

J. Daniel Ragland, Ph.D.
Curriculum Vitae

Date: September 2018

Home Address: 250 Tern Place
Davis, CA 95616

Office Address: University of California at Davis
Imaging Research Center
Department of Psychiatry and Behavioral Sciences
4701 X Street
Sacramento, CA 95817
Phone: (916) 734-5802
Fax: (916) 734-8750
Email: jdragland@ucdavis.edu

Education:

Sept, 1981- Nov, 1984	B.A. Earlham College (Psychology)
Sept, 1985- June, 1987	M.A. American University (Psychology)
Sept, 1987- June, 1991	Ph.D. American University (Clinical Psychology)

Postgraduate Training and Fellowship Appointments:

Sept, 1986- Sept, 1987	Neuropsychology Extern, National Institute of Mental Health, Clinical Brain Disorders Branch, Washington, D.C.
Sept, 1988- June, 1990	Clinical Psychology Extern, The Catholic University of America, Washington, D.C.
July, 1990- June, 1991	Clinical Psychology Intern, The Medical College of Pennsylvania at EPPI, Philadelphia, PA.
July, 1991- June, 1993	Post-doctoral Trainee in Neuropsychiatry, National Research Service Award Fellow, Department of Psychiatry, University of Pennsylvania, Philadelphia, PA.

Faculty Appointments:

July, 1993- June, 1994	Lecturer "A" in Psychiatry, Department of Psychiatry, University of Pennsylvania School of Medicine
July, 1994- June, 2000	Assistant Professor of Neuropsychology in Psychiatry, Tenure Track, Department of Psychiatry, University of Pennsylvania School of Medicine

July, 2000- June, 2003	Assistant Professor of Neuropsychology in Psychiatry, Clinician Educator Track, Department of Psychiatry, University of Pennsylvania School of Medicine
July, 2003- June, 2006	Associate Professor of Neuropsychology in Psychiatry, Clinician Educator Track, Department of Psychiatry, University of Pennsylvania School of Medicine
July, 2006- June, 2010	Associate Professor of Psychiatry and Behavioral Sciences, Tenured, Imaging Research Center, Department of Psychiatry and Behavioral Sciences, University of California at Davis
July, 2010- Present	Professor of Psychiatry and Behavioral Sciences, Step 3.5, Imaging Research Center, Department of Psychiatry and Behavioral Sciences, University of California at Davis

Hospital and Administrative Appointments:

1993 - 2006	Medical Staff Affiliate, Hospital of the University of Pennsylvania
2000 - 2006	Neuropsychology Training Director, Brain Behavior Laboratory, Department of Psychiatry, University of Pennsylvania School of Medicine
2006-	Psychologist, Early Detection and Intervention for the Prevention of Psychosis Program, University of California at Davis
2007-	Member, Neuroscience Advisory Group, Center for Neuroscience, University of California at Davis
2007-	Member, Psychology Graduate Group, Department of Psychology, University of California at Davis
2013-	Consulting Psychologist, Sacramento County Mental Health Treatment Center, Sacramento, California

Licensure:

California License 21739
Pennsylvania License PS006453L

Awards, Honors and Membership in Honorary Societies:

1984	Earlham College General and Departmental Honors
1991	American University Dissertation Fellowship Award
1991	National Research Service Award Fellowship
1994	Phi Kappa Phi Honor Society

1997	Young Investigator Award, The EJLB Foundation
2002	Recipient, NIH Loan Repayment Program Award
2003-10	Associate Member, American College of Neuropsychopharmacology
2003	Member, John Morgan Society
2004	NARSAD Independent Investigator Award
2005, 2006	Hofmann Trust Investigator
2008, 2009	UC Davis Academic Senate Research Travel Award
2010	Member, American College of Neuropsychopharmacology
2013	UC Davis Academic Senate Research Travel Award
2015	Fellow, American College of Neuropsychopharmacology

Memberships in Professional and Scientific Societies:

International Societies:

American College of Neuropsychopharmacology (ACNP)
 Memory Disorders Research Society
 Society of Biological Psychiatry
 Schizophrenia International Research Society

National Scientific Committees:

Study Section Member, Chronic Fatigue Syndrome Pathophysiology.
 National Institutes of Health, Bethesda, MD.

Review Member, Wellcome Trust. Great Britain.

Advisory Committee Member, NINDS Health Disparities Working Group:
 Cognitive and Emotional Health in Children. National Institutes of
 Health, Bethesda, MD.

Study Section Member, Special Emphasis Panel, ZMH1 NRB-Q-06. National
 Institutes of Health, Bethesda, MD.

Review Member, Michael Smith Foundation. British Columbia, Canada.

Study Section Member, Special Emphasis Panel, ZRG1 BBBP-R (02) R,
 National Institutes of Health, Bethesda, MD.

Ad-hoc member of NIMH Neural Basis of Psychopathology, Addictions and
 Sleep Disorders Study Section (NPAS). National Institutes of Health,
 Bethesda, MD.

Study Section Member, Special Emphasis Panel, ZRG1 EMNR-R(02).
 National Institutes of Health, Bethesda, MD.

Ad-hoc member of NIMH Adult Psychopathology and Disorders of Aging
 Study Section (APDA). National Institutes of Health, Bethesda, MD.

Study Section Member, NIMH Adult Psychopathology and Disorders of Aging Study Section (APDA). National Institutes of Health, Bethesda, MD.

Editorial Positions:

Editorial Board Member of *Biological Psychiatry*
 Editorial Board Member of *Psychiatry Research: Neuroimaging*
 Editorial Board Member of *Schizophrenia Research: Cognition*
 Editorial Board Member of *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*
 Faculty Member *Faculty of 1000 Medicine (Schizophrenia & Other Psychosis)*

Ad-Hoc Reviewer for: *American Journal of Geriatric Psychiatry, American Journal of Psychiatry, Archives of General Psychiatry, Behavioral Sciences, Biological Psychiatry, Brain, Brain and Cognition, Brain and Language, Cerebral Cortex, European Review of Applied Psychology, Journal of Abnormal Psychology, Journal of Neuroscience, NeuroImage, Neuropsychology, Neuropsychologia, PLOS ONE, Schizophrenia Bulletin, Schizophrenia Research, World Psychiatry.*

Organizing Role in Scientific Meetings and Study Sections:

2011	Co-Chair, “Role of the Prefrontal Cortex in Memory Dysfunction in Psychosis”, (American College of Neuropsychopharmacology, Boca Raton, Florida, USA)
2013	Chair, “Cognitive neuroscience perspectives on memory network dysfunction in schizophrenia and clinical risk states”, (14 th Annual Meeting of the International Congress on Schizophrenia Research, Orlando, FL, USA).
2013	Co-Chair, “Cognition in psychosis”, (14 th Annual Meeting of the International Congress on Schizophrenia Research, Orlando, FL, USA).
2015	Chair, Special Emphasis Panel, ZRG1 EMNR-R(02). National Institutes of Health, Bethesda, MD.

