



## Angus W. MacDonald, III, PhD

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### *ACADEMIC APPOINTMENTS*

**Director of Clinical Training**, University of Minnesota, Department of Psychology 2018 - present  
**Professor**, University of Minnesota, Department of Psychology 2014 - present  
**Assoc. Director for Practicum and Internship Placement**, UMn, Dept. of Psychology 2009 - 2017  
**Associate Professor**, University of Minnesota, Department of Psychology 2008 - 2014  
**Assistant Professor**, University of Minnesota, Department of Psychology 2003 - 2008

Primary Appointment: 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, Department of Psychology  
Center for Cognitive Sciences, College of Liberal Arts  
Graduate Program in Neuroscience, Department of Neuroscience  
Department of Psychiatry, University of Minnesota School of Medicine

### **Director, Translational Research in Cognitive and Affective Mechanisms laboratory**

The Translational Research in Cognitive and Affective Mechanisms laboratory was founded by Angus MacDonald to address the gap in knowledge between the symptoms of psychopathology and the cognitive and biological processes that support them. We use experimental cognitive psychological perspectives and the tools of cognitive neuroscience, neuroeconomics, neuromodulation, behavioral genetics and psychometrics to create new knowledge and new tools. We use these discoveries to understand and ameliorate the symptoms of psychosis, addiction and other forms of mental illness. Our current projects focus on (1) Understanding how executive control mechanisms, which are associated with prefrontal cortex functioning, modulate attention, emotional processing, social interactions and decision-making; (2) Evaluating how these mechanisms inform us about the genetic and environmental causes of psychoses, like schizophrenia, and addictive disorders, like drug abuse; and (3) using the latest neuromodulation technologies to facilitate plasticity in these mechanisms through treatment. Our laboratory collaborates with basic experimental human and animal researchers and with more applied, interventions-focused investigators. This allows us to translate our work across additional levels of analysis. The TRiCAM laboratory is also the managing office of the *Journal of Abnormal Psychology*, for which Dr. MacDonald is the Editor-in-Chief.

### *EDUCATION*

**Post-Doctoral Fellowship** Western Psychiatric Institute & Clinic, UPMC 2001-2002  
Clinical Cognitive Neuroscience Laboratory, Mentor: Cameron Carter, M.D.  
**Ph.D.** University of Pittsburgh 1994-2001  
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.** Amherst College, Amherst, MA 1986-1990  
 Psychology & Philosophy Majors

### ***AWARDS & HONORS***

Distinguished McKnight University Professor (University of Minnesota, 2020-present)  
 Chair, Council of Editors (American Psychological Association, Incoming 2020, 2021)  
 Starke Hathaway Endowed Chair in Clinical Psychology (University of Minnesota College of Liberal Arts,  
 2018-2021)  
 Editor-in-Chief *Journal of Abnormal Psychology* (2017-2021) thereafter *Journal of Psychopathology and  
 Clinical Science* (2022-2023, American Psychological Association)  
 APS Fellow (Association for Psychological Science, December 2015) Recognizing sustained outstanding  
 contributions to the science of psychology  
 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 (2011-2016)  
 Francoeur Investigator Award (2009-2010, National Alliance for Research on Schizophrenia and Depression)  
 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 T32 Training Fellowship (1998-1999, National Institutes of Health)

### ***MEMBERSHIPS IN PROFESSIONAL SOCIETIES***

American College of Neuropsychopharmacology  
 Cognitive Neuroscience Society  
 Society for Neuroscience  
 Society for Psychophysiological Research  
 Society for Research in Psychopathology  
 Schizophrenia International Research Society (formerly International Congress of Schizophrenia Research)

## **GRANTS**

### ***Current Grants***

1. P50 Conte Center National Institute of Mental Health, “PROJECT 3: Characterizing the course of state representation in early psychosis.” Part of the P50 Center *Dysfunctional State Representations in Psychosis: From Neurophysiology to Neuroplasticity-based Treatment*. \$9,750,000 direct costs. **A.W. MacDonald, III, Project 3 Principal Investigator**. Sophia Vinogradov & A. David Redish, Center PI’s. April 2020 - March 2025 (P50MH119569)
2. R01 National Institute of Mental Health, “5/5 Cognitive Neurocomputational Task Reliability & Clinical Applications.” \$1,500,000 direct costs current cycle. **A.W. MacDonald, III, Principal Investigator**. September 2019 - June 2024 (R01MH084861)
3. NIH RF1 BRAIN Initiative, "Increased thalamocortical connectivity in tdc5-potentiated generalization of cognitive training." \$1,990,000 direct costs. **A.W. MacDonald, III** and K.O. Lim, **Multiple PIs**. August 2018 - July 2022 (RF1MH116987)
4. R21 National Institute of Mental Health, “Persecution in RDoC: Spite Sensitivity and Frontal Dysconnectivity.” \$250,000 direct costs. **A.W. MacDonald, III, Principal Investigator**. August 2017 -- July 2019, NCE (R21MH112918)
5. R21 National Institute of Mental Health, “Parametrically Detailed Computational Analyses of Human Foraging Behavior.” **A.W. MacDonald, III, Co-Investigator**. \$275,000 direct costs. Alik Widge, Principal Investigator. July 2019 - June 2021 (R21MH120785)
6. National Institute of Mental Health, “Neural Disconnection and Errant Visual Perception in Psychotic Psychopathology.” \$1,025,000 direct costs. Scott Sponheim, Principal Investigator, **Angus W. MacDonald, III, Co-investigator**. September 2016 - August 2020, NCE (U01MH108150)
7. Merit Review, Department of Veterans Affairs. “Restoration of cognitive function with TDCS and training in schizophrenia.” \$749,000 direct costs. Tasha Nienow, Principal Investigator. **A.W. MacDonald, III, Co-Investigator**. July 2017 – June 2022

### ***Grants Submitted & Pending Resubmission***

R25 National Institute of Mental Health, “University of Minnesota psychiatry integrated research in residency experience (UMPIRRE)” **A.W. MacDonald, III, Co-Investigator**. Sophia Vinogradov & Kelvin Lim (MPIs). Resubmitted July 2020.

R01 National Institute of Mental Health, “Rule-Based Decision-Making: A Transdiagnostic Neuroeconomic Mechanism of Anorexia Nervosa and Related Disorders” **A.W. MacDonald, III, Co-Investigator**. Annie Haynos, PI. Submitted October 2020.

R21 National Institute of Mental Health, “Computational dissociation of the causes of cognitive rigidity in depression.” **A.W. MacDonald, III, Co-Investigator**. Alex Herman, PI. Submitted October 2020.

### ***Grants Completed***

1. University of Minnesota Informatics Institute, On the Horizon Award, “Human Connectome Project (HCP) Hosting at the Minnesota Supercomputer Institute (MSI).” \$25,700 direct costs. **A.W.**

- MacDonald, III, Principal Investigator.** January 2016 - August 2019.
2. R01 National Institute of Mental Health, “Cognitive Neuroscience Task Reliability & Clinical Applications.” \$600,000 direct costs current cycle. **A.W. MacDonald, III, Principal Investigator.** September 2008 – April 2018 (R01MH084861).
  3. National Institute of Mental Health, National Research Service Award F31, “Translating from Rats to Humans: A Human Foraging Model of Decision-Making.” Samantha Abram, Trainee. **A.W. MacDonald, III, Advisor and Co-Investigator.** July 2015 - June 2017 (F31DA040335).
  4. University of Minnesota College of Liberal Arts Brain Imaging Project, “Foraging Decisions: Value and Experiential Processing in Salience, Control and Reward Networks.” \$10,000 pilot funds. **A.W. MacDonald, III, Principal Investigator.** June 2015 – June 2016.
  5. 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 – February 2016 (R21MH100622).
  6. 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 (R01MH094229).
  7. 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.
  8. 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.
  9. 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 (R21DA024430).
  10. R01 National Institute of Mental Health. “Cognitive Neuroscience Task Reliability & Clinical Applications.” \$200,000 additional direct costs. **A.W. MacDonald, III, Principal Investigator.** Multi-site study. *ARRA-funded Competitive Revision* of R01MH084861. July 2010 – June 2012 (R01MH084861-03S1).
  11. 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 (R21MH079262).
  12. 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).
  13. 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, Principal Investigator. **A.W. MacDonald, III, Director** of the Cognitive and Behavioral Core. September 2007 – June 2012 (P20DA024196).

