia treatment research: the Jittered-Orientation Visual-Integration Task (JOVI). *Schizophrenia Bulletin*, 38, 125-134. PMID: 3245579
49. Gold, J.M., Barch, D.M., Carter, C.S., Dakin, S., Luck, S.J., **MacDonald, A.W., III**, Ragland, J.D., Ranganath, C., Silverstein, S.M., Strauss, M.E. (2012). Clinical, functional and inter-task correlations of measures developed by the Cognitive Neuroscience Test Reliability and Clinical applications for Schizophrenia (CNTRACS) consortium. *Schizophrenia Bulletin*, 38, 144-152. PMID: 3245578
50. Barch, D.M., Carter, C.S., Dakin, S.C., Gold, J., Luck, S.J., **MacDonald, A.W., III**, Ragland, J.D., Silverstein, S.M., Strauss, M.E. (2012). The clinical translation of a measure of gain control: the contrast-contrast effect task. *Schizophrenia Bulletin*, 38, 135-143. PMID: 3245599
51. Henderson, D.*, Poppe, A., Barch, D.M., Carter, C.S., Gold, J.M., Ragland, J.D., Silverstein, S.M., Strauss, M.E., **MacDonald, A.W., III** (2012). Optimization of a goal maintenance task for use in clinical applications. *Schizophrenia Bulletin*, 38, 104–113. PMID: 3245586
52. Keane, B.P., Silverstein, S.M., Barch, D.M., Carter, C.S., Gold, J.M., Kovács, I, **MacDonald, A.W.,**

- III**, Ragland, J.D., Strauss, M.E. (2012). The spatial range of contour integration deficits in schizophrenia. *Experimental Brain Research*, 220, 251-259. PMID: 22710617
53. **MacDonald, A.W., III**, El Shaikh, A., Moodie, C., Poppe, A.B, Ramsay, I.S., Wisner, K.M. (2013). "Schizophrenic Disorders." In D.S. Dunn (Ed.), *Oxford Bibliographies in Psychology*. New York: Oxford University Press. doi: 10.1093/obo/9780199828340-0105
54. Erickson, K.I., Banducci, S.E., Weinstein, A.M., **MacDonald, A.W., III**, Ferrell, R.E., Halder, I, Flory, J.D., Manuck, S.B. (2013). Physical activity moderates the effect of the BDNF val66met polymorphism on working memory performance. *Psychological Science*, 24, 1770–1779. PMID: 23907543
55. Jones, J.A.H.* , Lim, K.O., Wozniak, J.R., Specker, S., **MacDonald, A.W., III** (2013). Cognitive control in chronic cocaine users. *Psychology of Addictive Behaviors*. PMID: 23586455
56. Owoso, A., Barch, D.M., Carter, C.S., Gold, J., **MacDonald, A.W.,III**, Ragland, J.D., Silverstein, S., Strauss, M.E. (2013). Cognition in schizophrenia and schizoaffective disorder: impairments that are more similar than different. *Psychological Medicine*. 43, 2535-45. PMID: 23522057
57. Wisner, K.M.* , Atluri, G., Lim, K.O., **MacDonald, A.W., III** (2013). Neurometrics of intrinsic connectivity networks at rest using fMRI: Retest reliability and cross validation using a meta-level method. *NeuroImage*, 76, 236-251. PMID: 23507379
58. Ramsay, I. S.* , Yzer, M.C., Luciana, M., Vohs, K.D., **MacDonald, A.W., III** (2013). The involvement of socio-emotional and executive brain networks in the processing of persuasive anti-drug messages. *Journal of Cognitive Neuroscience*, 25. 1136-47. PMID: 23530896
59. Poppe, A.* , Wisner, K., Atluri, G., Lim, K.O., Kumar, V., **MacDonald, A.W., III** (2013). Toward a neurometric foundation for probabilistic independent component analysis of fMRI data. *Cognitive, Affective and Behavioral Neuroscience*, 13, 641–659. PMID: 23836423
60. Patzelt, E.H.* , Kurth-Nelson, Z., Lim, K.O., **MacDonald, A.W., III** (2013). Excessive state switching underlies reversal-learning deficits in cocaine users. *Drug and Alcohol Dependence*, 39. 403-13. PMID: 24176201
61. Wisner, K.M.* , Patzelt, E. H., Lim, K.O., **MacDonald, A.W., III** (2013). An intrinsic connectivity network approach to insula-derived dysfunctions among cocaine users. *American Journal of Drug and Alcohol Addiction*, 76. 236-251. PMID: 24200210
62. Crowe, D.A., Goodwin, S.J., Blackman, R.K., Sakellaridi, S., Sponheim, S.R., **MacDonald, A.W., III**, Chafee, M.V. (2013). Neural signals reflecting the executive control of spatial cognition are selectively transmitted from prefrontal to posterior parietal neurons. *Nature Neuroscience*, 16. 1484-91. PMID: 23995071
63. Atluri, G.* , Padmanabhan, K., Fang, G., Steinbach, M., Petrella, J.R., Lim, K., **MacDonald, A.W., III**, Samatova, N.F., Doraiswamy, P.M., Kumar, V. (2013). Complex biomarker discovery in neuroimaging data: finding a needle in a haystack. *Neuroimage: Clinical*, 3. 123-131. PMID: 24179856

64. Blackman, R.K., **MacDonald, A.W., III**, Chafee, M.V. (2013). Effects of ketamine on context-processing performance in monkeys: a new animal model of cognitive deficits in schizophrenia. *Neuropsychopharmacology*, 38, 2090-2100. PMID: 23660706
65. Strauss, M.E., McLouth, C., Barch, D.M., Carter, C.S., Gold, J.M., Luck, S.J., **MacDonald, A.W., III**, Ragland, J.D., Ranganath, C., Keane, B.P., Silverstein, S.M. (2014). Temporal stability and moderating effects of age and gender on CNTRaCS task performance. *Schizophrenia Bulletin*, 40, 835-844. PMID: 23817024
66. Seo, D., Olfman, C.A., Haut, K.M., Sinha, R., & **MacDonald, A.W., III**, Patrick, C.J. (2014). Neural correlates of preparatory and regulatory control over positive and negative emotion. *Social, Cognitive and Affective Neuroscience*, 9, 494-504. PMID: 23887812
67. Camchong, J., **MacDonald A.W., III**, Mueller, B.A., Nelson, B. Specker, S., Lim K.O. (2014). Changes in resting functional connectivity during abstinence in stimulant use disorder: a preliminary comparison of relapsers and abstainers. *Drug & Alcohol Dependence*. PMID: 24745476
68. Goghari, V., **MacDonald, A.W., III**, Sponheim, S.R. (2014). Relationship between prefrontal grey matter volumes and working memory performance in schizophrenia: a family study. *Schizophrenia Research*. PMID: 24529364
69. Sheffield, J., Gold, J., Strauss, M., Carter, C., **MacDonald, A.W. III**, Ragland, D., Silverstein, S., Barch, D. (2014). Common and specific cognitive deficits in schizophrenia: relationships to function. *Cognitive, Affective and Behavioral Neuroscience*. PMID: 24037621
70. Moodie, C.A.*, Wisner, K.M., **MacDonald, A.W., III** (2014). Characteristics of canonical intrinsic connectivity networks across tasks and monozygotic twin pairs. *Human Brain Mapping*. PMID: 24984861
71. Atluri, G.*, Steinbach, M., Lim, K.O, Kumar, V., & **MacDonald, A.W., III** (in press). Discriminative subnetworks in schizophrenia revealed using connectivity cluster analysis. *Human Brain Mapping*.
72. Elshaikh, A.*, Sponheim, S.R., Chaffee, M., **MacDonald, A.W., III** (in press). Spatial attentional control is not impaired in schizophrenia: dissociating specific deficits from generalized impairments. *Journal of Abnormal Psychology*.
73. Poppe, A.B*, Carter, C.S., Minzenberg, M.J., **MacDonald, A.W., III** (in press). Task-based functional connectivity as an indicator of genetic liability to schizophrenia. *Schizophrenia Research*.