University Committee Service:

2007-2016	Committee for Research Affairs, UC Davis School of Medicine
2010-present	Research Affairs Committee, Department of Psychiatry and Behavioral Sciences, UC Davis School of Medicine
2010-2014	Committee on Research – Grants, UC Davis Academic Senate
2012-2016	Compensation Advisory Committee, UC Davis School of Medicine
2013-2017	Faculty Executive Committee, UC Davis School of Medicine
2014-2017	Committee on Planning and Budget, UC Davis Academic Senate
2015-2017	Coordinating Committee for Self-Supporting Degree Programs, UC Davis Academic Senate

2016	Member, Search Committee for Associate Vice Chancellor for Academic Personnel, UC Davis School of Medicine
2016	Member, Center Director Reappointment Review Committee, UC Davis School of Medicine
2016-2018	Chair, Compensation Advisory Committee, UC Davis School of Medicine
2016	Member, Endowed Chair Reappointment Review Committee, UC Davis School of Medicine
2016	Member, Dean's Professorship Appointment Review Committee, UC Davis School of Medicine
2017-2018	Member, Committee on Student Promotions, UC Davis School of Medicine
2016-present	Selection Committee Member, Junior Faculty Development Award, Department of Psychiatry and Behavioral Sciences, UC Davis School of Medicine
2017-present	Member, Grand Rounds Committee, Department of Psychiatry and Behavioral Sciences, UC Davis School of Medicine
2018-present	Selection Committee Member, Medical Student Research Fellowship Program, UC Davis School of Medicine
2018-present	Member, Faculty Personnel Committee, UC Davis School of Medicine

Other Committee Service:

2010-2014	Member, American College of Neuropsychopharmacology (ACNP), Education and Training Committee
2014-2015	Member, American College of Neuropsychopharmacology (ACNP), Public Information Committee Member
2016	Member, International Congress of Schizophrenia Research (ICOSR), Program Planning Committee, 16 th Annual Conference
2016-2017	Co-Chair, American College of Neuropsychopharmacology (ACNP), Public Information Committee
2017-2018	Chair, American College of Neuropsychopharmacology (ACNP), Public Information Committee

Major Teaching and Clinical Responsibilities:

1.	1993-2006	Neuropsychology Clinic Supervisor at HUP, 1 day/week
2.	1996	Residency Training in Clinical Interview, HUP
3.	1997	Residency Training in Clinical Interview, HUP
4.	1997	Lecturer, Neuroimaging Seminar, Dept. of Psychology, Univ. of Pennsylvania
5.	1998	Lecturer, Psychiatric Diagnosis and Treatment (PGY2), HUP
6.	1998	Lecturer, IRCS Brain and Language Reading Group, Univ. of Pennsylvania
7.	1999	Lecturer, Biological and Behavioral Correlates of Mental Health and Illness (N622), School of Nursing, HUP

8. 1999 Lecturer, Psychiatric Diagnosis and Treatment (PGY2), HUP
9. 2000 Guest Lecturer, Pediatric Neuropsychiatry Module for Child and Adolescent Psychiatry Residents, CHOP
10. 2000 Lecturer, Biological and Behavioral Correlates of Mental Health and Illness (N622), School of Nursing, HUP
11. 2000 Lecturer, Psychiatric Diagnosis and Treatment (PGY2), HUP
12. 2000 Lecturer, IRCS Brain and Language Reading Group, Univ. of Pennsylvania
13. 2001 Lecturer, Brain and Behavior Course, HUP
14. 2001 Lecturer, BSN Survey Course (N321), School of Nursing, HUP
15. 2001 Lecturer, Biological and Behavioral Correlates of Mental Health and Illness (N622), School of Nursing, HUP
16. 2001 Lecturer, Neurobehavioral Studies of Schizophrenia (PGY I/II), HUP
17. 2002 Lecturer, Mental Status Examination, School of Medicine, HUP
18. 2002 Guest Lecturer, Psychiatric Diagnosis and Treatment (PGY2), HUP
19. 2003 Lecturer, Mental Status Examination, School of Medicine, HUP
20. 2003 Lecturer, Evidence Based Psychiatry Seminar (PGY 1&2), HUP
21. 2003 Lecturer, Neurobehavioral Studies of Schizophrenia (PGY I/II), HUP
22. 2004 Lecturer, University of Pennsylvania Clinical Seminars, Department of Psychology
23. 2004 Lecturer, Advanced Topics in Neuropsychopharmacology (Pharm 550), HUP
24. 2004 Guest Lecturer, Graduate Seminar in Neuroimaging, Drexel University
25. 2004 Guest Lecturer, Philadelphia Neuropsychology Society CME Presentation, Drexel University
26. 2004 Lecturer, Neurobehavioral Studies of Schizophrenia (PGY I/II), HUP
27. 2004 Lecturer, Biological and Behavioral Correlates of Mental Health and Illness (N622), School of Nursing, HUP
28. 2004 Lecturer, IRCS Brain and Language Reading Group, Univ. of Pennsylvania
29. 2005 Lecturer, Biological and Behavioral Correlates of Mental Health and Illness (N622), School of Nursing, HUP
30. 2006 Instructor, Doctoring II, School of Medicine, University of California at Davis.
31. 2007 Instructor, Introduction to Clinical Psychiatry (PSY 403), School of Medicine, University of California at Davis.

32. 2008 Instructor, Doctoring III, School of Medicine, University of California at Davis. School of Medicine, University of California at Davis.
33. 2009 Co-Instructor, Neuroscience for Clinicians, University of California at Davis. School of Medicine, University of California at Davis.
34. 2009 Instructor, Doctoring II, School of Medicine, University of California at Davis.
35. 2010 Co-Instructor, Neuroscience for Clinicians, University of California at Davis. School of Medicine, University of California at Davis.
36. 2010 Instructor, Doctoring II, School of Medicine, University of California at Davis.
37. 2011 Guest Lecturer, Masters Program in Health Informatics, School of Medicine, University of California at Davis.
38. 2011 Instructor, Doctoring II, School of Medicine, University of California at Davis.
39. 2012 Instructor, Doctoring II, School of Medicine, University of California at Davis.
40. 2012 Co-Instructor, Neuroscience for Clinicians, University of California at Davis. School of Medicine, University of California at Davis.
41. 2013 Instructor, Doctoring II, School of Medicine, University of California at Davis.
42. 2013 Co-Instructor, Neuroscience for Clinicians, University of California at Davis. School of Medicine, University of California at Davis.
43. 2014 Instructor, Doctoring II, School of Medicine, University of California at Davis.
44. 2014 Co-Instructor, Neuroscience for Clinicians, University of California at Davis. School of Medicine, University of California at Davis.
45. 2014 Lecturer, Evidence-Based Practice, Department of Psychiatry and Behavioral Sciences, School of Medicine, University of California at Davis
46. 2014 Co-Instructor, Neuroscience for Clinicians, University of California at Davis. School of Medicine, University of California at Davis.
47. 2015 Instructor, Doctoring II, School of Medicine, University of California at Davis.
48. 2015 Co-Instructor, Neuroscience for Clinicians, University of California at Davis. School of Medicine, University of California at Davis.
49. 2016 Co-Instructor, Neuroscience for Clinicians, University of California at Davis. School of Medicine, University of California at Davis.

50. 2017 Co-Instructor, Neuroscience for Clinicians, University of California at Davis. School of Medicine, University of California at Davis.