14. 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.
15. 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.
16. 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).
17. 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.
18. 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).
19. 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.
20. 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.
21. NCRB, 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. **MacDonald, A.W., III**, Carter, C.S., Kerns, J.G., Ursu, S., Barch, D.M., Holmes, A.J., Stenger, V.A., & Cohen, J.D. (2005). Specificity of prefrontal dysfunction and context processing deficits to schizophrenia in never-medicated patients with first-episode psychosis. *American Journal of Psychiatry*,

162, 475-84. PMID: 15741464

17. 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
18. 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
19. 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
20. **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
21. **MacDonald A.W., III**, Becker TM, Carter CS. (2006). Functional magnetic resonance imaging study of cognitive control in the healthy relatives of schizophrenia patients. *Biological Psychiatry*, 60, 1241-1249. PMID: 16945345
22. 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. PMID: 2632195
23. 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
24. 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
25. **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
26. 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
27. 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
28. 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
29. **MacDonald, A.W., III** (2008). Building a clinically-relevant cognitive task: case study of the AX

- paradigm. *Schizophrenia Bulletin*, 34, 619-628. PMID: 2632443
30. **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
  31. Barch, D.M., Berman, M.G., Engle R., Jones, J.A.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
  32. **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
  33. 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.
  34. **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
  35. Goghari, V.\*, **MacDonald, A.W., III** (2009). The neural basis of cognitive control: response selection and inhibition. *Brain & Cognition*, 71, 72-83. PMID: 290505
  36. 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. Included in ebook: *An Update On Neurocognitive Impairment in Schizophrenia and Depression*, K. Hugdahl & V.D. Calhoun (Eds.). PMID: 2773169
  37. 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
  38. 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
  39. 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
  40. 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
  41. 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



42. 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
43. 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
44. 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
45. 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
46. 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
47. 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
48. Taylor, S.F., & **MacDonald, A.W., III**. (2012). Brain mapping biomarkers of socio-emotional processing in schizophrenia. *Schizophrenia Bulletin*, *38*, 73-80. PMID: 3245598
49. 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 [CNTRACS]
50. 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 and validation of a visual integration test for schizophrenia research. *Schizophrenia Bulletin*, *38*, 125-134. PMID: 22021658 [CNTRACS]
51. 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 [CNTRACS]
52. 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 [CNTRACS]
53. 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 [CNTRACS]
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**Invited Articles, Commentaries & Chapters** (\* indicates student/trainee/staff first-authors)

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16. **MacDonald, A.W., III**, Elshaikh, 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
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18. **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*, 122, 891-3. PMID: 24016023
19. **MacDonald, A.W., III**. (2014). Schizophrenia: Presentation, Affect and Cognition, Pathophysiology & Etiology. In Blaney, P., Krueger, R.F. (Eds.) *Oxford Textbook of Psychopathology*. New York: Oxford University Press. pp. 333-352.
20. **MacDonald, A.W., III** (2015). Differential deficit. R. Cautin & S. Lillienfeld (Eds.) *Encyclopedia of Clinical Psychology*. John Wiley & Sons Ltd.
21. Ramsay, I.S.\*, Nienow, T. M., & **MacDonald, A.W., III** (2016). Overview of Cognitive Remediation in Schizophrenia. In C. Schulz, M. Green & K. Nelson (Eds.) *Schizophrenia and Psychotic Disorders*. New York, NY: Oxford University Press. pp. 265-282.
22. **MacDonald, A.W., III**, Zick, J.L, Netoff, T.I., Chafee, M.V. (2016). The Computation of Collapse: Can Reliability Engineering Shed Light on Mental Illness? In A.D. Redish & J.A. Gordon (Eds), *Computational Psychiatry: What Can Theoretical Neuroscience & Psychiatry Teach Each Other?* Strüngmann Forum Reports, vol. 20, series ed. J. Lupp. Cambridge, MA: MIT Press. pp 153-166.
23. Totah, N., Akil, H., Huys, Q.J.M., Krystal, J.H., **MacDonald, A.W., III**, Maia, T.V., Malenka, R.C., & Pauli, W.M. (2016). Complexity and Heterogeneity in Psychiatric Disorders: Opportunities for Computational Psychiatry. In A.D. Redish & J.A. Gordon (Eds), *Computational Psychiatry: What Can Theoretical Neuroscience & Psychiatry Teach Each Other?* Strüngmann Forum Reports, vol. 20, series ed. J. Lupp. Cambridge, MA: MIT Press. pp 33-59.
24. **MacDonald, A.W., III**, & Ma, Y. (2017). How to Find Needles of Nosology in Haystacks of Pathology: A Companion for the Bipolar and Schizophrenia Network for Intermediate Phenotypes (BSNIP) Consortium. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, 2, 3-4.
25. **MacDonald, A.W., III** (2017). Studying delusions within RDoC: the challenge of configural traits when building a mechanistic foundation for abnormal beliefs. *Schizophrenia Bulletin*, 43, 260-262.
26. Ramsay, I.S. & **MacDonald, A.W., III** (2018). The Ups and Downs of Thalamocortical Connectivity in Schizophrenia. *Biological Psychiatry*, 83, 473-474.
27. Poppe, A.\* & **MacDonald, A.W., III** (2019). Cognitive Neuroscience Approaches to Personality Disorders. In C. Schmahl, K.L. Phan, R.O. Friedel, and L.J. Siever (Eds.), *Neurobiology of Personality*

*Disorders*. NY NY: Oxford University Press. pp 75-94.

28. Holmes, A.V. & **MacDonald, A.W., III** (2020). Concepts and Principles of Clinical Functional Magnetic Resonance Imaging. In A.G.C. Wright & M.N. Hallquist (Eds), *Handbook of Research Methods in Clinical Psychology*. Cambridge University Press. pp 153-167.
29. Mervis, J.E.\*, Xuan, L., **MacDonald, A.W., III** (2020). Strengthening Neuromodulation and Cognitive Training Studies with Blinded Designs. In *Sage Psychological Research Methods*. Sage Press, Troy NY. <https://dx.doi.org/10.4135/9781529733297>
30. Corlett, P.R., Mohanty, A., & **MacDonald, A.W., III** (2020). What We Think About When We Think About Predictive Processing. *Journal of Abnormal Psychology*, 129, 529-533.
31. **MacDonald, A.W., III**, Goodman, S.H., & Watson, D. (2021). The Journal of Psychopathology and Clinical Science is the Future of the Journal of Abnormal Psychology: An Editorial. *Journal of Abnormal Psychology*, 130, 1-2.