Invited Journal Articles, Commentaries & Chapters (* indicates student/trainee/staff first-authors)

1. **MacDonald, A.W., III** (2003). Reconciling schizophrenic deficits in top-down and bottom-up processes -- not yet. Commentary on Philips & Silverstein. *Brain and Behavior Sciences*, 26, 96.
2. Krueger, R.F., & **MacDonald, A.W., III** (2005). Dimensional approaches to understanding and treating psychosis. *Psychiatric Annals*, 35, 31-35.
3. **MacDonald, A.W., III**, & Iacono, W.G. (2006). Toward an integrated etiology of psychopathy. In C.J. Patrick (Ed.), *Handbook of Psychopathy*. New York: Guilford Press. pp. 375-385.

4. **MacDonald, A.W., III**, & Chafee, M.V. (2006). Translational and developmental perspective on NMDA synaptic deficits in schizophrenia. *Development & Psychopathology*, *18*, 853-876. PMID: 17152404
5. **MacDonald, A.W., III**, & Kang, S.S. (2007). Cassandra's calculations: simulation studies of the psychometric confound. In D.P. French (Ed.), *Schizophrenic Psychology: New Research*. Hauppauge, NY: Nova Science Publishers, Inc. pp. 281-301.
6. Kang, S.S.*, **MacDonald, A.W., III** (2007). Measuring discriminating power: beyond true-score variance. In R.A. Degregorio (Ed.), *New Developments in Psychological Testing*. Hauppauge, NY: Nova Science Publishers, Inc. pp. 91-117.
7. **MacDonald, A.W., III** (2008). A sneaking suspicion: The semantics of emotional beliefs and delusions. Commentary on Rogers & McClelland. *Behavioral and Brain Sciences*, *31*, 719-720.
8. **MacDonald, A.W., III**, & Jones, J.A.H. (2009). Functional imaging in clinical assessment? The rise of neurodiagnostics. In J. Butcher (Ed.), *Oxford Handbook of Personality Assessment*. Oxford University Press. pp. 364-374
9. **MacDonald, A.W., III**. (2009). Is more cognitive experimental psychopathology of schizophrenia really necessary? Challenges and opportunities. In M. Ristner (Ed.), *Neuropsychiatric Biomarkers, Endophenotypes, and Genes: Promises, Advances and Challenges, vol. I*. Springer. pp. 141-154.
10. Engel, A.K., Friston, K., Kelso, S., König, P., Kovács, I., **MacDonald, A.W., III**, Miller, E.K., Phillips, W.A., Silverstein, S.M., Tallon-Baudry, C., Triesch, J., and Uhlhaas, P. (2010). Coordination in behavior and cognition. In C. von der Malsberg, W.A. Philips & W. Singer (Eds.), *Dynamic Coordination in the Brain: From Neurons to Mind*. Cambridge, MA: MIT Press. pp. 267-300.
11. **MacDonald, A.W., III** (2010). What is not working in working memory. *Biological Psychiatry*, *68*, 593–594. Invited commentary on Hahn, et al. (2010) and Haenschel, et al. (2010). PMID: 20850595
12. **MacDonald, A.W., III** & Schulz, S.C. (2011). The Legacy of “Just the Facts”: Commentary on Keshavan, Nasrallah and Tandon. *Schizophrenia Research*, *131*, 1-3. PMID: 21737247
13. Camchong, J.*, & **MacDonald, A.W., III** (2012). Imaging psychoses: Prediction of diagnosis and violence. In J. Simpson (Ed.), *Neuroimaging in Forensic Psychiatry: From the Clinic to the Courtroom*. John Wiley & Sons Ltd. pp. 113-130.
14. Gu, L.* & **MacDonald, A.W., III** (2012). Delay discounting as a measure of impulsivity: Task design, reliability, validity and neural mechanisms. In K.O. Moore and N.P. Gonzalez (Eds.) *Handbook on Psychology of Decision-Making: New Research*. Hauppauge, NY: Nova Science Publishers, Inc.
15. **MacDonald, A.W., III** (2013). What kind of a thing is schizophrenia? Specific causation and general failure modes. In S.M. Silverstein, B. Moghaddam & T. Wykes (Eds.) *Schizophrenia: Evolution and Synthesis*. Cambridge, MA: MIT Press. pp. 25-48.
16. Corvin, A, Buchanan, R.W., Carpenter, W.T., Kennedy, J.L., Keshavan, M.S., **MacDonald, A.W., III**, Sass, L., & Wessa, M. (2013). Which aspects of heterogeneity are useful to translational success?

In S.M. Silverstein, B. Moghaddam & T. Wykes (Ed.) *Schizophrenia: Evolution and Synthesis*. Cambridge, MA: MIT Press.

17. **MacDonald, A.W., III** & Krueger, R.F. (2013). Mapping the country within: a special section on reconceptualizing the classification of mental disorders. *Journal of Abnormal Psychology*. PMID: 24016023
18. **MacDonald, A.W., III** (in press). Differential deficit. R. Cautin & S. Lillienfeld (Eds.). *Encyclopedia of Clinical Psychology*. John Wiley & Sons Ltd.
19. **MacDonald, A.W., III**. (in press). Schizophrenia: Presentation, Affect and Cognition, Pathophysiology & Etiology. In Blaney, P., Krueger, R.F. (Eds.) *Oxford Textbook of Psychopathology*. New York: Oxford University Press.

Special Projects.

1. Schizophrenia Research Forum, *What We Know* (December 2008) (<http://www.schizophreniaforum.org/whatwewknow>) by the Minnesota Consensus Group, **MacDonald, A.W., III, chair**. Publically accessible and annotated summary of progress in schizophrenia research.
2. *Schizophrenia Bulletin*, Special Section on Theories of Schizophrenia: Explanatory Power and Inferential Strength. Publication May 2009. **MacDonald, A.W., III, special section editor**.
3. *Journal of Abnormal Psychology*, Special Theme on Reconceptualizing the Diagnosis of Mental Disorders: Incorporating Promising Leads into Lasting Insights. Publication August 2013. **MacDonald, A.W., III, special section editor**.

Journal Articles Submitted for Peer Review (* indicates student/trainee/staff first-authors)

1. Borgert, A.J., Marjańska, M., Robinson, P., Mueller, B.A., Specker, S., Auerbach, E., Henry, P-G., **MacDonald, A.W., III**, & Lim, K.O. (under revision). Anterior cingulate cortex GABA deficit in cocaine dependence: effects of prior history of depression.
2. Haut, K.M.*, Calhoun, V.D., Rachakonda, S., Mathalon, D.H., Ford, J.M., the FBIRN, & **MacDonald, A.W., III** (under revision). Comparing perceptual, frontal, and default mode networks for identifying patients with schizophrenia: a multisite fMRI discriminant analysis.
3. **MacDonald, A.W., III**, Johnson, M.K., Steen, M., Duquette, S., Goghari, V.M. (under revision). Two traits of distrust: Individual differences in persecution and cynicism.
4. Gu, L. *, Lim, K.O., **MacDonald, A.W., III** (under revision). The effects of reward magnitude on parameter estimation of delay discounting indifference curve in clinical and normal populations.
5. Gu, L. *, Lim, K.O., Specker, S., Raymond, N., & **MacDonald, A.W., III** (under revision). Devaluation of reward in long-term cocaine users: the specificity of decision-making biases in cocaine addiction.
6. Kang, S.S., & **MacDonald, A.W., III** (under revision). Resolving the psychometric confound I:

Optimizing discriminating power measurement.