Lectures by Invitation: (past 10 years)

- July 11, 2005 “Imaging Working Memory: The N-Back Paradigm”, College of Life Sciences and Technology, Wuhan, China.
- July 13, 2005 “Brain Function During Word Encoding and Recognition in Schizophrenia”, College of Life Sciences and Technology, Wuhan, China.
- Dec. 6, 2005 “Role of fronto-temporal function in thought disorder, semantic and episodic memory in schizophrenia”, Center for Functional Neuroimaging, University of Pennsylvania, Philadelphia, PA., USA
- May 10, 2006 “Functional Imaging of Obesity & its Complications: Understanding Food Craving & Satiety”, Plenary speaker, ISMRM 14th Scientific Meeting and Exhibition, Seattle, WA, USA.
- Sept. 27, 2006 “Memory in Schizophrenia, Forgetting to Remember”, CME speaker, First Annual UC Davis Conference on Psychotic Disorders, UC Davis, Sacramento, CA., USA
- Oct. 2, 2006 “Forgetting to Remember: Associative Encoding in Schizophrenia”, Guest Speaker, Cognitive Control Symposium, UC Davis, Center for Mind and Brain, Davis, CA., USA
- Oct. 5, 2006 “Word Encoding and Retrieval in Schizophrenia”, Guest Speaker, UC Davis, Neuropsychology Post-Doctoral Training Program, Sacramento, CA., USA
- Jan. 12, 2007 "Memory in schizophrenia: Role of encoding strategy", Guest Speaker, UC Davis, Dept. Psychology, PCCN brownbag series, Davis, CA., USA
- Feb. 9, 2007 “Functional Correlates of Cognitive Disability in Schizophrenia”, Guest Speaker, UC Davis, Center for Neuroscience, Davis, CA, USA
- Oct. 12, 2007 “Impact of Relational Processing on Memory and Brain Function in Healthy Subjects and Patients with Schizophrenia”, Grand Rounds Speaker, UC Davis, Department of Psychiatry and Behavioral Sciences, Sacramento, CA, USA
- Dec. 11, 2007 “Role of the Prefrontal Cortex in Memory Dysfunction in Psychosis”, Panel Presenter and Co-Chair, American College of Neuropsychopharmacology, Boca Raton, Florida, USA
- April 11, 2008 “Role of the Prefrontal Cortex in Memory Dysfunction in Psychosis”, Department of Psychiatry and Research Imaging Center, University of Texas Health Science Center at San Antonio, San Antonio, TX, USA
- April 24, 2008 “Role of the Prefrontal Cortex in Memory Dysfunction in Psychosis”, OMNI Meeting, Center for Mind and Brain, UC Davis, Davis, CA., USA

- August 21, 2008 “Candidate Mechanism of Memory Dysfunction in Schizophrenia”, National Institutes of Mental Health, Rockville, MD, USA
- Sept. 19, 2008 “Prefrontal Cortex and Relational Memory Deficits in Schizophrenia”, Memory Disorders Research Meeting, St. Louis, MO, USA
- Nov. 4, 2008 “A Neuroscience Perspective on Schizophrenia”, Departments of Biology and Psychology, Chico State University, Chico, CA, USA
- Nov. 22, 2008 “Prefrontal Control of Attention and Memory in Schizophrenia”, International Symposium on The Cognitive Neuroscience of attention: From Basic Research to Clinical Application, University of Aachen, Aachen, Germany
- March 7, 2009 “Functional MRI Imaging Center Workshop”, 3rd Annual UC Davis Health Informatics Program, Department of Psychiatry UC Davis Medical School, Sacramento, CA, USA
- March 27, 2009 “Schizophrenia’s Impact on Basic Prefrontal Mechanisms of Episodic Encoding and Retrieval”, The International Congress Emory University Cognition Satellite Meeting, San Diego, CA, USA
- March 28, 2009 “Using Eye-Movements to Assess Item-Specific and Relational Long Term Memory in Schizophrenia”, 12th Annual Meeting of the International Congress on Schizophrenia Research, San Diego, CA, USA
- July 16, 2009 “Contribution of Relational Encoding & Retrieval to Episodic Memory Deficits in Schizophrenia”, Psychiatry Grand Rounds, Vanderbilt University, Nashville, TN, USA
- Feb. 19, 2010 "Contribution of Relational Encoding and Retrieval to Episodic Memory Deficits in Schizophrenia", Guest Speaker, UC Davis, Dept. Psychology, PCCN brownbag series, Davis, CA., USA
- April 23, 2010 “Cognitive Control of Memory Deficits in Schizophrenia”, Integrated Neuroscience Seminar, UC Davis Center for Mind and Brain, Davis, CA, USA
- May 21, 2010 “Translational Development of the Relational and Item-Specific Encoding (RISE) Long Term Memory Task”, 65th Annual Meeting, Society of Biological Psychiatry, New Orleans, LA, USA
- August 13, 2010 “Eye Movement Monitoring of Item and Relational Memory In Schizophrenia”, 118th Annual Convention, American Psychological Association, San Diego, CA., USA
- October 8, 2010 “Memory of Items and their Relations: The RISE Task”, 24th Annual Meeting, Society for Research in Psychopathology, Seattle, WA, USA
- April 3, 2011 “Memory of Items and their Relations: The RISE Task”, 13th Annual Meeting, International Congress on Schizophrenia Research, Colorado Springs, CO, USA
- Sept 15, 2011 “Forgetfulness and Disorganization in Schizophrenia: Brain Circuits and Intervention”, Sixth Annual UC Davis Conference on Psychotic Disorders, Sacramento, CA, USA

- Sept 29, 2011 “Functional Imaging of the Brain”, UC Davis Medical Center, Health Informatics Graduate Program, Sacramento, CA, USA
- May 6, 2012 “Understanding and Treating Impaired Cognition and Emotion in Schizophrenia”, 165th Annual Meeting of the American Psychiatric Association, Philadelphia, PA, USA
- April 23, 2013 “Neural Correlates of Recollection and Familiarity Deficits in Schizophrenia”, 14th Annual Meeting of the International Congress on Schizophrenia Research, Orlando, FL, USA
- May 16, 2013 “Dorsolateral and Ventrolateral Fronto-Temporal Memory Networks in Schizophrenia and Schizoaffective Disease States”, 68th Annual Meeting of the Society of Biological Psychiatry, San Francisco, CA, USA
- March 27, 2014 “Forgetfulness & Disorganization in Schizophrenia: Brain Circuits & Interventions”, CME Presentation, Sacramento Valley Psychological Association, Sacramento, CA, USA
- Nov 20, 2014 "From Memory to Neurotransmitter: Multi-modal Imaging of Episodic Memory in People with Schizophrenia", NeuroLunch, Center for Neuroscience, Davis, CA, USA
- April 5, 2016 “Relational and Item Specific Memory Markers of Psychosis Risk”, 5th Biennial Schizophrenia International Research Society Conference, Florence, Italy.
- March 26, 2018 “Forgetting to Remember: Memory Network Function and Dysfunction in People with Schizophrenia”, Grand Rounds Presentation, Department of Psychiatry, University of California at San Francisco, San Francisco, CA, USA
- April 22, 2018 “Specificity of Memory Network Dysfunction in People with Schizophrenia”, 2018 International Conference on Learning and Memory, Huntington Beach, CA, USA
- March 26, 2018 “Forgetting to Remember: Memory Network Function and Dysfunction in People with Schizophrenia”, Psychiatry Grand Rounds, University of California at San Francisco, San Francisco, CA, USA