### **Preprints.**

1. Kazinka, R.\*, Vilares, I., & **MacDonald, A.W., III** (2021, June 30). A Computational Model of Non-optimal Suspiciousness in the Minnesota Trust Game. <https://doi.org/10.31234/osf.io/kwe8p>
2. Redish, A.D., Sweis, B.M., Abram, S., Duin, A., Kazinka, R., Kocharian, A., MacDonald, A.W., III, Schmidt, B., Schmitzer-Torbert, N., Thomas, M. (2021, September). Sunk cost sensitivity in mice, rats, and humans on the Restaurant Row and WebSurf tasks cannot be explained by attrition biases alone.

### **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 lead and co-editor**
3. *Journal of Abnormal Psychology*, Special Section on Reconceptualizing the Diagnosis of Mental Disorders: Incorporating Promising Leads into Lasting Insights. Publication August 2013. **MacDonald, A.W., III, special section lead and co-editor**
4. *Journal of Abnormal Psychology*, Special Section on Validation of a Structural Approach to Conceptualizing Psychopathology. Publication November 2016. **MacDonald, A.W., III, special section co-editor**
5. *Journal of Abnormal Psychology*, Special Section on Predictive Coding in Psychopathology. Publication 2020. **MacDonald, A.W., III, special section co-editor**
6. *Journal of Abnormal Psychology*, Special Section on Theories Psychopathology. Anticipated publication 2021. **MacDonald, A.W., III, special section co-editor**
7. Renaming of the *Journal of Abnormal Psychology* to *Journal of Psychopathology and Clinical Science* in 2022. **MacDonald, A.W., III, editor-in-chief**. Featured in *Forbes*.

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

1. **MacDonald, A.W., III**, Patzelt, E., Kurth-Nelson, Z., Barch, D.M., Carter, C.S., Gold, J., Ragland, J.D., & Silverstein, S. (invited resubmission). Computational Modeling of Reversal Learning Impairments in Schizophrenia and Bipolar Disorder Reveals Shared Failure to Exploit Rewards.
2. Ma, Y.\*, Hendrickson, T., Ramsay, I.S., Shen, A., Sponheim, S.R., **MacDonald, A.W., III** (submitted). Resting-State Functional Connectivity Explained Psychotic-Like Experiences in the General Population and Partially Generalized to Patients and Relatives.
3. Kazinka, R.\*, Vilares, I., & **MacDonald, A.W., III** (submitted). A Computational Model of Non-optimal Suspiciousness in the Minnesota Trust Game.
4. Mervis, J.E.\*, **MacDonald, A.W., III** (submitted). Greater Psychotic-Like Experiences Accompany Cannabis Use in People with Lower Cognitive Insight: A Latent Profile Analysis.

***Presentations***

***Invited and Refereed Addresses, Symposia, Colloquia***

1. "Neuroimaging perspective on cognitive control and the genes that cause schizophrenia." Invited presentation at the 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 8<sup>th</sup> 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 12<sup>th</sup> 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 23<sup>rd</sup> 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 65<sup>th</sup> 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 24<sup>th</sup> 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 3<sup>rd</sup> 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 at New Neuroscience-Based Cognitive Paradigms for Biomarker Research in Schizophrenia at the 13<sup>th</sup> 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 51<sup>st</sup> 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. 3 April, 2014.
28. "Stumbling into the brain: applying Watson's 'Rules for Success' to a career in cognitive neuroscience." **MacDonald, A.W., III**. Invited keynote address at the Minnesota Undergraduate Psychology Conference. Arden Hills, MN. May 2014.
29. "Edge of the matrix: Additional Constructs to Capture Psychotic Symptomology" Presentation part of the "Searching for Psychosis in the RDoC Framework" Symposium at the International Congress on Schizophrenia Research. Colorado Springs, CO. 1 April 2015. **MacDonald, A.W., III**, Symposium organizer.
30. "Is There a Cognitive Neuroscience of Schizophrenia? Challenges and Directions in the Science of Psychosis." **MacDonald, A.W., III**. Distinguished Scholar Lecture at the Minnesota Psychological Association. St. Paul, MN. 7 October 2015.
31. "The Salience of Salience: Transdiagnostic Vulnerability and Insula/Cingulate Connectivity." Symposium at the Society for Research in Psychopathology. New Orleans, LA. 17 October 2015. **MacDonald, A.W., III**, symposium co-organizer.
32. "What Does the Cognitive Neuroscience of Psychosis Reveal About Healthy Cognition?" **MacDonald, A.W., III**. Invited presentation at Yale-NUS, Singapore. 2 December 2015.
33. "Toward the next generation of psychopathology research at the Journal of Abnormal Psychology." **MacDonald, A.W., III**. Presentation part of the "New Face in Psychopathology" Symposium at the 29th

American Psychological Society Annual Convention, Boston, MA. 25 May 2017.

34. "Trust v. Spite & Selfishness: Examining the Cognitive and Neural Architecture of Cooperation in Persecuted and Non-persecuted People." **MacDonald, A.W., III**. Invited presentation at the Neuroeconomics Seminar at ETH Zürich (Eidgenössische Technische Hochschule Zürich), Switzerland. 19 October 2017.
35. "Goldilocks Principles of Retest Reliability: Measurement Trade-offs in Functional Connectivity MRI Analyses." **MacDonald, A.W., III** & Ma, Y. Presentation part of the "Optimizing Psychophysiological Measures For the Study of Individual Differences" Symposium at the 58th Annual Meeting of the Society for Psychophysiological Research, Quebec, Quebec, 4 October 2018.
36. "Neuroscience and the Human Condition." **MacDonald, A.W., III**, panelist. Presentation part of "CLA: Time Past, Time Present, Time Future" part of the series *Shattering Expectations: Celebrating CLA's 150th Anniversary*, 10 October 2018.
37. "From Cognitive Neuroscience of Schizophrenia to Cognitive Remediation for Psychosis," **MacDonald, A.W., III**. Invited remote presentation for the British University of Egypt, Cairo, Egypt, April 2019.
38. "Two sides of Executive Control Failure: Clinical Cognitive Neuroscience Approaches to Psychosis." **MacDonald, A.W., III**. Invited presentation at the National University of Singapore, Singapore, April 2019.
39. "Failure and Recovery of Executive Control: Two Translational Neuroscience Programs to Address Psychotic Symptoms." **MacDonald, A.W., III**. Grand Rounds at the University of Michigan, Ann Arbor, May 2019.
40. "Next Steps for Methods & Measurements." **MacDonald, A.W., III**, panelist. Part of the Integrating Genomics with Dimensional and Transdiagnostic Approaches to Advance Mental Health Research, a National Institute of Mental Health virtual workshop, April 2021.

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

1. **MacDonald, A.W., III**, Abram, S.V., Redish, A.D. (2016, March). Experiential foraging in humans: behavioral and imaging comparison across species. Poster presentation at the Cognitive Neuroscience Society, New York, NY.
2. Elliott, S.\* , Mervis, J.E.\* , **MacDonald, A.W., III**. (2016, April). Feasibility of administering the effort expenditure for rewards task in an undergraduate population. Poster presented at the Minnesota Undergraduate Psychology Conference, Minneapolis, MN.
3. Capizzi, R.\* , Mervis, J.E.\* , Boroda, E., & **MacDonald, A.W., III**. (2016, April). Effects of non-invasive prefrontal brain stimulation on cognition in psychosis. Poster presented at the Minnesota Psychological Association, Plymouth, MN.
4. Abram, S.V.\* , Wisner, K.M., DeYoung, C.G., Smith, M.J., **MacDonald, A.W. III**. (2016, April). A dimensional approach to elucidating the neural basis of psychotic spectrum traits. Talk presented at the Schizophrenia International Research Society Conference, Florence, Italy.
5. **MacDonald, A.W., III**, Poppe, A.B., Chafee, M.V., Carter, C.S., Ragland, J.D., & Barch, D. M. (2016,