7. Kang, S.S., & **MacDonald, A.W., III** (under revision). Resolving the psychometric confound II: Correcting discriminating power differences.
8. Kim, S., Yzer, M.C., Vohs, K.D., Luciana, M. & **MacDonald, A.W., III** (resubmitted). Understanding perceived effectiveness: Message features induce effectiveness ratings of antidrug messages.
9. Kang, S.S., **MacDonald, A.W., III**, Chafee, M., Im, C-W, Aviyente, S., Bernat, E., Davenport, N., & Sponheim, S.R. (under revision). Abnormal synchrony of prefrontal cortex with visual cortical regions in schizophrenia during working memory.
10. Ramsay, I. S.*, Yzer, M.C., Vohs, K.D., Luciana, M., **MacDonald, A.W., III** (submitted). Building a better anti-drug PSA: a neural perspective on the features of persuasive health messages.
11. Beckes, L., McMenamin, B.W., **MacDonald, A.W., III**, & Marsolek, C.J. (under revision). Mismatches between social outcomes and goals activate the dorsal anterior cingulate cortex.
12. Ramsay, I.S.*, Nienow, T. M., & **MacDonald, A.W., III** (submitted). Overview of Cognitive Remediation in Schizophrenia. In C. Schulz, M. Green & K. Nelson (Eds.) *Oxford Primer in Schizophrenia*.
13. Ramsay, I.S.* & **MacDonald, A.W., III** (under revision). Neural Mechanisms Supporting Cognitive Remediation in Schizophrenia: An Activation Likelihood Estimate Meta-Analysis.
14. Abram, S.V.*, Wisner, K.M., Grazioplene, R.G., Krueger, R.F., **MacDonald, A.W., III**, DeYoung, C.G. (under revision). Insula Functional Coherence Predicts Externalizing and Disinhibition in Males.
15. Abram, S.V.*, Moodie, C.A., DeYoung C.G., MacDonalds, A.W., III, Waller, N.G. (submitted). A Data-driven Approach for Examining Individual Differences in Functional Connectivity Using Penalized Regression.
16. Kang, S.S., Sponheim, S.R., & **MacDonald, A.W., III** (submitted). Failure of Prefrontal Cognition not Visual Encoding Primarily Accounts for the Context Processing Deficit in Schizophrenia: Response to Dias et al.

Presentations

Invited Addresses, Symposia, Colloquia

1. “Neuroimaging perspective on cognitive control and the genes that cause schizophrenia.” Invited presentation at University of Michigan fMRI Laboratory Speaker Series. Ann Arbor, MI, 8 December 2005.
2. “A cognitive perspective on the relationship between prefrontal cortex and schizophrenia.” Invited presentation at Grand Rounds, Department of Neurology, University of Minnesota School of Medicine, Minneapolis, MN, March 2006.
3. “Imaging risky decisions with human and non-human partners.” Invited presentation at Graduate

Program for Neuroscience, University of Minnesota School of Medicine, Minneapolis, MN, 2 October 2006.

4. "Suckers: the structural, cognitive, and neuroanatomical basis of trust and suspiciousness." Invited presentation at the University of Minnesota Carlson School of Management, Department of Marketing Friday Series, Minneapolis, MN, 27 April 2007.
5. "Mending the broken brain: pathways toward rehabilitation in schizophrenia." Invited presentation at the 8th Annual Psychiatry Review, University of Minnesota Department of Psychiatry, Minneapolis, MN, 17 September 2007.
6. "Coming to the wall: Is more experimental psychopathology of schizophrenia necessary?" Presentation part of the "Is cognition still relevant for schizophrenia research?" Symposium at the Annual Meeting of the Society for Research in Psychopathology, Iowa City, IA, 4 October 2007. A. W. MacDonald, III, Symposium organizer.
7. "How the brain responds to cognitive rehabilitation." Invited presentation at the International Congress of Schizophrenia Research Translational meeting, Minneapolis, MN, 6 October 2008.
8. "Attentional control deficits in schizophrenia: Implications for glutamate, dopamine and neuromigration theories." Invited presentation at the Mt. Sinai Satellite Symposium on Cognition in Schizophrenia. San Diego, CA, 28 March 2009.
9. "The rough ride of experimental paradigms: From hypothesis testing in undergraduates to clinical application." Invited presentation as part of the Cognitive Neuroscience Treatment Research to Improve Cognition in Schizophrenia (CNTRICS): Motivation, Results, and Next Steps symposium at the International Congress on Schizophrenia Research, San Diego, CA, 29 March 2009.
10. "Body of knowledge: the purposes, approaches and outcome of appraising What We Know about schizophrenia." Workshop at the International Congress on Schizophrenia Research, San Diego, CA, 29 March 2009. A. W. MacDonald, III, symposium organizer. Webcast in collaboration with Schizophrenia Research Forum and the National Association for Research in Schizophrenia and Affective Disorders.
11. "The signature of schizophrenia: a problem with prefrontal cortex and how to fix it." Invited Inaugural Address at the Neuroscience Program of the University of St. Thomas, St. Paul, MN, 22 April 2009.
12. "Plasticity in the prefrontal cortex of schizophrenia patients undergoing cognitive training: stronger networks or alternative strategies?" Invited presentation at the 12th Annual Conference on Cognitive Remediation in Psychiatry, New York City, 5 June 2009.
13. "Role of medial PFC activation differences in MZ twins discordant for persecutory personality traits." Invited presentation at the Association for Research in Personality, Evanston, IL, 17 July 2009.
14. "Dynamic coordination in the brain: From neurons to mind." Invitational symposium at the Ernst Strüngmann Forum, Frankfurt Institute for Advanced Studies, Frankfurt, Germany, 16-21 August 2009.

15. "Plasticity in prefrontal cortex following cognitive training in schizophrenia patients." Invited symposium presentation at the 23rd Annual Meeting of the Society for Research in Psychopathology, Minneapolis, MN, 12 September 2009.
16. "Bringing cognitive neuroscience into treatment trials for schizophrenia: the CNTRICS initiative." Invited presentation at NARSAD's Healthy Minds Across America, Minneapolis, MN, 24 April 2010.
17. "Translation and development of a goal maintenance task for clinical applications." Invited presentation in the Cognitive Neuroscience in the Clinic: Developing Measures of Treatment Effects symposium at the Society of Biological Psychiatry's 65th Annual Scientific Convention, New Orleans, LA, 20-22 May 2010.
18. "Working memory - Event Related Potential (ERP); functional MRI (fMRI); gamma evoked oscillations." Invited presentation at the Forum on Neuroscience and Nervous System Disorders' workshop on Glutamate-related Biomarkers in Drug Development for Disorders of the Nervous System. Institute of Medicine, Washington, D.C., 21-22 June 2010.
19. "Measuring Deficit "g"? Domain Specific Deficits or a System Failure." Gold, J., **MacDonald, A.W., III** and the CNTRICS Consortium (Barch, D. M., Carter, C. S., Dakin, S., Harvey, P., Keefe, R., Kovacs, I., Luck, S. J., Ragland, J. D., Ranganath, C., Silverstein, S., Strauss, M.E.). Invited presentation Cognitive Neuroscience in the Clinic: The Good, the Bad and The Ugly symposium at the 24th Annual Meetings of the Society of Research in Psychopathology, Seattle, WA, 7-10 October 2010.
20. "CNTRICS Constructs: Executive Control" **MacDonald, A.W., III**. Invited presentation at CNTRICS II: Human Biomarkers of Schizophrenia, Davis, CA, 28 October 2010.
21. "Networks and Symptoms: The Cognitive Neuroscience of Executive Control in Health and Disease." **MacDonald, A.W., III** & Carter, C.S. Invited presentation at NIMH's 3rd Brain Camp. Cold Spring Harbor, NY. 18-21 March, 2011.
22. "The efficient measurement of differential deficits in goal representation." **MacDonald, A.W., III**, Henderson, D., Poppe, A., Barch, D. M., Carter, C. S., Gold, J.M., Ragland, J.D., Ranganath, C., Silverstein, S., Strauss, M.E. Invited presentation New Neuroscience-Based Cognitive Paradigms for Biomarker Research in Schizophrenia at the 13th Biennial Meeting of the International Congress on Research in Schizophrenia, Colorado Springs, CO. April 2011.
23. "How independent components can contribute to the sadly neglected neurometrics of functional imaging." **MacDonald, A.W., III** & Wisner, K. Invited presentation at the Presidential Symposium on Grounding Psychodiagnosis in Neurophysiology: Promises and Challenges at the 51st Annual Meeting of the Society for Psychophysiological Research, Boston, MA. 16 September 2011.
24. "Functional connectivity of reward responsivity and disinhibition." **MacDonald, A.W., III**. Invited presentation at the NIDA Symposium on Dis-Connectivity of the Brain in Addiction and its Interventions at the Annual Meeting of the American Psychiatric Association, Philadelphia, PA. 7 May 2012.

25. Invited discussant for “Neural networks across development in health, anxiety/depression, and treatment implications” at the 51st ACNP Annual Meeting in Hollywood, FL, 6 December, 2012.
26. “Giving the devil his due: Reliability engineering approaches to general failures in psychopathology.” **MacDonald, A.W., III**. Invited presentation at the Center for Cognitive Sciences Fall Insitute 2013 theme, Cognition, Psychopathology and the Brain, University of Minnesota, MN. 8 October 2013.
27. “What Happens When Cognitive and Affective Processes Break Down in Schizophrenia.” **MacDonald, A.W., III**. Invited presentation at Psychiatry Update 2014, Minneapolis, MN. April 3, 2014.