Bibliography: (*h-index = 50; 9637 citations, 4143 since 2013*)

Research Publications, peer reviewed (print or other media):

1. Goldberg, T.E., Kleinman, J.E., Daniel, D.G., Myslobodsky, M.S., Ragland, J.D., Weinberger, D.R.: Dementia praecox revisited: Age disorientation, mental status and ventricular enlargement. *British Journal of Psychiatry* 153:187-190, 1988.
2. Goldberg, T.E., Ragland, J.D., Torrey, E.F., Gold, J.M., Bigelow, L.B., Weinberger, D.R.: Neuropsychological assessment of monozygotic twins discordant for schizophrenia. *Archives of General Psychiatry* 47:1066-1072, 1990.
3. Ragland, J.D., Berman, A.F.: Farm crisis and suicide: Dying on the vine? *Omega* 22:173-185, 1991.
4. Ragland, J.D., Goldberg, T.E., Wexler, B.E., Gold, J.M., Torrey, E.F., Weinberger, D.R.: Dichotic listening in monozygotic twins discordant and concordant

- for schizophrenia. *Schizophrenia Research* 7:177-183, 1992.
5. Goldberg, T.E., Torrey, E.F., Gold, J.M., Ragland, J.D., Bigelow, L.B., Weinberger, D.R.: Learning and memory in monozygotic twins discordant for schizophrenia. *Psychological Medicine* 23:71-85, 1993.
 6. Torrey, E.F., Ragland, J.D., Gold, J., Goldberg, T.E., Bowler, A., Bigelow, L.B., Gottesman, I.I.: Handedness in twins with schizophrenia: A refutation of Boklage. *Schizophrenia Research* 9:83-85, 1993.
 7. Gur, R.C., Jaggi, J.L., Ragland, J.D., Resnick, S.M., Shtasel, D., Muenz, L., Gur R.E.: Effects of memory processing on regional brain activation: Cerebral blood flow in normal subjects. *International Journal of Neuroscience* 72:31-44, 1993.
 8. Gur, R.C., Ragland, J.D., Resnick, S.M., Jaggi, J., Skolnick, B.E., Gur, R.E.: Lateralized increases in cerebral blood flow during performance of verbal and spatial tasks: Relationship with performance level. *Brain and Cognition* 24:244-258, 1994.
 9. Gur, R.E., Jaggi, J., Shtasel, D., Ragland, J.D., Gur, R.C.: Cerebral blood flow in schizophrenia: Effects of memory processing on regional activation. *Biological Psychiatry* 35:3-15, 1994.
 10. Goldberg, T.E., Torrey, E.F., Gold, J.M., Bigelow, L.B., Ragland, J.D., Taylor E., Weinberger D.R.: Genetic risk of neuropsychological impairment in schizophrenia: a study of monozygotic twins discordant and concordant for the disorder. *Schizophrenia Research* 17:77-84, 1995.
 11. Ragland, J.D., Gur, R.C., Deutsch, G.K., Censits, D.M., Gur, R.E.: Reliability and construct validity of the paired-associate recognition test: A test of declarative memory using wisconsin card sorting stimuli. *Psychological Assessment* 7:25-32, 1995.
 12. Smith, R.J., Shao, L., Freifelder, R., Karp, J.S., Ragland, J.D.: Quantitative measurement of cerebral blood flow in volume imaging PET scanners. *IEEE Transactions on Nuclear Science* 42:1018-1023, 1995.
 13. Ragland, J.D., Censits, D.M., Gur, R.E., Glahn, D.C., Gallacher, F., Gur, R.E.: Assessing declarative memory in schizophrenia using Wisconsin Card Sorting Test stimuli: the Paired Associate Recognition Test. *Psychiatry Research* 60:135-145, 1996.
 14. Ragland, J.D., Glahn, D.C., Gur, R.C., Censits, D.M., Smith, R.J., Mozley, P.D., Alavi, A., Gur, R.E.: PET regional cerebral blood flow change during working and declarative memory: relationship with task performance. *Neuropsychology* 11:222-231, 1997.
 15. Gur, R.C., Ragland, J.D., Mozley, L.H., Mozley, P.D., Smith, R., Alavi, A., Bilker, W., Gur, R.E.: Lateralized changes in regional cerebral blood flow during performance of verbal and facial recognition tasks: Correlations with performance and "effort". *Brain and Cognition* 33:388-414, 1997.
 16. Censits, D.M., Ragland, J.D., Gur, R.C., Gur, R.E.: Neuropsychological evidence supporting a neurodevelopmental model of schizophrenia: a longitudinal study. *Schizophrenia Research* 24:289-298, 1997.
 17. Coleman, A.R., Moberg, P.J., Ragland, J.D., Gur, R.C.: Comparison of the halstead-reitan and infra-red light beam finger tappers. *Assessment* 4:271-280, 1997.

18. Glahn, D.C., Gur, R.C., Ragland, J.D., Gur, R.E.: Reliability, performance characteristics, and construct validity and initial application of the visual object learning test (VOLT). *Neuropsychology* 11:602-612, 1997.
19. Ragland, J.D., Gur, R.C., Glahn, D.C., Censits, D.M., Smith, R.J., Lazarev, M.G., Alavi, A., Gur, R.E.: Fronto-temporal cerebral blood flow change during executive and declarative memory tasks in schizophrenia: a positron emission tomography study. *Neuropsychology* 12:399-413, 1998.
20. Ragland, J.D., Gur, R.E., Klimas, B.C., McGrady, N., Gur, R.C.: Neuropsychological laterality indices of schizophrenia: interactions with gender. *Schizophrenia Bulletin* 25:79-89, 1999.
21. Glahn D.C., Cannon, T.D., Gur, R.E., Ragland, J.D., Gur, R.C.: Working Memory Constrains Abstraction in Schizophrenia. *Biological Psychiatry* 47:34-42. 2000.
22. Ragland, J.D., Coleman, A.R., Gur, R.C., Glahn, D.C., Gur, R.E.: Sex differences in brain-behavior relationships between verbal episodic memory and resting regional cerebral blood flow. *Neuropsychologia* 38:451-461, 2000.
23. Kohler, C.G., Ances, B.M., Coleman, A.R., Ragland, J.D., Lazarev, M., Gur, R.C.: Marchiafava-Bignami disease: Literature and case report. *Neuropsychiatry, Neuropsychology, and Behavioral Neurology* 13:67-76, 2000.
24. Ragland, J.D., Gur, R.C., Lazarev, M.G., Smith, R.J., Schroeder, L., Raz, J., Turetsky, B.I., Alavi, A., Gur, R.E.: Hemispheric activation of anterior inferior prefrontal cortex during verbal encoding and recognition. *NeuroImage* 11:624-633, 2000.
25. Kurtz, M.M., Ragland, J.D., Bilker, W.B., Gur, R.C., Gur, R.E.: Comparison of the continuous performance test with and without working memory demands in healthy controls and patients with schizophrenia *Schizophrenia Research* 48:307-316, 2001.
26. Ragland, J.D., Gur, R.C., Raz, J., Schroeder, L., Smith, R.J., Alavi, A., Gur, R.E.: Effect of Schizophrenia on Frontotemporal Activity During Word Encoding and Recognition: A PET Cerebral Blood Flow Study. *American Journal of Psychiatry* 158:1114-1125, 2001.
27. Hill, S.K., Ragland, J.D., Gur, R.C., Gur, R.E.: Neuropsychological differences among empirically derived clinical subtypes of schizophrenia. *Neuropsychology* 15: 492-501, 2001.
28. Moelter, S.T., Hill, S.K., Ragland, J.D., Lunardelli, A., Gur, R.C., Gur, R.E., Moberg, P.J.: Controlled and automatic processing during animal word list generation in schizophrenia. *Neuropsychology* 15: 502-509, 2001.
29. Gur, R.C., Ragland, J.D., Moberg, P.J., Turner, T.H., Bilker, W.B., Kohler, C., Siegel, S.J., Gur, R.E.: Computerized Neurocognitive Scanning: I. Methodology and validation in healthy people. *Neuropsychopharmacology* 25:766-776, 2001.
30. Gur, R.C., Ragland, J.D., Moberg, P.J., Bilker, W.B., Kohler, C., Siegel, S.J., Gur, R.E.: Computerized Neurocognitive Scanning II: The Profile of Schizophrenia. *Neuropsychopharmacology* 25:777-788, 2001.
31. Langleben, D.D., Schroeder, L., Gur, R.C., Maldjian, J.P., McDonald, S., Ragland, J.D., O'Brien, C.P., Childress, A.R.: Brain Activity during