- September). Crosstalk: Monkey electrophysiology and human neuroimaging reveal common neural coding for proactive and reactive control. Poster presented at the Society for Psychophysiological Research, Minneapolis, MN.
6. Mervis, J.E.\*, Helwig, N.E., **MacDonald, & A.W., III.** (2016, September). Measurement of symptom – cognition relationships in schizophrenia. Poster presented at the Society for Research in Psychopathology, Baltimore, MD.
  7. Wisner, K.\*, Johnson, M.\*, Porter, J.\*, **MacDonald, A.W., III.** (2016, September). Spite sensitivity as a mechanism underlying persecutory ideation in patients with schizophrenia and discordant monozygotic twins: An fMRI study of network connectivity. Poster presented at the Society for Research in Psychopathology, Baltimore, MD.
  8. Ma, Y.\*, Poppe, A.B.\*, Elshaikh, A.A.\*, **MacDonald, A.W.** (2016, September). In search of the generalized deficit: Cognitive slowing in schizophrenia across elementary reaction time tasks with increasing demands. Poster presented at the Society for Research in Psychopathology, Baltimore, MD.
  9. Pratt, D. N.\*, Jiang, M., Beal, R., Zhao, Q., **MacDonald, A. W., III.** (2016, September). Rationale and early observations of a mouse-eye paradigm adaptation for studying visual information foraging. Poster presented at the Society for Research in Psychopathology, Baltimore, MD.
  10. Mervis, J.E.\*, Helwig N., Meyer-Kalos, P., **MacDonald, A.W. III.** (2016, September). Variable retest-reliability and stable internal consistency in first-episode psychosis: Challenges in inferring specific deficits across illness progression. Poster presented at the Society for Research in Pathology, Baltimore, MD.
  11. Abram, S.V.\*, Redish, A.D., **MacDonald, A.W. III.** (2016, November). The neural correlates of experiential foraging in humans. Poster presented at the Society for Neuroscience, San Diego, CA.
  12. Mervis, J.E.\*, Helwig, N.E., Meyer-Kalos, P.S., & **MacDonald, A.W., III.** (2017, March). The mismeasurement of psychosis: Parsing differences in discriminating power across symptom dimensions and time. Poster presented at the International Congress of Schizophrenia Research, San Diego, CA.
  13. Capizzi, R.\*, Mervis, J.E., Boroda, E., & **MacDonald, A.W., III.** (2017, April). Effects of non-invasive prefrontal brain stimulation on cognition in schizophrenia: A systematic quantitative review. Poster presented at the annual meeting of the Minnesota Psychological Association, Plymouth, MN.
  14. Mervis, J.E.\*, Deckert, C., Meyer-Kalos, P.S., **MacDonald, A.W., III.** (2017, September). Variable retest-reliability and stable internal consistency in first-episode psychosis: Challenges in inferring specific deficits across illness progression. Poster presented at the annual meeting of the Society for Research in Psychopathology, Denver, CO.
  15. Capizzi, R.\*, Coudray, C., Mervis, J., & **MacDonald, A.W., III.** (2017, September). The effects of transcranial direct current stimulation on cognition in schizophrenia: A meta-analytical approach. Poster presented at the annual meeting of the Society for Research in Psychopathology, Denver, CO.
  16. Pratt, D. N.\*, Strauss, M. E., McLouth, C. J., Barch, D. M., Carter, C. S., Gold, J. M., Luck, S. J., Ragland, J. D., Ranganath, C., Keane, B. P., Silverstein, S. M., Davison, M. L., & **MacDonald, A.W., III.** (2017, September). Practice Effects and Reliability of the DPX. Poster presented at the Society for Research in Psychopathology meeting, Denver, CO.

17. Ma, Y.\*, & **MacDonald, A.W., III.** (2017, September). Resting-state functional connectivity substrates for correlation between openness to experience and psychotic-like experiences in the general population. Poster presented at the annual meeting of the Society for Research in Psychopathology, Denver, CO.
18. Agrawal, S., Atluri, G., Verma, S., Karpathe, A., Liess, S., **MacDonald, A.W. III.**, Chatterjee, S., Kumar, V. (2017, November). Discovery of sub-interval relationships in time series data. Presented at the IEEE International Conference on Data Mining, New Orleans, LA.
19. L Czepielewski, C Gama, C Carter, **MacDonald, A.W., III**, J Gold, S Silverstein, DM Barch. (2018, April). Different influences of intellectual functioning and cognitive performance to functional outcomes in schizophrenia and healthy controls. *Schizophrenia Bulletin*, 44, S140.
20. J Camchong, A Roy, C Gilmore, L Goelkel, E Boroda, M Thao, M Kazynski, M Fiecas, **MacDonald, A.W. III.**, KO Lim, M Kushner. (2018, May). Non-invasive brain stimulation modifies a brain network that supports abstinence during alcohol use disorder recovery. *Biological Psychiatry*, 83, S449.
21. Kazinka, R.\* , Pratt, D., Kwashie, A., Ameri, S., & **MacDonald, A.W. III.** (2018, September). Value representations of spite sensitivity in psychosis. Presented at the annual meeting of the Society for Research in Psychopathology, Indianapolis, IN.
22. Myers, E. J., Ramsay, I. S., Ma, Y., **MacDonald, A.W. III.**, & Sponheim, S. R. (2018, September). Context processing in individuals with schizophrenia and bipolar disorder and their biological relatives: Exploring the role of disorganization symptomatology. Presented at the annual meeting of the Society for Research in Psychopathology, Indianapolis, IN.
23. Capizzi, R., Mervis, J.E., Kazinka, R., Abram, S., **MacDonald, A.W., III.** (2018, September). Nice work if you can get it: Translational implications for personality and effort expenditure. Poster presented at the annual meeting of the Society for Research in Psychopathology, Indianapolis, IN.
24. Pratt, D. N.\*, Guo, K., Schrater, P. R., & **MacDonald, A.W., III.** (2018, September). Can the mouse-eye paradigm be used to diagnose individuals with serious mental illness? Poster presented at the 2018 meeting of the Society for Research in Psychopathology, Denver, CO.
25. Pratt, D. N.\*, Guo, K., Schrater, P. R., & **MacDonald, A.W., III.** (2018, September). Can the mouse-eye paradigm be used to diagnose individuals with serious mental illness? Poster presented at the 2018 meeting of the Society for Research in Psychopathology, Indianapolis, IN.
26. Kwashie, A.\* , Ma, Y., & **MacDonald, A.W., III.** (2018, September). Validating neural correlates of cognitive control. Poster session presented at the Clinical and Translational Science Institute Poster Presentation Session at University of Minnesota, Minneapolis, MN.
27. Kazinka, R.\* , Pratt, D., Kwashie, A., Ameri, S., & **MacDonald, A.W., III.** (2018, September). Value representations of spite sensitivity in psychosis. Poster session presented at the annual meeting of the Society for Research in Psychopathology, Indianapolis, IN.
28. Myers, E. J., Ramsay, I. S., Ma, Y., **MacDonald, A.W., III.**, & Sponheim, S. R. (2018, September). Context processing in individuals with schizophrenia and bipolar disorder and their biological relatives: Exploring the role of disorganization symptomatology. Presented at the 2018 meeting of the Society for Research in Psychopathology, Indianapolis, IN.