Recent Conference Presentations (* indicates student/trainee/staff first-authors)

1. Ragland, J.D., Ranganath, C., Barch, D., Dakin, S., Gold, J., Haley, B., Harvey, Ph., Richard, K., Kovacs, I., Lucks, S., **MacDonald, A., W., III**, Silverstein, S., Strauss, M., Carter, C.S. (May 2010). Translational development of the relational and item-specific encoding (RISE) long-term memory task. Presented at the Society of Biological Psychiatry’s 65th Annual Scientific Convention, New Orleans, LA, 20-22 May 2010.
2. Silverstein, S, Barch, D., Dakin, S., Gold, J., Haley, B., Harvey, Ph., Richard, K., Kovacs, I., Lucks, S., **MacDonald, A., W., III**, Ragland, J.D., Ranganath, C., Strauss, M., Carter, C.S. (May 2010). Translational development and psychometric comparison of two visual integration tasks. Presented at the Society of Biological Psychiatry’s 65th Annual Scientific Convention, New Orleans, LA, 20-22 May 2010.
3. Patzelt, E.H.*, Johnson, M.K., **MacDonald, A.W., III** (June 2010). Decisions to trust elicit medial prefrontal activity in persecuted and non-persecuted schizophrenia. Poster Presentation at the 2010 Annual Meeting of the Organization for Human Brain Mapping. Barcelona, Spain.
4. Poppe, A.B.*, Minzenberg, M., Rafael, S., Carter, C.S. & **MacDonald, A.W., III** (October 2010). Context processing deficits in schizophrenia patients and their first-degree relatives: an independent components analysis of fMRI data. Poster presentation at the 24th Annual Meeting of the Society of Research in Psychopathology, Seattle, WA, 7-10 October 2010.
5. **MacDonald, A.W., III**, Ramsay, I, Steen, M. Faber, R.J., Luciana, M. Vohs, K.D., Yzer, M.C. (November 2010). Persuasion Neuroscience? Functional MRI of effective and ineffective anti-drug messages in adolescents. Presentation at the nanosymposium “Opiates: Diversity of Approaches and Treatment Implications” at Neuroscience 2010. San Diego, CA.
6. Henderson, D.* , Fang, G., Paunic, V., Oatley, B., Miller, M.B., Swanson, L.C., Lim, K.O., Steinbach, M., Kumar, V., & **MacDonald, A.W., III** (November 2010). “Exploring the relationship between context processing and genetic risk for schizophrenia using discriminative pattern analysis.” Poster presentation at at Neuroscience 2010. San Diego, CA.
7. Camchong J*, **MacDonald, AW, III**, Nelson B, Bell C, Mueller BA, Lim KO (December 2010). Increased frontal functional connectivity in chronic cocaine-dependent subjects and its association with delayed discounting and reversal learning task performance. Poster presentation at the American

College of Neuropsychopharmacology, Miami, FL.

8. **MacDonald, A.W., III** & Kang, S.S. (April 2011). Brute force estimation of tests? discriminating power: a simulation and independent components analysis approach. Poster presentation at the International Congress of Research in Schizophrenia, Colorado Springs, CO.
9. Patzelt, E.H.*, Lim, K.O., Raymond, N., Specker, S., **MacDonald, A.W., III** (April 2011). The ability to adapt to shifting reward contingencies is differentially impaired in cocaine addiction and binge eating disorder. Poster presentation at the 2011 Annual Meeting of the Cognitive Neuroscience Society, San Francisco, CA.
10. Wisner, K.M.*, Krueger, R.F., **MacDonald, A.W., III** (June 2011). Intrinsic connectivity networks: Replication with extension to adolescent individual differences. Poster presentation at the 17th annual meeting of the Organization for Human Brain Mapping, Quebec City, Quebec.
11. Ramsay, I.S.*, Yzer, M.C., Faber, R.J., Luciana, M., Vohs, K.D., & **Angus W. MacDonald III** (June 2011). The impact of individual differences on anti-drug advertisements: an fMRI study of adolescents. Poster presentation at the 17th annual meeting of the Organization for Human Brain Mapping, Quebec City, Quebec.
12. Henderson, D.*, Paunic, V., Feng, G., Miller, M. B., Steinbach, M., Kumar, V., Lim, K.O., Barch, D. M., Carter, C. S., Gold, J. M., Silverstein, S. M., & **MacDonald, A. W., III** (November 2011). Discriminative pattern analysis for evaluation of epistasis in context processing and schizophrenia. Poster presentation for the 41st Annual Meeting of the Society for Neuroscience, Washington, D. C.
13. Poppe, A.*, Barch, D., Carter, C., Gold, J., Ragland, D., Silverstein, S., MacDonald, A. (April 2012). Intrinsic connectivity Networks Underlying Context Processing Deficits in Schizophrenia. Poster presented at the Cognitive Neuroscience Society Conference, Chicago, IL.
14. Wisner, K.M.*, Lim, K.O., MacDonald, A.W. (April 2012). Neurometrics of Intrinsic Connectivity Networks: Retest Reliability and Cross-Validation Using a Meta-Level Method. Poster presented at the Cognitive Neuroscience Society Annual Meeting, Chicago, IL.
15. Ian S. Ramsay*, Marco C. Yzer, Monica Luciana, Kathleen Vohs, **Angus W. MacDonald III**. (April 2012). Persuasion is characterized by simultaneous limbic and prefrontal activation. Poster Session at Cognitive Neuroscience Society. Chicago, IL.
16. Moodie, C.*, Wisner, K.M., **MacDonald, A.W., III**. (March 2012). Assessing the Trait-Like Characteristics of Intrinsic Connectivity. Poster will be presented at the Cognitive Neuroscience Society Annual Meeting, Chicago, IL
17. Patzelt, E.H.*, Kurth-Nelson, Z., Raymond, N., Specker, S., Lim, K.O., **MacDonald, A.W., III**. (April 2012). State switching in psychopathology using a hidden markov model. Poster presentation at the 2012 cognitive Neuroscience Society Conference, Chicago, IL.
18. Goghari, V., **MacDonald, A.W., III**, Sponheim, S.R. (April 2012). Relationship between working memory performance and prefrontal volumes in schizophrenia: A family study. Poster presentation at the 3rd Biennial Schizophrenia International Research Society Conference, Florence, Italy.