- Simulated Deception: An Event-Related Functional Magnetic Resonance. *NeuroImage* 15:727-732, 2002.
32. Ragland, J.D., Turetsky, B.I., Gur, R.C., Gunning-Dixon, F., Turner, T., Schroeder, L., Chan, R., Gur, R.E.: Working Memory for Complex Figures: An fMRI Comparison of Letter and Fractal N-Back Tasks. *Neuropsychology* 16: 370-379, 2002.
 33. Gur, R.E., McGrath, C., Chan, R.M., Schroeder, L., Turner, T., Turetsky, B.I., Kohler, C., Alsop, D., Maldjian, J., Ragland, J.D., Gur, R.C.: An fMRI study of facial emotion processing in schizophrenia. *American Journal of Psychiatry* 159:1992-1999, 2002.
 34. Hill, S.K., Ragland, J.D., Gur, R.C., Gur, R.E.: Neuropsychological profiles delineate distinct profiles of schizophrenia, an interaction between memory and executive function, and uneven distribution of clinical subtypes. *Journal of Clinical and Experimental Neuropsychology* 24:765-780, 2002.
 35. Gur, R.E., Kohler, C., Ragland, J.D., Siegel, S.J., Bilker, W.B., Loughhead, J., Phend, N., Gur, R.C.: Neurocognitive Performance and Clinical Changes in Olanzapine Treated Patients with Schizophrenia. *Neuropsychopharmacology*, 28:2029-2036, 2003.
 36. Ragland, J.D., Moelter, S.T., McGrath, C., Hill, S.K., Gur, R.E., Bilker, W.B., Siegel, S.J., Gur, R.C.: Levels-Of-Processing Effect on Word Recognition in Schizophrenia. *Biological Psychiatry*, 54:1154-1161, 2003.
 37. Kurtz, M.M., Ragland, J.D., Moberg, P.J., Gur, R.C.: The Penn Conditional Exclusion Test: A New Measure of Executive-function with Alternate Forms for Repeat Administration. *Archives of Clinical Neuropsychology*, 19:191-201, 2004.
 38. Irani, F., Dankert, M., Brensinger, C., Bilker, W.B., Nair, S.R., Kohler, C.G., Kanes, S.J., Turetsky, B.I., Moberg, P.J., Ragland, J.D., Gur, R.C., Gur, R.E., Siegel, S.J.: Patient attitudes towards surgically-implantable, long-term delivery of psychiatric medicine, *Neuropsychopharmacology*, 29:960-968, 2004.
 39. Ragland, J.D., Gur, R.C., Valdez, J., Turetsky, B.I., Elliott, M., Kohler, C., Siegel, S., Kanes, S., Gur, R.E.: Event-Related fMRI of Frontotemporal Activity During Word Encoding And Recognition in Schizophrenia. *American Journal of Psychiatry*, 161:1004-1015, 2004.
 40. Elliott, M.A., Gualtieri, E.E., Hulvershorn J., Ragland, J.D., Gur, R.C.: The effects of geometric distortion correction on motion realignment in fMRI. *Academic Radiology*, 11:1005-1010, 2004.
 41. Lowery, N., Ragland, J.D., Gur, R.C., Gur, R.E., Moberg, P.J.: Normative data for the Symbol Cancellation Test in young healthy adults. *Applied Neuropsychology*, 11:218-221, 2004.
 42. Pelchat, M.L., Johnson, A., Chan, R., Valdez, J., Ragland, J.D.: Images of desire: food craving activation during fMRI. *NeuroImage*, 23:1486-1493, 2004.
 43. Kurtz, M.M., Moberg, P.J., Ragland, J.D., Gur, R.C., Gur, R.E.: Symptoms versus neurocognitive test performance as predictors of psychosocial status: A 1- and 4-year prospective study. *Schizophrenia Bulletin*, 31:167-174, 2005.