29. Kazinka, R.\* , Pratt, D., Kwashie, A., Ameri, S., & **MacDonald, A.W., III.** (2018, October). Persecutory decision-making in psychosis patients playing the Minnesota Trust Game. Poster session presented at the annual meeting of the Society for Neuroeconomics, Philadelphia, PA.
30. **MacDonald, A.W., III,** Ma, Y. (2018, October). Impact of dimensionality on test-retest reliability of resting-state functional connectivity using ICA and dual regression in the Human Connectome Project. In A. MacNamara (Chair), Optimizing psychophysiological measures for the study of individual differences. Symposium conducted at the annual meeting of the Society for Psychophysiological Research, Quebec City, Canada.
31. Guo, K., Pratt, D.N., **MacDonald, A.W., III,** Schrater, P.R. (2018). Labeling images by interpretation from natural viewing. *CEUR Workshop Proceedings, Volume 2068.*
32. Y Camchong, A Roy, C Gilmore, M Thao, M Kazynski, M Fiecas, B Mueller, **MacDonald, A.W., III,** M Kushner, K Lim. (2018). Using rain stimulation to modify a brain network and support abstinence during alcohol use disorder recovery.” *Brain Stimulation: Basic, Translational, and Clinical Research in Neuromodulation, 12,* 510.
33. J Camchong, A Roy, C Gilmore, L Goelkel, E Boroda, M Thao, M Kazynski, M Fiecas, **AW MacDonald,** KO Lim, M Kushner. “Using brain stimulation to support abstinence during alcohol use disorder recovery.” *Alcoholism-clinical and Experimental Research, 42,* 111A
34. Kwashie, A.\* , Ma, Y., & **MacDonald, A.W., III.** (2019, April). Cognitive control mechanisms within patient and healthy populations. Poster session presented at the annual meeting of the Society for International Research in Schizophrenia, Orlando, FL.
35. Ma, Y.\* , Kwashie, A., **MacDonald, A.W., III,** & Sponheim, S. R. (2019, April). Investigating neural mechanisms of proactive and reactive control in psychotic disorders with the dot pattern expectancy task. Presented at the annual meeting of the Schizophrenia International Research Society, Orlando, FL.
36. Mervis, J.E.\* , Hwang, W., Macdonald, K., **MacDonald, A.W., III.** (2019, April). Modulating executive function in schizophrenia: Translational applications from clinical cognitive neuroscience. Poster presented at the annual meeting of the Schizophrenia International Research Society, Orlando, FL.
37. Ma, Y.\* , Kwashie, A., **MacDonald, A.W., III.,** & Sponheim, S. R. (2019, May). Investigating neural mechanisms of proactive and reactive control in psychotic disorders with the dot pattern expectancy task. Presented at the 2019 meeting of the Human Connectome Project Investigators, Bethesda, MD.
38. Pratt, D. N.\* , Barch, D. M., Carter, C. S., Gold, J. M., Luck, S. J., Ragland, J. D., Silverstein, S. M., & **MacDonald, A.W., III.** (2019, September). Reliability and replication of novel reinforcement learning and working memory paradigms in CNTRaCS. Poster presented at the 2019 meeting of the Society for Research in Psychopathology, Buffalo, NY.
39. Kwashie, A., Kazinka, R., Pratt, D., Ameri, S., Skarsgard, N., Wilson, S., & **MacDonald, A.W., III.** (2019, September). Persecutory ideation and social appraisals within a clinical sample. Poster session presented at the annual meeting of the Society for Research in Psychopathology, Buffalo, NY.

40. Kazinka, R.\* , Pratt, D., Kwashie, A., Ameri, S., Skarsgard, N., Wilson, S., Vilares, I., **MacDonald, A.W., III.** (2019, September). Dissociation between rational mistrust and spite sensitivity in psychosis patients on the Minnesota Trust Game during fMRI. Poster session presented at the annual meeting of the Society for Research in Psychopathology, Buffalo, NY.
41. Mervis, J.E.\* , Thuras, P., **MacDonald, A.W., III,** Lim, K.O. (2019, September). Mindfulness-based stress reduction differentially improves overall PTSDsSymptoms but not experiential avoidance in veterans. Poster presented at the annual meeting of the Society for Research in Psychopathology, Buffalo, NY.
42. Mervis, J.E.\* & Xuan, L., **MacDonald, A.W., III.** (2019, September). Experiential avoidance and cognitive effort: Implications for intervention outcome assessments. Poster presented at the annual meeting of the Society for Research in Psychopathology, Buffalo, NY.
43. Kazinka,R.\* , **MacDonald, A.W., III,** & Redish, A.D. (2019, October). The websurf task in an amazon mechanical turk sample. Poster presentation at Society for Neuroeconomics, Dublin, Ireland.
44. **MacDonald, A.W., III.,** & Ma, Y. (2019, December). Optimizing reliability for clinical measurement in resting state functional MRI. Presented at the annual meeting of the American College of Neuropsychopharmacology, Orlando, FL.
45. Haynos, A. F., Abram, S. V., **MacDonald, A.W., III.,** Redish, A. D., Crow, S. J. (2020, October). Novel decision-making mechanisms of anorexia nervosa emerging from a computationally-informed translational approach. Poster to be presented at the annual meeting for the Eating Disorder Research Society, Sitges, Spain.
46. Kazinka, R\*., Vilares, I., Redish, A. D., & **MacDonald, A. W.** (2020, October). Computational model of Minnesota Trust Game explains suspiciousness towards partner. Poster presentation at Society for Neuroeconomics virtual conference.
47. Haynos, A. F., Abram, S. V., Redish, A. D., Crow, S. J., **MacDonald, A.W., III** (2020, November). Parsing Decision-Making Systems in Anorexia Nervosa Using a Computationally-Informed Translational Neuroeconomic Paradigm. Paper accepted for the annual meeting for the Association for Behavioral and Cognitive Therapies, Philadelphia, PA.
48. Yu, L.\* , Kazinka, R., Pratt, D., Kwashie, A., Ameri, S., **MacDonald III, A.W.** (2021, April): Resting-State Networks Associated with Severity of Persecutory Ideation in Psychosis Patients. 2021 Congress of the Schizophrenia International Research Society (virtual).

### ***PROFESSIONAL ACTIVITIES***

#### **Journal Reviewing:**

1. Editor-in-Chief
  - a. Journal of Abnormal Psychology (2017-2023)
2. Associate Editor
  - a. Journal of Abnormal Psychology (2011-2016)
3. Editorial Board

- a. Biological Psychiatry: Cognitive Neuroscience and Neuroimaging (2018-2021)
  - b. Diagnostics in Neuropsychiatry (2015-2016)
  - c. Journal of Abnormal Psychology (2005-2010)
4. Guest Action Editor: Schizophrenia Bulletin (2008, 2009)
  5. Ad Hoc Referee: Acta Psychiatrica Scandinavica (2006), American Journal of Psychiatric Genetics (2006), American Journal of Psychiatry (2006-07, 2010, 2017, 2019), Archives of General Psychiatry/JAMA Psychiatry (2003 –10, 2014-17), Biological Psychiatry (2004-16, 18-19), BioMed Central (BMC) Psychiatry (2004), Bipolar Disorder (2002), Brain (2012), Brain and Behavioral Science (2002, 2006, 2008), Brain Research (2006, 2012), British Journal of Psychiatry (2008-09), 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, 2014-15), International Journal of Psychophysiology (2015), Journal of Abnormal Psychology (1999 – 2004), Journal of Neuroscience (2006), Journal of Personality (2007, 2013), Neuroimage (2002, 2004, 2015), 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), Psychonomics Review & Bulletin (2018), Psychiatry Research (2003), Public Library of Science (PLoS) One (2014, 2016), Schizophrenia Bulletin (2006, 2008-12, 2014-15, 2019), Schizophrenia Research (2004, 2010, 2014, 2019), Science (2006, 2009, 2011).