19. **MacDonald, A.W., III**, Wisner, K.M., & Poppe, A. (April 2012). Comparison of Task- and Rest-related Intrinsic Connectivity Networks for the Study of Individual Differences in Cognitive Control. Presentation at the Cognitive Neuroscience Society Annual Meeting , Chicago, IL.
20. Dey, S., Atluri, G., Steinbach, M., Lim, K., **MacDonald, A.** & Kumar, V. (October 2012). A Pattern Mining Based Integrative Framework for Biomarker Discovery. Presentation at the ACM Conference on Bioinformatics, Computational Biology and Biomedicine, Orlando, FL.
21. **MacDonald, A.W., III**, Wisner, K.M., Patzelt, E., Camchong, J., Specker, S., & Lim, K.O. (October 2012). Deleterious resting-state connectivity in stimulant dependence. Presentation at the 52nd Annual Meeting of the Society for Psychophysiological Research, New Orleans, LA.
22. El Shaikh, A.A.* , Sponheim, S.R., Chafee, M.V., **MacDonald, A.W., III**. (October 2012). Spatial attentional control is not impaired in schizophrenia: Dissociating specific from generalized deficits. Presentation at the 52nd Annual Meeting of the Society for Psychophysiological Research, New Orleans, LA.
23. Jones, J.A.H., Kang, S.S., **MacDonald, A.W., III**, Sponheim, S.R. (March 2013). Electrophysiological components associated with context processing impairment in schizophrenia. Poster presentation at the International Congress of Research in Schizophrenia, Orlando, FL.
24. Ramsay, I.S.* & **MacDonald, A.W., III**. (April 2013). Cognitive remediation training affects default mode network coherence in patients with schizophrenia. Poster Session at International Congress on Schizophrenia Research, Orlando, FL.
25. Nienow, T. M., Gerould, H. L., Smith, M. D., Schwartz, C. E., Sponheim, S. R. & **MacDonald, A. W.** (April, 2013). Patient Perceptions of Computer-based Skills Training. Poster presentation for the International Congress on Schizophrenia Research, Orlando, Florida.
26. Poppe, A.P.* , Minzenburg, M., Rafael, S., Carter, C.S., & **MacDonald, A.W., III**. (April 2013). fMRI of genetic liability to schizophrenia: Regional activity and connectivity difference perspectives. Poster presentation at the International Congress on Schizophrenia Research, Colorado Springs, CO.
27. Ramsay, I.S.* , **MacDonald, A.W., III**, Marggraf, M.P., & Nienow, T. (June 2013). Cognitive Skills Training Affects Brain Connectivity During Task and Rest: Preliminary Findings. Poster Session at Cognitive Remediation in Psychiatry, New York, N.Y.
28. Wisner, K.M.* , Patzelt, E.H., Lim, K.O., & **MacDonald, III, A.W.** (June 2013). Expanding the boundaries of addiction neuroscience: Utilizing dimensionality for prediction. Poster presented at the 19th Annual Meeting for the Organization for Human Brain Mapping in Seattle, WA
29. Ramsay, I.S.* , **MacDonald, A.W., III**, Marggraf, M.P., & Nienow, T. (April 2014). Changes in Functional Activation and Neural Connectivity in Response to Cognitive Remediation in Schizophrenia. Poster Session at Schizophrenia International Research Society, Florence, Italy.
30. **MacDonald, A.W., III**, Moodie, C., Poppe, A.B., Wisner, K.M., & Atluri, G. (November 2013). Are Intrinsic Connectivity Networks Stable Individual Differences? Twin and Retest Samples at Rest And During Task. Poster presentation at Neuroscience 2013. San Diego, CA.

31. Miner, M., Swinburne, R.R., MacDonald, **MacDonald, A.W., III**, Janssen, E., Patzelt, E., Raymond, N., Coleman, E., Strobel, C., Person, A. (November 2013). Toward a Conceptualization of Hypersexuality: Preliminary Cognitive and Psychophysiological Data. Annual Meeting of the Society for the Scientific Study of Sexuality. San Diego, CA.
32. Wisner, K.M.*, Lim, K.O., **MacDonald, A.W., III**, . (May 2014) Aberrant intrinsic connectivity involving insula and orbital frontal cortex in individuals with schizophrenia. Poster presented at the Society of Biological Psychiatry 69th Annual Scientific Convention in New York, NY.
33. Ramsay, I.S.*, **MacDonald, A.W., III**, Marggraf, M.P., & Nienow, T. (June 2014). Changes in Functional Activation and Neural Connectivity in Response to Cognitive Remediation in Schizophrenia. Poster Session at Cognitive Remediation in Psychiatry, New York, N.Y.
34. Ramsay, I.S.* & **MacDonald, A.W., III**. (September 2014). Brain Areas Supporting Neural Response to Cognitive Remediation in Schizophrenia: an ALE Meta-Analysis. Poster Session at Society for Research in Psychopathology, Evanston, IL.
35. Wisner, K.M*, Johnson, M.K, **MacDonald, III, A.W.** (September 2014). A neural investigation of persecutory ideation using the Minnesota Trust Game. Poster presented at the Society for Research in Psychopathology 28th Annual Meeting in Evanston, IL
36. **MacDonald, III, A.W.**, Poppe, A.B., Elliott, M., Barch, D.M., Carter, C.S., Golds, M., Ragland, J.D., Silverstein, S.M. (November 2014). Dot Pattern Expectancy (DPX) task efficiently measures specific cognitive control deficits and prefrontal cortical abnormalities in patients with schizophrenia. Poster presentation at 2014 Annual Meeting of the Society for Neuroscience. Washington, D.C.

PROFESSIONAL ACTIVITIES

Journal Reviewing:

1. Associate Editor: Journal of Abnormal Psychology (2011-present)
2. Consulting Editor: Journal of Abnormal Psychology (2005-2010)
3. Guest Action Editor: Schizophrenia Bulletin (2008, 2009)
4. Ad Hoc Referee: Acta Psychiatrica Scandinavica (2006), American Journal of Psychiatric Genetics (2006), American Journal of Psychiatry (2006-07, 2010), Archives of General Psychiatry (2003 – 12), Biological Psychiatry (2004-13), BioMed Central (BMC) Psychiatry (2004), Bipolar Disorder (2002), Brain (2012), Brain and Behavioral Science (2002, 2006), Brain Research (2006, 2012), British Journal of Psychiatry (2009), Clinical Psychological Science (2013), Cognitive, Affective and Behavioral Neuroscience (2007, 2009-2013), Cerebral Cortex (2003-04, 2008, 2010, 2012), Emotion (2005-06), Human Brain Mapping (2004, 2009), Journal of Abnormal Psychology (1999 – 2004), Journal of Neuroscience (2006), Journal of Personality (2007), Neuroimage (2002, 2004), Neuron (2011), Neuropsychology (2005), Neuropsychopharmacology (2011, 2013), Neuroscience (2005), Proceedings of the National Academy of Science, U.S.A. (2006-08, 2010), Psychological Medicine (2004, 2006, 2010-11), Psychiatry Research (2003), Schizophrenia Bulletin (2006, 2008-12), Schizophrenia Research (2004, 2010), Science (2006, 2009, 2011).

Presses:

- Ad Hoc Reviewer: MIT Press (2012)

Grant Reviewing:

National Institutes of Health

1. NIMH, Special Emphasis Panel ZMH1 NRB-Q, Ad hoc Member, 2004 – 2005
2. NIMH, Special Emphasis Panel ZMH1 ERB-D, Ad hoc Member, 2007
3. NIMH, Special Emphasis Panel ZMH1 ERB-Z (06), Ad hoc Member, 2008
4. NIMH, Special Emphasis Panel ZMH1 ERB-S (01), Ad hoc Member, 2009
5. CSR, Molecular Neurogenetics (MNG) Study Section & Special Emphasis Panel ZRG1 ETTN-G (60), Ad hoc Member, October 2009-February 2010
6. NIDA, Special Emphasis Panel ZDA1 KXH-C (08) Cognitive Remediation Approaches to Improve Drug Abuse Treatment Outcomes, Ad hoc Member, June 2010
7. NIMH, Special Emphasis Panel ZMH1 ERB-S04/L07, Ad hoc Member, March 2012, June 2012, October 2012
8. NIMH, Special Emphasis Panel ZMH1 ERB-S04, Ad hoc Member, March 2013.

International Research Institutes:

1. Wellcome Trust, United Kingdom, External Reviewer, 2004, 2006
2. Israeli Science Foundation, External Reviewer, 2007
3. National Medical Research Council, Singapore, External Reviewer, 2005
4. Italian National Institute of Health, Biobehavioral and Behavioral Processes Online Reviewer, 2010

University of Minnesota:

1. University of Minnesota Medical Center, General Clinical Research Center, Reviewer, 2005

Mentoring & Committee Service:**Post-doctoral Mentoring.**

1. Jazmin Camchong, Ph.D. 2007 – 2010. University of Minnesota Departments of Psychology and Psychiatry.
 - a. NIMH Clinical Science & Psychopathology Training Grant fellowship, 2008-2009. NIMH Psychoneuroimmunology Training Grant Fellowship 2009-2011.
2. Seung Suk Kang, Ph.D. 2008-2011. Veterans Affairs Medical Center Department of Psychiatry and University of Minnesota Department of Psychology.

Graduate Student Mentoring.