44. Glahn, D.C., Ragland, J.D., Abramoff, A., Barrett, J., Laird, A.R., Bearden, C.E., Velligan, D.I.: Beyond hypofrontality: a quantitative meta-analysis of functional neuroimaging studies of working memory in schizophrenia. *Human Brain Mapping*, 25:60-69, 2005.
45. Ragland, J.D., Gur, R.C., Valdez, J.N., Loughead, J., Elliott, M., Kohler, C., Kanes, S., Siegel, S.J., Moelter, S.T., Gur, R.E.: Levels-of-processing effect on frontotemporal function in schizophrenia during word encoding and recognition. *American Journal of Psychiatry*, 162:1840-1848, 2005.
46. Calkins, M.E., Gur, R.C., Ragland, J.D., Gur, R.E.: Face recognition memory deficits in schizophrenia patients and their relatives: comparison with visual object memory performance. *American Journal of Psychiatry*, 162:1963-1966, 2005.
47. Moelter, S.T., Hill, S.K., Hughett, P., Gur, R.C., Gur, R.E., Ragland, J.D.: Organization of Semantic Category Exemplars in Schizophrenia. *Schizophrenia Research*, 78:209-217, 2005.
48. Ragland, J.D., McCarthy E., Bilker, W.B., Brensinger, C.M., Valdez, J., Kohler, C. Gur, R.E., Gur, R.C. Levels-Of-Processing Effect on Internal Source Monitoring in Schizophrenia. *Psychological Medicine*, 36:641-648, 2006.
49. Siegel, S.J., Irani, F., Kohler, C., Bilker, W., Brensinger, C., Kanes, S.J., Ragland, J.D., Gur, R.C., Gur, R.E.: Prognostic variables at intake and later level of function in first episode and previously treated males and females with schizophrenia. *American Journal of Psychiatry*, 163:433-441, 2006.
50. Dickinson, D., Ragland, J.D., Calkins, M.E., Gold, J.M., Gur, R.C. A Comparison of Cognitive Structure in Schizophrenia Patients and Healthy Controls Using Confirmatory Factor Analysis. *Schizophrenia Research*, 85:20-29, 2006.
51. Gur, R.E., Kohler, C.G., Ragland, J.D., Siegel, S.J., Lesko, K., Bilker, W.B., Gur, R.C.: Flat Affect in Schizophrenia: Relation to Emotion Processing and Neurocognitive Measures. *Schizophrenia Bulletin*, 32:279-287, 2006.
52. Weiss, E.M., Ragland, J.D., Brensinger, C.M., Bilker, W.B., Deisenhammer, E.A., Delazer, M.: Sex differences in clustering and switching in verbal fluency tasks. *Journal of the International Neuropsychological Society*, 12:502-509, 2006.
53. Ragland, J.D., Valdez, J.N., Loughead, J., Gur, R.C., Gur, R.E.: Functional magnetic resonance imaging of internal source monitoring in schizophrenia: Recognition with and without recollection. *Schizophrenia Research*, 87:160-171, 2006.
54. Aliyu, M.H., Calkins, M.E., Swanson, C.L. Jr., Lyons, P.D., Savage, R.M., May, R., Wiener, H., Devlin, B., Nimgaonkar, V.L., Ragland, J.D., Gur, R.E., Gur, R.C., Bradford, L.D., Edwards, N., Kwentus, J., McEvoy, J.P., Santos, A.B., McCleod-Bryant S., Tennison, C., Go, R.C.; On behalf of the PAARTNERS study group. Project among African-Americans to explore risks for schizophrenia (PAARTNERS): Recruitment and assessment methods. *Schizophrenia Research*, 87:32-44, 2006.
55. Gur, R.E., Turetsky, B.I., Loughead, J., Snyder, W., Kohler, C., Elliott, M., Pratiwadi, R., Ragland, J.D., Bilker, W.B., Siegel, S.J., Kanes S.J., Arnold, S.E., Gur, R.C.: Visual attention circuitry in schizophrenia

- investigated with an oddball event-related fMRI study. *American Journal of Psychiatry*, 164:442-449, 2007.
56. Wolf, D.H., Gur, R.C., Valdez, J.N., Loughead, J., Elliott, M.A., Gur, R.E., Ragland, J.D. Alterations of fronto-temporal connectivity during word encoding in schizophrenia. *Psychiatry Research: Neuroimaging*, 154:221-232, 2007.
 57. Gur, R.E., Nimgaonkar, V.L., Almas, L., Calkins, M.D., Ragland, J.D., Pogue-Geile, M.F., Kanes, S., Blangero, J., Gur, R.C.: Neurocognitive endophenotypes in a multiplex multigenerational family study of schizophrenia. *American Journal of Psychiatry*, 164:813-819, 2007.
 58. Gur, R.C., Turetsky, B.I., Loughead, J., Waxman, J., Snyder, W., Ragland, J.D., Elliott, M., Bilker, W.B., Arnold, S.E., Gur, R.E.: Hemodynamic Responses in Neural Circuitries for Detection of Visual Target and Novelty: An Event-Related fMRI Study. *Human Brain Mapping*, 28:263-274. 2007.
 59. Ragland, J.D., Yoon, J., Minzenberg, M.J., Carter, C.S.: Neuroimaging of cognitive disability in schizophrenia: Search for a pathophysiological model. *International Review of Psychiatry*, 19:417-427, 2007.
 60. Ragland, J.D., Moelter, S.T., Bhati, M.T., Valdez, J.N., Kohler, C.G., Siegel, S.J., Gur, R.C., Gur R.E.: Effect of Retrieval Effort and Switching Demand on fMRI Activation During Semantic Word Generation in Schizophrenia. *Schizophrenia Research*, 99:312-323, 2008.
 61. Ranganath, C., Minzenberg, M., Ragland, J.D.: The Cognitive Neuroscience of Memory Function and Dysfunction in Schizophrenia. *Biological Psychiatry*, 64:417-427, 2008.
 62. Yoon, J.H., Minzenberg, M.D., Ursu, S., Walters, R., Wendelken, C., Ragland, J.D., Carter, C.S.: Association of Dorsolateral Prefrontal Cortex Dysfunction With Disrupted Coordinated Brain Activity in Schizophrenia: Relationship With Impaired Cognition, Behavioral Disorganization, and Global Function. *American Journal of Psychiatry*, 165:1006-1014, 2008.
 63. Dickinson D., Ragland, J.D., Gold, J.M., Gur, R.C.: General and Specific Cognitive Deficits in Schizophrenia: Goliath Defeats David? *Biological Psychiatry*, 64:18-25, 2008.
 - 64 Yoon, J.H., Tamir, D., Minzenberg, M.J., Ragland, J.D., Ursu, S., Carter, C.S.: Multivariate Pattern Analysis of Functional Magnetic Resonance Imaging Data Reveals Deficits in Distributed Representations in Schizophrenia. *Biological Psychiatry*, 64:1035-1041, 2008.
 65. Gur, R.C., Ragland, J.D., Reivich, M., Greenberg, J., Alavi, A., Gur, R.E.: Regional Differences in the Coupling Between Resting Cerebral Blood Flow and Metabolism May Indicate Action Preparedness as a Default State. *Cerebral Cortex*, 19:375-382, 2009.
 66. Ragland, J.D., Cools, R., Frank, M., Pizzagalli, D.A., Preston, A., Ranganath, C., Wagner, A.D.: CNTRICS Final Task Selection: Long-term Memory. *Schizophrenia Bulletin*, 35:197-212, 2009.
 67. Ragland, J.D., Laird, A.R., Ranganath, C., Blumenfeld, R.S., Gonzales, S.M., Glahn, D.C.: Prefrontal Activation Deficits During Episodic Memory in Schizophrenia. *American Journal of Psychiatry*, 166:863-874, 2009.