**Presses:**

1. 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, Ad hoc member, 2008
4. NIMH, Special Emphasis Panel ZMH1 ERB-S, Ad hoc member, 2009
5. CSR, Molecular Neurogenetics (MNG) Study Section & Special Emphasis Panel ZRG1 ETTN-G, Ad hoc member, October 2009, February 2010
6. NIDA, Special Emphasis Panel ZDA1 KXH-C 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
9. CSR, Special Emphasis Panel ZRG1 BDCN-N S, Ad hoc member, May 2015
10. NIMH Special Emphasis Panel ZMH1-ERBS-01, Ad hoc member, November 2016
11. CSR, Special Emphasis Panel ZRG1 BDCN-C R Using the NIMH Research Domain Criteria (RDoC) Approach to Understand Psychosis, Ad hoc member, July 2017
12. CSR, Adult Psychopathology and Disorders of Aging (APDA) Study Section, Ad hoc member, October 2017, February 2018, June 2018
13. CSR Special Emphasis Panel ZRG1 PSE B64, Ad hoc member, July 2018
14. NIMH, BRAINS Special Emphasis Panel ZMH1 ERB-L03, Ad hoc Member, February 2015, 2016; ERB-Q R October 2018, October 2019, November 2020
15. CSR Special Emphasis Panel ZRG1 BDCN, Ad hoc member, November 2018, December 2018,

February 2019, August 2019, July 2020

16. CSR, Neural Basis of Psychopathology, Addictions and Sleep Disorders (NPAS) Study Section, Ad hoc member, October 2019
17. NIMH Special Emphasis Panel ZMH1 ERB-S Computationally-Defined Behaviors in Psychiatry, Ad hoc member, March 2020
18. NIMH Special Emphasis Panel ZMH1 ERB-S Clinical High Risk for Psychosis Research Network (U01) and Data Processing, Analysis, and Coordination Center (U24), May 2020

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 Academic Health Center, General Clinical Research Center, Reviewer, 2005
2. University of Minnesota Academic Health Center, Wallin Neurosci. Discovery Fund, Reviewer, 2015
3. University of Minnesota Academic Health Center, Medical Discovery Teams, Reviewer 2018

**Mentoring & Committee Service:**

**Post-doctoral Mentoring.**

1. Jazmin Camchong, Ph.D. 2007 – 2010. University of Minnesota Departments of Psychology and Psychiatry. (Co-mentor with Kelvin Lim)
  - 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. (Co-mentor with Scott Sponheim)
3. Caroline Demro, Ph.D., 2020-present. University of Minnesota Departments of Psychology and Psychiatry. (Co-mentor with Scott Sponheim)
4. Michael Bronstein, Ph.D., 2020-present. University of Minnesota Department of Psychiatry. (Co-mentor with Sophia Vinogradov)

**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. Graduate School Patrick & Kathy Lewis Thesis Research Grant, “Do you see what I see: The nature of emotion recognition deficits in schizophrenia.” November 2006.
  - f. Vertically Integrated Research Team Experience (VIRTE<sub>x</sub>) Program fellowship, Summer 2007, “Prefrontal structure-function relationships in schizophrenia patients, their health relatives and controls.”
  - g. Clinical Internship: University of Illinois at Chicago, July 2008 – June 2009.

- h. 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. College of Liberal Arts Graduate Research Partnership Program award, "MEG/fMRI Integration in the Study of PFC/Parietal Disconnectivity in Schizophrenia." 2008.
  - b. 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. Eva O. Miller Fellowship award "Cognitive control over emotional reactivity in schizophrenia." 2007-2008.
  - e. Society for Research in Psychopathology 2007 Smadar Levine Award Runner Up, "Cognitive training in schizophrenia: prefrontal cortical changes and behavioral correlates."
  - f. Clinical Internship: University of California, Los Angeles, July 2009 – June 2010.
  - g. 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. 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. NIMH Clinical Science & Psychopathology Training Grant fellowship, 2009-2010.
  - c. Clinical Internship: Baltimore Consortium, Baltimore, MD, July 2010 - June 2011
  - d. 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. Clinical Internship: Hazelden Foundation, Center City, MN, July 2010 - June 2011
  - c. Dissertation, "Behavioral and Electrophysiological Correlates of Context Processing in Individuals with Schizophrenia and Their First-Degree Relatives." August 2011.
6. Lidan Gu, 2009-2012, University of Minnesota Department of Educational Psychology, Counseling Psychology Program.
  - a. Clinical Internship: Children's Hospital, St. Paul, MN, July 2011 - June 2012
  - b. Dissertation, "Delay Discounting as a Measure of Impulsivity." November 2011

7. Andrew Poppe, 2009-2016, 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. Clinical Internship: University of Arizona Department of Psychiatry, August 2014 - July 2015
  - c. Dissertation, “Functional Magnetic Resonance Imaging of Goal Maintenance in Schizophrenia: Activation, Functional Connectivity, and Reliability.” June 2016.
8. Craig Moodie, 2010-2014, University of Minnesota Graduate Program in Neuroscience, Co-advisor with K.O. Lim.
  - a. Dissertation, “Neurometric encoding and decoding: Using Multivariate Functional Connectivity Methods to Describe Cognitive States, Traits and Clinical Endophenotypes.” October 2014.
9. Ian Ramsay, 2010-2016, 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, “Neural Impact of Cognitive Remediation for Schizophrenia in a Randomized Controlled Trial.” May 2014 - June 2015.
  - d. Dissertation, “Neural Impact of Cognitive Remediation for Schizophrenia in a Randomized Controlled Trial.” May 2015.
  - e. Clinical Internship: San Francisco Veterans Affairs, San Francisco, CA, July 2015 - June 2016
10. Krista Wisner, 2010-2016, 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 - December 2016.
  - d. Clinical Internship: Baltimore Veterans Affairs, Baltimore, MD, July 2015 - June 2016
  - e. Dissertation, “An investigation into the neural nature of persecutory ideation.” December 2016.
11. Ansam Elshaikh, 2010-2016, University of Minnesota Department of Psychology, Biological Psychopathology Program.
  - a. Egyptian Government Scholarship, 2010-2013.
  - b. Dissertation, “Cognitive/Neural Compensatory Mechanisms in Schizophrenia: Reaction Times-Brain Activity Correlates.” December 2016.
12. Samantha Abram, 2012-2018, University of Minnesota Department of Psychology, Clinical Science and Psychopathology Research Program.
  - a. Center for Cognitive Sciences student fellowship, 2013-2014.
  - b. Auke Tellegen Fellowship in Applied Personality Assessment. Summer 2015
  - c. National Institutes of Health, National Research Service Award F31, “Translating from Rats to Humans: A Human Foraging Model of Decision-Making.” July 2015 - June 2017.
  - d. Clinical Internship: San Francisco Veterans Affairs, San Francisco, CA, July 2017 - June 2018
  - e. Dissertation, “Towards a Translational Model of Decision-Making: Findings from the Web-Surf Task.” May 2017.
13. Yizhou Cherry Ma, 2014-2020, University of Minnesota Department of Psychology, Clinical Science