1. Vina Goghari, 2003-2009. University of Minnesota Department of Psychology, Clinical Science and Psychopathology Research Program.
 - a. College of Liberal Arts Graduate Research Partnership Program award “Prefrontal structure and function in the healthy relatives of schizophrenia patients and controls.” 2004.
 - b. NSERC Masters Award, “Comparison of neuroanatomical basis of cognitive control and response inhibition.” 2004-2005.
 - c. NSERC Doctoral Award, “Exploring the dual mechanisms of cognitive control.” 2005-2008.
 - d. Department of Psychology David Campbell Research Fellowship, 2006.
 - e. Master’s Thesis, “Efficient acquisition of paired events in fMRI: Comparison of techniques across a cognitive control paradigm.” March 2006.
 - f. Graduate School Patrick & Kathy Lewis Thesis Research Grant, “Do you see what I see: The nature of emotion recognition deficits in schizophrenia.” November 2006.
 - g. Vertically Integrated Research Team Experience (VIRTE) Program fellowship, Summer

- 2007, “Prefrontal structure-function relationships in schizophrenia patients, their health relatives and controls.”
- h. Specials Paper, “The functional neuroanatomy of symptoms in schizophrenia.” August 2007.
 - i. Clinical Internship: University of Illinois at Chicago, July 2008 – June 2009.
 - j. Dissertation, “Functional and structural brain markers of the genetic vulnerability to schizophrenia: A neuroimaging investigation of schizophrenia patients, non-psychotic adult relatives, and community controls.” June 2009.
2. Seung Suk Kang, 2004-2008. University of Minnesota Department of Psychology, Biological Psychopathology Program, Co-Advisor with S.R. Sponheim.
 - a. Specials Paper, “Functional disintegration syndrome of schizophrenia.” September 2007.
 - b. College of Liberal Arts Graduate Research Partnership Program award, “MEG/fMRI Integration in the Study of PFC/Parietal Disconnectivity in Schizophrenia.” 2008.
 - c. Dissertation, “Functional dysintegration syndrome of schizophrenia: a multimodal neuroimaging study.” November 2008.
 3. Kristen Haut, 2004-2010. University of Minnesota Department of Psychology, Clinical Science and Psychopathology Research Program.
 - a. College of Liberal Arts Graduate Research Partnership Program award “Functional neuroplasticity through cognitive rehabilitation in schizophrenia.” 2005.
 - b. NIMH Clinical Science & Psychopathology Training Grant fellowship, 2005-2007.
 - c. Wisconsin Symposium on Emotion Fellowship award, 2007.
 - d. Master’s Thesis, “Prefrontal cortical changes following cognitive training in patients with schizophrenia.” June 2007.
 - e. Eva O. Miller Fellowship award “Cognitive control over emotional reactivity in schizophrenia.” 2007-2008.
 - f. Society for Research in Psychopathology 2007 Smadar Levine Award Runner Up, “Cognitive training in schizophrenia: prefrontal cortical changes and behavioral correlates.”
 - g. Specials Paper, “Improving diagnosis in schizophrenia by evaluation of underlying neurocognitive deficits and functional connectivity.” February 2008.
 - h. Clinical Internship: University of California, Los Angeles, July 2009 – June 2010.
 - i. Dissertation, “The Use of Functional Networks to Identify Patients with Schizophrenia and Assess Models of Underlying Deficits.” June 2010.
 4. Rachel Force, 2004-2010. University of Minnesota Department of Psychology, Biological Psychopathology Program, Co-Advisor with S.R. Sponheim.
 - a. Master’s Thesis, “The specificity of auditory processing event-related potential anomalies in schizophrenia.” February 2007.
 - b. Specials Paper, “A Model of the Neural Mechanisms Underlying Sensitivity Deficits on the DS-CPT in Schizophrenia.” February 2008.
 - c. Dissertation, “An fMRI investigation of perceptual impairments on the DS-CPT in Schizophrenia Patients.” December 2010.
 5. Melissa Johnson, 2005-2011. University of Minnesota Department of Psychology, Clinical Science and Psychopathology Research Program.
 - a. College of Liberal Arts Graduate Research Partnership Program award, “Neural underpinnings of suspicious personality characteristics.” 2006.
 - b. Master’s Thesis, “Economic decision-making differentiates paranoid suspiciousness from rational mistrust and risk aversion.” May 2007.

- c. Specials Paper, "Translational approach to the neurobiology of positive symptoms in schizophrenia: persecutory ideation and the medial prefrontal cortex." September 2009.
 - d. NIMH Clinical Science & Psychopathology Training Grant fellowship, 2009-2010.
 - e. Clinical Internship: Baltimore Consortium
 - f. Dissertation, "A Translational Approach to the Neurobiology of Persecutory Ideation in Schizophrenia." August 2011.
5. Jessica Hurdelbrink Jones, 2006-2011, University of Minnesota Department of Psychology, Clinical Science and Psychopathology Research Program, Co-Advisor with S.R. Sponheim.
 - a. College of Liberal Arts Graduate Research Partnership Program award "Context processing in psychometrically-identified schizotypes." 2007.
 - b. Master's Thesis, "The Dot Pattern Expectancy Task: Reliability and Replication of Deficits in Schizophrenia." September 2008.
 - c. Specials Paper, "Cognitive deficits in schizophrenia: the case for context processing." September 2009.
 - d. Clinical Internship: Hazelden Foundation, Center City, MN.
 - e. Dissertation, "Behavioral and Electrophysiological Correlates of Context Processing in Individuals with Schizophrenia and Their First-Degree Relatives." August 2011.
 6. Lidan Gu, MA, 2009-2012, University of Minnesota Department of Educational Psychology, Counseling Psychology Program.
 - a. Specials Paper, "Delay discounting as a measure of impulsivity: a critical review of literature." November 2010.
 - b. Clinical Internship: University of Minnesota Counseling Services
 - c. Dissertation, "Delay Discounting as a Measure of Impulsivity." November 2011.
 7. Craig Moodie, 2011-2014, University of Minnesota Graduate Program in Neuroscience, Co-advisor with K.O. Lim.
 - a. Dissertaion,, "Neurometric encoding and decoding: Using Multivariate Functional Connectivity Methods to Describe Cognitive States, Traits and Clinical Endophenotypes." October 2014.
 8. Andrew Poppe, 2009-present, University of Minnesota Department of Psychology, Clinical Science and Psychopathology Research Program.
 - a. College of Liberal Arts Graduate Research Partnership Program award "Context processing deficits in schizophrenia patients and their first-degree relatives." 2010.
 - b. Master's Thesis, "fMRI of genetic liability to schizophrenia: Regional activity and connectivity difference perspectives." April 2011.
 9. Krista Wisner, 2010-present, University of Minnesota Department of Psychology, Clinical Science and Psychopathology Research Program.
 - a. College of Liberal Arts Graduate Research Partnership Program award, 2011.
 - b. NIMH Clinical Science & Psychopathology Training Grant fellowship, 2011-2011.
 - c. National Institute of Mental Health, National Research Service Award F31, "Neural Nature of Persecutory Ideation in Schizophrenia." September 2013 - August 2015.
 10. Ian Ramsay, 2010-present, University of Minnesota Department of Psychology, Clinical Science and Psychopathology Research Program.
 - a. NIMH Clinical Science & Psychopathology Training Grant fellowship, 2011-2012.
 - b. Center for Personalized Prevention Research Early Career Investigators Network (ECIN) Summer Fellowship, 2013.

- c. National Institute of Mental Health, National Research Service Award F31, May 2014 - August 2015.
- 11. Ansam-El-Shaikh, MA, 2010-present, University of Minnesota Department of Psychology, Biological Psychopathology Program.
 - a. Egyptian Government Scholarship, 2010-2013.
- 12. Samantha Abram, 2012-present, University of Minnesota Department of Psychology, Clinical Science and Psychopathology Research Program.
 - a. Center for Cognitive Sciences student fellowship, 2013-2014.
- 13. Yizhou Cherry Ma, 2014-present, University of Minnesota Department of Psychology, Clinical Science and Psychopathology Research Program.

Undergraduate Student Mentoring.