68. Yoon, J.H., Rokem, A.S., Silver, M.A., Minzenberg, M.J., Ursu, S., Ragland, J.D., Carter, C.S.: Diminished Orientation-Specific Surround Suppression of Visual Processing in Schizophrenia. *Schizophrenia Bulletin*, 35:1078-1084, 2009.
69. Calkins, M.E., Tepper, P., Gur, R.C., Ragland, J.D., Klei, L., Wiener, H.W., Richard, J., Savage, R.M., Allen, T., O'Jile, J., Devlin, B., Kwentus, J., Aliyu, M.H., Bradford, D., Edwards, N., Lyons, P.D., Nimgaonkar, V.L., Santos, A.B., Go, R.C.P., Gur, R.E.: Project Among African-Americans to Explore Risks for Schizophrenia (PAARTNERS): Evidence for Impairment and Heritability of Neurocognitive Functioning in Families of Schizophrenia Patients. *American Journal of Psychiatry*, 167:459-472, 2010.
70. Yoon, J., Maddock, R., Rokem, A., Silver, M., Minzenberg, M.J., Ragland, J.D., Carter, C.S.: Gamma-Aminobutyric Acid Concentration is Reduced in Visual Cortex in Schizophrenia and Correlates with Orientation-Specific Surround Suppression. *Journal of Neuroscience*, 30:3777-3781, 2010.
71. Leitman, D.I., Wolf, D.H., Ragland, J.D., Laukka, P., Loughhead, J., Valdez, J.N., Javitt, D.C., Turetsky, B.I., Gur, R.C.: "It's Not What You Say, But How You Say it": A Reciprocal Temporo-frontal Network for Affective Prosody. *Frontiers of Human Neuroscience*, 4:1-13, 2010.
72. Hannula, D.E., Ranganath, C., Ramsay, I.S., Solomon M., Yoon, J., Niendam, T.A., Carter, C.S., Ragland, J.D.: Use of Eye Movement Monitoring to Examine Item and Relational Memory in Schizophrenia. *Biological Psychiatry*, 68:610-616, 2010.
73. Ursu, S., Kring, A.M., Gard, M.G., Minzenberg, M.J., Yoon, J.H., Ragland, J.D., Solomon, M., Carter, C.S.: Prefrontal Cortical Deficits and Impaired Cognition-Emotion Interactions in Schizophrenia. *American Journal of Psychiatry*, 168:276-285, 2011.
74. Solomon, M., Olsen, E., Niendam, T., Ragland, J.D., Yoon, J., Minzenberg, M., Carter, C.S.: From lumping to splitting and back again: Atypical social and language development in individuals with clinical-high-risk for psychosis, first episode schizophrenia, and autism spectrum disorders. *Schizophrenia Research*, 131:146-151, 2011.
75. Leitman, D.I., Wolf, D.H., Laukka, P., Ragland, J.D., Valdez, J.N., Turetsky, B.I., Gur, R.E., Gur, R.C.: Not Pitch Perfect: Sensory Contributions to Affective Communication Impairment in Schizophrenia. *Biological Psychiatry*, 70:611-618, 2011.
76. Ragland, J.D., Blumenfeld, R.S., Ramsay, I.S., Yonelinas, A., Yoon, J., Solomon, M., Carter, C.S., Ranganath, C.: Neural Correlates of Relational and Item-Specific Encoding During Working and Long-Term Memory in Schizophrenia, *NeuroImage*, 59:1719-1726, 2012.
77. 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.: Relational and Item-Specific Encoding (RISE): Task Development and Psychometric Characteristics, *Schizophrenia Bulletin*, 38:114,124, 2012.
78. Barch, D.M., Carter, C.S., Dakin, S., Gold, J., Luck, S., MacDonald III, A.W., Ragland, J.D., Silverstein, S., & Straus, M.E.: The clinical translation

- of a measure of gain control: the Contrast-Contrast Effect, *Schizophrenia Bulletin*, 38:135-143, 2012.
79. Gold, J.M., Barch, D.M., Carter, C.S., Dakin, S., Harvey, P., Keefe, R., Luck, S.J., MacDonald III, A.W., Ragland, J.D., Ranganath, C., Kovacs, I., Silverstein, S.M., Straus, M.E.: Clinical, functional and inter-task correlations of measures developed by the Cognitive Neuroscience Test Reliability and Clinical Applications for Schizophrenia consortium. *Schizophrenia Bulletin*, 38:144-152, 2012.
 80. Henderson, D., Poppe, A., Barch, D.M., Carter, C.S., Gold, J., Luck, S., Ragland, J.D., Silverstein, S., Straus, M.E., MacDonald III, A.W.: Optimization of a context processing task for use in clinical applications, *Schizophrenia Bulletin*, 38:104-113, 2012.
 81. Silverstein, S., Keane, B., Barch, D.M., Carter, C.S., Dakin, S., Gold, J., Luck, S., MacDonald III, A.W., Ragland, J.D., Straus, M.E.: Optimization of a measure of visual integration for use in schizophrenia treatment research: The Jittered-Orientation Visual-Integration Task (JOVI), *Schizophrenia Bulletin*, 38:125-134, 2012.
 82. Ragland, J.D., Cohen, N.J., Cools, R., Frank, M.J., Hannula, D.E., Ranganath, C.: CNTRICS Imaging Biomarkers Final Task Selection: Long-term Memory and Reinforcement Learning. *Schizophrenia Bulletin*, 38:62-72, 2012.
 83. Libby, L.A., Ragland, J.D.: fMRI as a Measure of Cognition Related Brain Circuitry in Schizophrenia. *Current Topics in Behavioral Neuroscience*, 11:253-268, 2012.
 84. Yoon, J.H., Nguyen, D.V., McVay, L.M., Deramo, P., Minzenberg, M.J., Ragland, J.D., Niendam, T., Solomon, M., Carter, C.S.: Automated classification of fMRI during cognitive control identifies more severely disorganized subjects with schizophrenia. *Schizophrenia Research*, 135:28-33, 2012.
 85. Libby, L.A., Ekstrom, A.D., Ragland, J.D., Ranganath, C.: Differential connectivity of perirhinal and parahippocampal cortices within human hippocampal subregions revealed by high-resolution functional imaging. *Journal of Neuroscience*, 32:6550-6560, 2012.
 86. Keane, B.P., Silverstein, S.M., Barch, D.M., Carter, C.S., Gold, J., Kovács, I., MacDonald, A.III., Ragland, J.D., Strauss, M. E.: The spatial range of contour integration deficits in schizophrenia. *Experimental Brain Research*, 220:251-259, 2012.
 87. Libby, L.A., Yonelinas, A.P., Ranganath, C., Ragland, J.D.: Recollection and familiarity in schizophrenia: A quantitative review. *Biological Psychiatry*, 73:944-950, 2012.
 88. Owoso, A., Barch, D.M., Carter, C.S., Gold, J., MacDonald III, A., Ragland, J.D., Silverstein, S., Strauss, M.E.: Cognition in Schizophrenia and Schizoaffective Disorder: Impairments That Are More Similar Than Different. *Psychological Medicine*, 43:2635-2645, 2013.
 89. Paz-Alonso, P.M., Ghetti, S., Ramsay, I., Solomon, M., Yoon, J., Carter, C.S., Ragland, J.D.: Semantic processes leading to true and false memory formation in schizophrenia. *Schizophrenia Research*, 147:320-325, 2013.