- and Psychopathology Research Program.
- a. Graduate Research Partnership Program, 2015
  - b. UMn Graduate School selection for the Howard Hughes Medical Institute 2016 International Student Research Fellowship, 2016
  - c. Graduate Research Award, 2016
  - d. J. Butcher Graduate Summer Research Fellowship, 2017
  - e. Clinical Internship: Worcester Veterans Affairs, Worcester, MA, September 2019 - August 2020.
  - f. Dissertation, "In Search of the Psychosis Continuum in the Human Connectome." August 2020.
14. Danielle Pratt, 2015-present, University of Minnesota Department of Psychology, Clinical Science and Psychopathology Research Program.
- a. Graduate Research Partnership Program, 2016
  - b. Clinical Internship: Yale-New Haven Veterans Affairs, New Haven, CT, July 2020 - June 2021.
  - c. Dissertation, "Striking A Balance Between Psychometric Integrity and Efficiency for Assessing Reinforcement Learning and Working Memory in Psychosis-Spectrum Disorders." June 2021.
15. Josh Mervis, 2015-2021, University of Minnesota Department of Psychology, Clinical Science and Psychopathology Research Program.
- a. Graduate Research Award, 2016
  - b. Clinical Internship: Indianapolis Veterans Affairs, Indianapolis, IN, August 2020 - August 2021.
  - c. Dissertation, "Know Thyself: Tracing Insight Along the Psychosis Spectrum." August 2021.
16. Rebecca Kazinka, 2016-present, University of Minnesota Department of Psychology, Clinical Science and Psychopathology Research Program.
- a. National Institutes of Health Training T32, "Using Computation to Make Breakthroughs in Neuroscience", September 2018 - August 2020
  - b. Clinical Internship: Ann Arbor Veterans Affairs, Ann Arbor, MI, July 2021 - June 2022.
17. Anita Kwashie, 2017-present, University of Minnesota Department of Psychology, Clinical Science and Psychopathology Research Program.
- a. Clinical & Translational Science Institute's Advanced Pathways to Research Program Scholar, 2018
  - b. College of Liberal Arts' Brain Imaging Grant (BIG), "Evaluating Prefrontal Dysconnectivity during Persecutory Sociocognitive Processes," \$9,948.91, 2019-2021
  - c. President's Student Leadership and Service Award, 2021
18. Lingyan Yu, 2019-present, University of Minnesota Department of Psychology, Clinical Science and Psychopathology Research Program.
- a. Graduate Summer Research Fellowship, 2020
19. Rylee Brower, 2020-present, University of Minnesota Department of Psychology, Clinical Science and Psychopathology Research Program.

### **Undergraduate Student Mentoring.**

100+ 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. "An fMRI Investigation of the Dot Pattern Expectancy Task."
28. Stacey Rhyner, 2015. Department of Psychology Senior Honors Thesis. "Task Demands and Reaction Time in Schizophrenia: Piloting the Button-Release Reaction Function (BRRF) Task."
29. Brian Zetah, 2015. Department of Psychology, Senior Honors Thesis. "Efficacy of Anodal and Cathodal Transcranial Direct Current Stimulation (tDCS) Across Neural and Psychiatric Domains: A Review and Meta-analysis."
30. Sori Baek, 2016. Department of Psychology, Senior Honors Thesis. "Risk-Variant of the Web-Surf Task: A Serial-Choice Foraging Paradigm to Model Decision-Making in Humans."
31. Eric Hastings, 2016. CLA Dean's Freshman Research and Creative Scholars project.
32. Brittany Bostrom, 2017. Department of Psychology, Senior Honors Thesis. "Individual Differences in Impulsivity and Decision-Making on the Web-Surf Task."
33. Lei Xuan, 2018. Department of Psychology, Senior Honors Thesis. "Quantifying 'Targeted Individuals' Online Reports."
34. Grayson Ziegler, 2020. Department of Psychology, Senior Honors Thesis. "Decision Making and Psychosis: an Analysis of Visual Decision Making Estimated by the 'Mouse Eye' Task."

**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. Co-mentor.

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

1. Doctoral Theses
  - 1.1. Elizabeth Hurliman (Psychology, C SPR). "Feedback processing in the ventral prefrontal lobes." November 2004.
  - 1.2. Adam Schmidt (Psychology, C SPR). "A behavioral profile of the adult rat following fetal/neonatal iron deficiency." September 2005.
  - 1.3. Stephen Benning (Psychology, C SPR). September 2006.
  - 1.4. Molly Gill Willer (Psychology, C SPR). "Bulimia nervosa: towards a better understanding of diagnosis and treatment." May 2007.
  - 1.5. Ela Bhatt (Rehabilitation Sciences). "Finger vs. elbow tracking: neural substrates of motor skill learning revealed using fMRI." July 2007.
  - 1.6. Dongju Seo (Psychology, C SPR). "Cognitive control over positive and negative emotion." July 2008.

- 1.7. 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.
- 1.8. Nicholas Davenport (Psychology, BP). "Characterizing sources of variance in voxelwise analyses of white matter integrity in schizophrenia." 2008.
- 1.9. Jaroslaw Grygolec (Economics), "Neuroeconomics of Social Decisions." December 2008.
- 1.10. Ian Stoner (Philosophy), "The Reward of Virtue: An Essay on the Relationship Between Character and Well-Being." July 2011.
- 1.11. 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.
- 1.12. Brenton McMenamain (Psychology, CABS). "More than a feeling: Emotional value alters visual perception." May 2012.
- 1.13. Jamie Joseph (Rutgers University, NJ, Neuroscience). "Identifying SNP correlates of a schizophrenia subtype characterized by poor premorbid functioning and perceptual organization deficits." June 2013.
- 1.14. Rachel Blackman (Graduate Program in Neuroscience). "Neural basis of context processing dysfunction in schizophrenia: A monkey model." July 2013.
- 1.15. James Porter (Psychology, CSPR). "Cortical and subcortical correlates of emotional control across adolescent development." August 2013.
- 1.16. 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.
- 1.17. Michael-Paul Schallmo (Graduate Program in Neuroscience). "Neural Mechanisms of Visual Context Processing in Healthy Adults and those with Schizophrenia." December 2014
- 1.18. Gowtham Atluri (Computer Science and Engineering). "Mining Dynamic Relationships From Spatio-temporal Datasets: An Application to Brain fMRI Data." May 2014
- 1.19. Andrew Papale (Graduate Program in Neuroscience). "Hippocampal Representations on the Spatial Delay Discounting Task." September 2015
- 1.20. Tyler Yost (Psychology, Cognition and Brain Sciences). "Meta-analytic and Empirical Estimates of the Resource Depletion Effect Size." May 2016.
- 1.21. Peter Lynn (Psychology, CSPR) April 2019. "The Role of Theta- / Gamma-Coupling in Working Memory Dysfunction in Schizophrenia" April 2019.
- 1.22. Amanda Reuter (Psychology, Personality, Individual Differences and Behavioral Genetics). "Investigating the neural networks involved in externalizing and conscientious behavior." May 2019.
- 1.23. Nathalia Torres Jimenez (Graduate Program in Neuroscience). "The Role of D-Serine in Normal Retinal Function and Implications for Psychiatry." July 2019.
- 1.24. Adele DeNicola (Graduate Program in Neuroscience). "Altered MD-PFC thalamocortical network dynamics in an NMDAR antagonist animal model of cognitive control deficits in schizophrenia." July 2019.
- 1.25. Elias Baroda (Graduate Program in Neuroscience). "Modulating Human Brain Plasticity with Transcranial Direct Current Stimulation (tDCS): Basic and Clinical Applications." December 2019.
- 1.26. Karen Guo (Computer Science and Engineering). "Characterizing Human Looking Behavior