46 University of Minnesota Directed Research advisees (2003-present)

14 University of Pittsburgh Directed Research advisees (1998-2002)

1 Mentoring Connection (Mahtomedi High School) advisee (2005)

In addition to projects specified below:

1. Theresa M. Becker, 2002, University of Pittsburgh Senior Honors Thesis, "Verbal & Spatial Working Memory Deficits in Schizophrenia Patients: General or Specific?"
2. Jessica L. Barker, 2003, University of Minnesota, Undergraduate Research Opportunities Program (UROP) Grant.
3. Kyle Ratner, 2003, Research Experience for Undergraduates (REU) Summer Program, "Cognitive Components of Economic Decision-Making."
4. Marsha Sargeant, 2004, Research Experience for Undergraduates (REU) Summer Program, "Personality Correlates of Antisocial Behavior in Economic Decision-Making Games."
5. Zack Adams, 2005, Research Experience for Undergraduates (REU) Summer Program, "A Multidimensional Exploration of Schizotypy and Normal Personality via Self-Report."
6. James Porter, 2006, University of Minnesota Senior Honors Thesis, "Reliability of an Automated Method for Cortical Parcellation in the Analysis of Structural MRI." *Awarded "Poster of Note" (top 8 of 160) at 2006 University of Minnesota Undergraduate Research Session.*
7. Margaret Flood, 2006, Research Experience for Undergraduates (REU) Summer Program, "Brain activity associated with switch-costs: an fMRI study."
8. Megan Rozman, 2007, Undergraduate Research Opportunities Program (UROP) grant, "Dissociating Cognitive Processes in Psychometrically-Defined Schizotypy." *Awarded funding for National Conference on Undergraduate Research from the College of Liberal Arts.*
9. Jennifer Ostergren, 2007, University of Minnesota Senior Honors Thesis, "Affective images in a flanker task: An investigation of cognitive control in emotion" *Junita J. Mortensen Research Award from the Department of Psychology.*
10. Margaret Wilke, 2007, University of Minnesota Senior Honors Thesis, "A Structured Interview Approach to the Subjective Experience of Suspiciousness" *Junita J. Mortensen Research Award from the Department of Psychology.*
11. Danielle Huber, 2007, Department of Psychology Senior Thesis. "Conceptualizing dimensions of trust."
12. Maria Prom, 2007, Research Experience for Undergraduates (REU) Summer Program, "Test-retest reliability of functional MRI in schizophrenic patients within a working memory paradigm."
13. Sylvia Sng, 2008, Undergraduate Research Opportunities Program (UROP) grant.

14. Adam Gierok, 2008, Department of Psychology Senior Honors Thesis. "COMT polymorphism and reasoning in schizophrenia and first-degree relatives of patients."
15. Heather Watson, 2008, Department of Psychology Senior Thesis. "Behavioral differences among schizophrenia patients, first degree biological relatives, and controls in a Stop Signal Task."
16. Annie Niesen, 2008, Department of Psychology Senior Thesis. "Test-retest reliability of cognitive control deficits in schizophrenia patients, relatives, and controls."
17. Amanda Kern, 2008, Research Experience for Undergraduates Summer Program, "Context processing aptitude in individuals with cocaine dependence."
18. Madelyn Steen, 2008, Department of Psychology Senior Honors Thesis. "The role of persecuted personality in suspicious and hostile decision-making."
19. Andrew White, 2009, Research Experience for Undergraduates Summer Program, "Establishing visual tasks sensitive to context processing deficits in schizophrenia."
20. Elizabeth Davis, 2009. Department of Psychology Senior Honors Thesis. "An exploration of the relationship among personality, subjective well-being, and affective reactivity."
21. Lindsay Swanson, 2010. Department of Psychology Senior Honors Thesis. "Schizophrenia: A Study of Context Processing and Genetic Risk."
22. Mike Reinke, 2010. Department of Psychology Senior Honors Thesis. "Adaptation to gains and losses: Relationship to personality and prediction of utility."
23. Ashley Talberg, 2010, Department of Psychology Senior Project. "Belief in a Just Universe versus Group Membership: What is the Truth behind Trusting Behavior?"
24. Anthony Grandelis, 2011. Department of Psychology Senior Honors Thesis. "The Effect of Anti-Drug Message Strength on Long Term Memory."
25. Tulsi Patel, 2011, Research Experience for Undergraduates Summer Program, "Affective perceptual aberrations: Potential effect on decision-making and trusting behaviors."
26. Regina Steffen, 2013-14, President's Distinguished Faculty Mentor Program, The Office for Equity and Diversity, Multicultural Center for Academic Excellence.
27. Maxwell Elliott, 2014. Department of Psychology Senior Honors Thesis.

Other Mentoring.

1. Peter Milev, M.D., Ph.D., University of Minnesota School of Medicine Career Advancement Program for Clinical Research Scholars (CAPS), 2006-2010. "Deficits in perceptual organization and thought disorder in schizophrenia: relationships with fMRI functional anatomy and with in vivo GABA and glutamate status measured with magnetic resonance spectroscopy." Co-mentor.
2. Gowtham Atluri, Ph.D., University of Minnesota College of Science & Engineering, Department of Computer Science and Engineering, 2012-2014. Dissertation.

Thesis Committee Service (in addition to committees for students in the TRiCAM Laboratory).

1. Doctoral Theses
 - a. Elizabeth Hurliman (Psychology, C SPR). "Feedback processing in the ventral prefrontal lobes." November 2004.
 - b. Adam Schmidt (Psychology, C SPR). "A behavioral profile of the adult rat following fetal/neonatal iron deficiency." September 2005.
 - c. Stephen Benning (Psychology, C SPR). September 2006.
 - d. Molly Gill Willer (Psychology, C SPR). "Bulimia nervosa: towards a better understanding of diagnosis and treatment." May 2007.

- e. Ela Bhatt (Rehabilitation Sciences). "Finger vs. elbow tracking: neural substrates of motor skill learning revealed using fMRI." July 2007.
 - f. Dongju Seo (Psychology, CSPR). "Cognitive control over positive and negative emotion." July 2008.
 - g. Susanne Vrshek-Schallhorn (Psychology, CSPR). "The effects of acute tyrosine phenylalanine depletion on emotion-based decision-making on the iowa gambling task in healthy adults." August 2008.
 - h. Nicholas Davenport (Psychology, BP). "Characterizing sources of variance in voxelwise analyses of white matter integrity in schizophrenia."
 - i. Jaroslaw Grygolec (Economics), "Neuroeconomics of Social Decisions." December 2008.
 - j. Ian Stoner (Philosophy), "The Reward of Virtue: An Essay on the Relationship Between Character and Well-Being." July 2011.
 - k. Sara Klaphake (Psychology, CABS). "Depletion and Replenishment: Exploring Self-Regulation Resource Depletion, Activities that Replenish the Resource, and the Corresponding Effects on Mood." August 2011.
 - l. Brenton McMenamin (Psychology, CABS). "More than a feeling: Emotional value alters visual perception." May 2012.
 - m. Jamie Joseph (Rutgers University, NJ, Neuroscience). "Identifying SNP correlates of a schizophrenia subtype characterized by poor premorbid functioning and perceptual organization deficits." June 2013.
 - n. Rachel Blackman (Graduate Program in Neuroscience). "Neural basis of context processing dysfunction in schizophrenia: A monkey model." July 2013.
 - o. James Porter (Psychology, CSPR). "Cortical and subcortical correlates of emotional control across adolescent development." August 2013.
 - p. Jennifer Puig (Institute for Child Development, DPCS). "Mitigating the effects of early experience: adolescent social functioning as a predictor of adult physical health." September 2013.
 - q. Michael-Paul Schallmo (Graduate Program in Neuroscience). On-going.
 - r. Andrew Papale (Graduate Program in Neuroscience). On-going.
 - s. Gowtham Atluri (Computer Science and Engineering). On-going.
2. Comprehensive Specials Theses
- a. Stephen Benning (Psychology, CSPR). September 2004.
 - b. Molly Gill Willer (Psychology, CSPR). "Prognostic Indicators for Outcome from Cognitive Behavioral Therapy for Bulimia Nervosa." April 2005.
 - c. Michelle Stein (Graduate Program in Neuroscience). "Development of prefrontal abilities: performance of 8- and 11-year-old children on the Cambridge Neuropsychological Test Automated Battery." May 2005.
 - d. Ela Bhatt (Rahabilitation Sciences). Specialist Certificate Examining Committee. October 2005.
 - e. Dongju Seo (Psychology, CSPR), "Neural Mechanism of Impulsive Aggression." October 2006.
 - f. Nicholas Davenport (Psychology, Biological Psychopathology), "Regional abnormalities of white matter volume and integrity in schizophrenia." January 2007.
 - g. Sara Kvidera (Psychology, Cognitive & Biological), "Depletion and replenishment: exploring self-regulation resource depletion, activities that replenish the resource, and individual

- differences in both.” June 2009.
- h. Katherine Lingras (Institute for Child Development, DPCS), “For better or worse? A developmental perspective on the contributions of executive function to relationally aggressive behavior.” January 2010.
 - i. Daniel Goldman (Psychology, CSPR). “The Need for Dimensional Approaches in Understanding Startle Reflex Dysregulations in Posttraumatic Stress Disorder.” April 2010.
 - j. Rachel Blackman (Neuroscience), “Impact of synaptic disconnection on context processing in prefrontal cortex.” August 2010.
 - k. Jamie Joseph (Neuroscience, Rutgers University). Written exam. August 2010.
 - l. Andrew Papale (Graduate Program in Neuroscience), “Hippocampal modulation of intertemporal choice in rats.” November 2010.
 - m. Brenton McMenamen (Psychology, CAB). “Hemispheric asymmetries in amygdala function explained by asymmetries in object representation.” December 2010.
 - n. James Porter (Psychology, CSPR) “Tracking the development of motivational control across childhood, adolescence, and young adulthood.” April 2011.
 - o. Jennifer Puig (Institute for Child Development, DPCS). 2012
 - p. Gowtham Atluri (Computer Science and Engineering). January 2013.
 - q. Nathalia Torres Jimenez (Graduate Program in Neuroscience). “The pERG of Schizophrenia.” November 2014.
3. Master’s Theses
- a. Nicholas Davenport (Psychology, Biological Psychopathology). “Neural Anomalies During Visual Search in Schizophrenia Patients and Unaffected Siblings of Schizophrenia Patients.” December 2005.
 - b. James Porter (Psychology, CSPR) “Cortical maturation and verbal fluency in childhood, adolescence, and young adulthood,” October 2009.
 - c. Casey Gradick (Public Health, Epidemiology) “Characterization of hospital-treated schizophrenia in the Los Ríos Region, Chile.” August 2012.
4. Undergraduate Honors Theses
- a. JoAn Laes (Psychology). “Relationships between cognitive functions and current social functioning in schizophrenia and bipolar affective disorder,” May 2004.
 - b. Nancy Meissner (Psychology). “Smell identification ability and cognitive associations in patients with deficit/nondeficit schizophrenia, bipolar affective disorder, and their relatives.” May 2005.
 - c. Noah Venables (Psychology). “Negative emotionality, trait aggression, and brain potential responses in an affective 3-stimulus oddball paradigm.” December 2005.
 - d. Sylvia Sng (Psychology). “International Students’ Adjustment in the United States: Social Contact.” January 2010.
 - a. Abe Van Voorhis (Psychology). “Response Inhibition and Event Related Potentials in Patients with Bipolar Disorder and Schizophrenia.” May 2012.

Courses Taught:

1. Psychology 3633: **Happiness: Integrating Research Across Psychological Sciences**. Fall 2008, 2009, 2011, 2013.
2. Psychology 3960: **Global Triangle: Power, Addiction & Buddhism in Northern Thailand** (Global Studies course to Chiang Mai, Thailand). January 2013.

3. Psychology 4960: **Senior Seminar: Psychology of Love and Happiness**. Fall 2006.
4. Psychology 5993 (formerly 4993/8993): **Neuroimaging and Psychopathology** (Research Seminar). Spring, Summer & Fall 2003; Spring, Summer & Fall 2004; Spring, Summer & Fall 2005; Spring & Fall 2006; Spring 2007-present.
5. Psychology 8814 : **Analysis of Psychological Data** (Psychology Graduate Core Curriculum). Fall 2003, Fall 2004, Fall 2005.
6. Psychology 8620: **Clinical Practicum** (Clinical Psychology and Psychopathology Research Program Required course). Fall 2009 – present.
7. Psychology 8622: **Treatment of Mental Disorders** (Clinical Psychology and Psychopathology Research Program Required course). Fall 2003, Fall 2004, Fall 2005, Fall 2006, Spring 2009, 2011, 2013.
8. Psychology 8960: **Neuroimaging: Methods and Applications** (Graduate Research Seminar). Spring 2004.
9. Guest Lectures:
 - a. Psychology 1001H: Honors **Introduction to Psychology**. Instructor: Kristen Haut. Spring 2012, 2013. Topic: Hedonic Science.
 - b. Psychology 5061: **Behavioral Neuroscience**. Instructor: Jonathan Gewirtz. Spring 2004, 2006. Topic: Neuroscience of Schizophrenia.
 - c. Neuroscience 5661: **Behavioral Neuroscience**. Instructor: Karen Mesce. Spring 2004, 2005, 2007, 2009-11. Topic(s): Functional Neuroimaging, Neuroscience of Cognitive Control.
 - d. Psychology 5604H: Honors **Abnormal Psychology**. Instructor: Gloria Leon. Spring 2006. Topic: Biological Basis of Schizophrenia.
 - e. Cognitive Sciences 8040: **Cognitive Neuroscience**. Instructor: Matthew Chafee. Fall 2006, Spring 2009. Topic: Neuroscience of Schizophrenia.
 - f. LAW 6063 **Law and Neuroscience**. Instructor: Francis Shen. Fall 2012. Topic: Neuroscience of Cognitive Control.

Lectures in the Community:

1. **Introduction to Happiness**. Community lecture to the cast of “The Happy Show,” Live Action Set Theater. Minneapolis, MN. Spring 2010.
2. **Happy Holidays? The Unanticipated Science of Pleasure & Desire**. Community lecture to the Humanists of Minnesota. Minneapolis, MN. December 2012.
3. **Science of Happiness**. Community lecture to the University of Minnesota LearningLife program of the College of Continuing Education, St. Paul, MN. June 2013.
4. **Hitting Gold: How Pleasure & Desire Find Balance with Age**. Community lecture to the American Association of University Women. Minneapolis, MN. September 2013.
5. **Am I Paranoid Enough? The Psychology of Persecution and Psychotic Violence**. Community lecture at UConnects Rochester. Rochester, MN, January 2014.

Academic Service:

1. University of Minnesota, University Senate, 2012-2015
2. College of Liberal Arts, Graduate Fellowship Committee, 2014
3. College of Liberal Arts Assembly Representative, 2004-2006, 2009-2011 (Assistant Chair, 2009-2010)
4. College of Liberal Arts, Budget Advisory Committee Member, 2005-2007

5. College of Liberal Arts, Executive Committee Member, 2009-2010
6. College of Liberal Arts, 2015 Planning Committee Member, 2010
 - a. Chair, Distinction/Size Work Group
7. College of Liberal Arts, Vertically-Integrated Research Team Experience (VIRTE_x) Program, Developer & Director, 2007 – 2009.
8. Psychology Department, Biological Psychopathology Program, Director, 2008 - 2013
9. Psychology Department, MRI Users' Group, Faculty Supervisor, 2004-2007, 2008-2011.
10. Psychology Department, Neuroimaging Consortium, Director, 2006-present.
11. Psychology Department, Faculty Committee Memberships:
 - a. Psychology Department, Computer and Research Infrastructure Committee, 2004-2007 (Chair, Spring 2007).
 - b. Psychology Department, Appointments Committee Member, 2006-2007, 2011-2012
 - c. Psychology Department, Awards and Graduate Admissions Committee, 2008 – 2012.
 - d. Psychology Department, Curriculum Committee Member, 2013
 - e. Research Experience in Psychology and Institutional Review Board Committee Member, 2014

Other Academic Service / Volunteer Activities:

1. Society for Research in Psychopathology
 - a. Website Development & Oversight Committee, 2004-2007 (Chair, 2004-2006), 2012-present.
 - b. Annual Meeting, Local Host, 2009 (Minneapolis).
 - c. Awards Committee, Member, 2011
 - d. Program Committee, Member, 2012
 - e. Executive Board, 2012-present
2. Society for Neuroscience,
 - a. Community Presenter, Brain Awareness Week, 2004, 2005, 2009, 2011
3. Schizophrenia Research Forum (<http://www.schizophreniaforum.org/>)
 - a. Scientific Review Board, 2011- present
 - b. Webinar “Cognitive Remediation in Schizophrenia: Ready for Widespread Use?” Organizer and moderator, 15 December 2011.

Community Service Activities

1. Clouds in Water Zen Center, St. Paul, MN.
 - a. Children & Youth Practice Teacher (2nd-3rd grades). 2010-2011
 - b. Children & Youth Practice Substitute Teacher. 2009-2010, 2011-2013
 - c. Board of Directors, 2012-2014.