- considering Human interest and Visual Attention with contributions to Cognitive AI and HCI.”  
March 2020.
- 1.27. Lana Towle Leeper (Psychology, Fielding Graduate University). Meta-analysis of BOLD Signaling in Schizophrenia. July 2020.
  2. Comprehensive Specials Theses
    - 2.1. Stephen Benning (Psychology, C SPR). September 2004.
    - 2.2. Molly Gill Willer (Psychology, C SPR). “Prognostic Indicators for Outcome from Cognitive Behavioral Therapy for Bulimia Nervosa.” April 2005.
    - 2.3. 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.
    - 2.4. Ela Bhatt (Rehabilitation Sciences). Specialist Certificate Examining Committee. October 2005.
    - 2.5. Dongju Seo (Psychology, C SPR), “Neural Mechanism of Impulsive Aggression.” October 2006.
    - 2.6. Nicholas Davenport (Psychology, Biological Psychopathology), “Regional abnormalities of white matter volume and integrity in schizophrenia.” January 2007.
    - 2.7. 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.
    - 2.8. 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.
    - 2.9. Daniel Goldman (Psychology, C SPR). “The Need for Dimensional Approaches in Understanding Startle Reflex Dysregulations in Posttraumatic Stress Disorder.” April 2010.
    - 2.10. Rachel Blackman (Neuroscience), “Impact of synaptic disconnection on context processing in prefrontal cortex.” August 2010.
    - 2.11. Jamie Joseph (Neuroscience, Rutgers University). Written exam. August 2010.
    - 2.12. Andrew Papale (Graduate Program in Neuroscience), “Hippocampal modulation of intertemporal choice in rats.” November 2010.
    - 2.13. Brenton McMenamen (Psychology, CAB). “Hemispheric asymmetries in amygdala function explained by asymmetries in object representation.” December 2010.
    - 2.14. James Porter (Psychology, C SPR) “Tracking the development of motivational control across childhood, adolescence, and young adulthood.” April 2011.
    - 2.15. Jennifer Puig (Institute for Child Development, DPCS). 2012
    - 2.16. Gowtham Atluri (Computer Science and Engineering). January 2013.
    - 2.17. Nathalia Torres Jimenez (Graduate Program in Neuroscience). “The pERG of Schizophrenia.” November 2014.
    - 2.18. Peter Lynn (Psychology, C SPR). “Gamma- and Theta- Band Dysfunction During Working Memory in People with Schizophrenia and their First-Degree Relatives.” March 2016.
    - 2.19. Elias Boroda (Graduate Program in Neuroscience). May 2017.
  3. Master’s Theses
    - 3.1. Nicholas Davenport (Psychology, Biological Psychopathology). “Neural Anomalies During Visual Search in Schizophrenia Patients and Unaffected Siblings of Schizophrenia Patients.” December 2005.

- 3.2. James Porter (Psychology, CSPR) “Cortical maturation and verbal fluency in childhood, adolescence, and young adulthood,” October 2009.
- 3.3. Casey Gradick (Public Health, Epidemiology) “Characterization of hospital-treated schizophrenia in the Los Ríos Region, Chile.” August 2012.
- 3.4. Peter Lynn (Psychology, CSPR). January 2016.
4. Undergraduate Honors Theses
  - 4.1. JoAn Laes (Psychology). “Relationships between cognitive functions and current social functioning in schizophrenia and bipolar affective disorder,” May 2004.
  - 4.2. Nancy Meissner (Psychology). “Smell identification ability and cognitive associations in patients with deficit/nondeficit schizophrenia, bipolar affective disorder, and their relatives.” May 2005.
  - 4.3. Noah Venables (Psychology). “Negative emotionality, trait aggression, and brain potential responses in an affective 3-stimulus oddball paradigm.” December 2005.
  - 4.4. Sylvia Sng (Psychology). “International Students’ Adjustment in the United States: Social Contact.” January 2010.
  - 4.5. 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, 2015.
2. Psychology 3960: **Global Triangle: Power, Addiction & Buddhism in Northern Thailand** (Global Studies course to Chiang Mai, Thailand). January 2013, May-June 2014.
3. Psychology 4960: **Senior Seminar: Psychology of Love and Happiness**. Fall 2006.
4. Psychology 5993 (formerly 4993/8993): **Neuroimaging and Psychopathology** (Research Seminar). Spring 2003 - 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). Every semester Fall 2009 – 2017.
7. Psychology 8622: **Treatment of Mental Disorders** (Clinical Psychology and Psychopathology Research Program Required course). Fall 2003, 2004, 2005, 2006, Spring 2009, 2011, 2013, 2015, 2017, 2019, 2021
8. Psychology 8960: **Neuroimaging: Methods and Applications** (Graduate Research Seminar). Spring 2004.
9. Guest Lectures:
  - a. Psychology 1001H: Honors **Introduction to Psychology**. Instructor: Kristen Kling. 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.
6. **Getting Your Groove: Happiness and the Flexibility of Experience in Graduate School.** Community lecture for the Council on Graduate Studies Wellness Event. Minneapolis, MN. March 2016.

### Academic Service:

1. University of Minnesota, University Senate, 2012-2015
2. University of Minnesota, University Storage Redesign & Restructure Committee, 2016-2017
3. College of Liberal Arts, Graduate Fellowship Committee, 2014
4. College of Liberal Arts Assembly Representative, 2004-2006, 2009-2011 (Assistant Chair, 2009-2010)
5. College of Liberal Arts, Budget Advisory Committee Member, 2005-2007
6. College of Liberal Arts, Executive Committee Member, 2009-2010
7. College of Liberal Arts, 2015 Planning Committee, 2010
  - a. Chair, Distinction/Size Work Group
8. College of Liberal Arts, Vertically-Integrated Research Team Experience (VIRTE<sub>x</sub>) Program, Developer & Director, 2007 – 2009
9. Psychology Department, Biological Psychopathology Program, Director, 2008 - 2013
10. Psychology Department, MRI Users’ Group, Faculty Supervisor, 2004-07, 2008-11, 2012-14
11. Psychology Department, Neuroimaging Consortium, Director, 2006-15.
12. Psychology Department, Departmental & Faculty Committee Memberships:
  - a. Psychology Department, Computer and Research Infrastructure Committee, 2004-07 (Chair, Spring 2007).
  - b. Psychology Department, Appointments Committee Member, 2006-07, 2011-12, 2015-16
  - c. Psychology Department, Awards and Graduate Admissions Committee, 2008 – 12.
  - d. Psychology Department, Curriculum Committee Member, 2013
  - e. Psychology Department, Research Experience in Psychology and IRB Committee Member, 2014
  - f. Psychology Department, Department Communications Committee, 2015-16
  - g. Psychology Department, Promotion and Tenure Committee, 2016-17, 2018-19
  - h. Psychology Department, Diversity Committee, 2016-17, 2020-21

**Other Academic Service / Volunteer Activities:**

1. American Psychological Association
  - a. Council of Editors, 2017-2023 (Chair 2022, Incoming Chair 2021)
  - b. Journal Advisory Committee, Member, 2020-2022
2. Society for Research in Psychopathology
  - a. Website Development & Oversight Committee, 2004-2007 (Chair, 2004-2006), 2012-2014.
  - b. Annual Meeting, Local Host, 2009 (Minneapolis).
  - c. Awards Committee, Member, 2011
  - d. Program Committee, Member, 2012
  - e. Executive Board, 2012-2016
  - f. Director of Investment, 2016-present
3. Society for Neuroscience,
  - a. Community Presenter, Brain Awareness Week, 2004, 2005, 2009, 2011, 2015, 2018
4. 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. 2010-2011 (Grades 2-3), 2015-2017 (Grades 4-6)
  - b. Children & Youth Practice Substitute Teacher. 2009-2010, 2011-2013
  - c. Board of Directors, 2012-2015