90. Swaab, T.Y., Boudewyn, M.A., Long, D.L., Luck, S.J., Kring, A.M., Ragland, J.D., Ranganath, C., Lesh, T., Niendam, T., Solomon, M., Mangun, G.R., Carter, C.S.: Spared and Impaired Spoken Discourse Processing in Schizophrenia: Effects of Local and Global Language Context. *The Journal of Neuroscience*, 33;155578-155587, 2013.
91. Lesh, T.A., Westphal, A.J., Niendam, T.A., Yoon, J.H., Minzenberg, M.J., Ragland, J.D., Solomon, M., Carter, C.S.: Proactive and reactive cognitive control and dorsolateral prefrontal cortex dysfunction in first episode schizophrenia. *Neuroimage Clinical*, 2:590-599, 2013.
92. Solomon, M., Yoon, J., Ragland, J.D., Niendam, T., Lesh, T., Fairbrother, W., Carter, C.S.: The development of the neural substrates of cognitive control in adolescents with autism spectrum disorders. *Biological Psychiatry*, 76:412-421, 2014.
93. Niendam, T.A., Yoon, J., Westphal, A.J., Hutchinson, N., Ragland, J.D., Solomon, M., Minzenberg, M., Carter, C.S.: Impaired context processing as a potential marker of psychosis risk state. *Psychiatry Research: Neuroimaging*, 221:13-20, 2014.
94. Sheffield, J.M., Gold, J.M., Strauss, M.E., Carter, C.S., MacDonald, A.W., Ragland, J.D., Silverstein, S.M., Barch, D.M.: Common and Specific Cognitive Deficits in Schizophrenia. *Cognitive Affective Behavioral Neuroscience*, 14:161-174, 2014.
95. Strauss, M.E., McLouth, C.J., Barch D.M., Carter, C.S., Gold, J.M., MacDonald, A.W. III, Ragland, J.D., Ranganath, C., Keane, B.P., Silverstein, S.M.: Temporal stability and moderating effects of age and sex on CNTRaCS task performance. *Schizophrenia Bulletin*, 40:835-844, 2014.
96. Flegal, K.E., Marin-Gutierrez, A., Ragland, J.D., Ranganath, C.: Brain mechanisms of successful recognition through retrieval of semantic context. *Journal of Cognitive Neuroscience*, 26:1694-1704, 2014.
97. Wang, W-C, Montchal, M.E., Yonelinas, A.P., Ragland, J.D.: Hippocampal and parahippocampal cortex volume predict recollection in schizophrenia. *Schizophrenia Research*, 157:319-320, 2014.
98. McFarlane, W., Levin, B., Travis, L., Lucas, F., Lynch, S., Verdi, M., Williams, D., Calkins, R., Adelsheim, S., Carter, C., Cornblatt, B., Taylor, S., Auther, A., McFarland, B., Melton, R., Migliorati, M., Niendam, T., Ragland, J., Sale, T, Salvador, M., Spring, E.: Clinical and functional outcomes after 2 years in the Early Detection and Intervention for the Prevention of Psychosis multisite effectiveness trial. *Schizophrenia Bulletin*, 41:30-43, 2014.
99. Yoon, J.H., Westphal, A.J., Minzenberg, M.J., Niendam, T., Ragland, J.D., Lesh, T., Solomon, M., Carter, C.S.: Task-evoked substantia nigra hyperactivity associated with prefrontal hypofunction, prefrontonigral disconnectivity and nigrostriatal connectivity predicting psychosis severity in medication naïve first episode schizophrenia. *Schizophrenia Research*, 159:521-6, 2014.
100. Fisher, M., Loewy, R., Carter, C.S., Lee, A., Ragland, J.D., Niendam, T., Schlosser, D., Pham, L., Miskovich, T., Vinogradov, S.: Neuroplasticity-based auditory training via laptop computer improves cognition in young

- individuals with recent onset schizophrenia. *Schizophrenia Bulletin*, 41:250-8, 2015.
101. Solomon, M., Frank, M.J., Ragland, J.D., Smith, A.C., Niendam, T.A., Lesh, T.A., Grayson, D., Beck, J.S., Matter, J.C., Carter, C.S.: Feedback-driven trial-by-trial learning in autism spectrum disorders. *American Journal of Psychiatry*, 172:173-81, 2015.
 102. Kappenman, E. S., Luck, S. J., Kring, A. M., Lesh, T. A., Mangun, G. R., Niendam, T., Ragland, J. D., Ranganath, C., Solomon, M., Swaab, T. Y., & Carter, C. S.: Electrophysiological evidence for impaired control of motor output in schizophrenia. *Cerebral Cortex*, 26:1891-1899, 2016.
 103. Lesh, T.A., Tanase, C., Geib, B.R., Niendam, T.A., Yoon, J.H., Minzenberg, M.J., Ragland, J.D., Solomon, M., Carter, C.S.: A Multimodal Analysis of Antipsychotic Effects on Brain Structure and Function in First-Episode Schizophrenia. *JAMA Psychiatry*, 72:226-34, 2015.
 104. Sheffield, J.M., Repovs, G., Harms, M.P., Carter, C.S., Gold, J.M., MacDonald, A.M., Ragland, J.D., Silverstein, S.M., Godwin, D., Barch, D.M.: Fronto-parietal and cingulo-opercular network integrity and global cognition in health and schizophrenia. *Neuropsychologia*, 73:82-93, 2015.
 105. Tso, I.F., Taylor, S.F., Grove, T.B., Niendam, T., Adelsheim, S., Auther, A., Cornblatt, B., Carter, C.S., Calkins, R., Ragland, J.D., Sale, T., McFarlane, W.R.: Factor analysis of the Scale of Prodromal Symptoms: data from the Early Detection and Intervention for the Prevention of Psychosis Program. *Early Interv Psychiatry*, (Epub: December 21, 2014).
 106. Ragland, J.D., Ranganath, C., Harms, M.P., Barch, D.M., Gold, J.M., Layher, E., Lesh, T.A., MacDonald, A.W., Niendam, T.A., Phillips, J., Silverstein, S.M., Yonelinas, A.P., Carter, C.S.: Functional and neuroanatomical specificity of episodic memory dysfunction in schizophrenia: An fMRI study of the relational and item-specific encoding task. *JAMA Psychiatry*, 72:909-16, 2015.
 107. Silverstein, S.M., Harms, M.P., Carter, C.S., Gold, J.M., Keane, B.P., MacDonald, A., Ragland, J.D., Barch, D.M.: Cortical Contributions to Impaired Contour Integration in Schizophrenia. *Neuropsychologia*, 75:469-480, 2015.
 108. Sheffield, J.M., Repovs, G., Harms, M.P., Carter, C.S., Gold, J.M., MacDonald, A.W., Ragland, J.D., Silverstein, S.M., Godwin, D., Barch, D.M.: Evidence for Accelerated Decline of Functional Brain Network Efficiency in Schizophrenia. *Schizophrenia Bulletin*, 42(3):753-61, 2016.
 109. Lopez-Garcia, P., Lesh, T.A., Salo, T., Barch, D.M., MacDonald, A.W. 3rd, Gold, J.M., Ragland, J.D., Strauss, M., Silverstein, S.M., Carter, C.S.: The neural circuitry supporting goal maintenance during cognitive control: a comparison of Expectancy AX-CPT and Dot Probe Expectancy Paradigms. *Cognitive, Affective, and Behavioral Neuroscience*, 16(1):164-75, 2016.
 110. Lynch, S., McFarlane, W., Joly, B., Adelsheim, S., Auther, A., Cornblatt, B., Migliorati, M., Ragland, J.D., Sale, T., Spring, E., Calkins, R., Carter, C., Jaynes, R., Taylor, S.: The early detection for the prevention of psychosis

- program: Community outreach and early identification at six sites across the United States. *Psychiatric Services*, 67(5):510-6, 2016.
111. Ragland, J.D., Ranganath, C., Phillips, J., Boudewyn, M.A., Kring, A.M., Lesh, T.A., Long, D.L., Luck, S.J., Niendam, T.A., Solomon, M., Swaab, T.A., Carter, C.S.: Cognitive Control of Episodic Memory in Schizophrenia: Differential Role of Dorsolateral and Ventrolateral Prefrontal Cortex. *Frontiers in Human Neuroscience*, 9(604):1-10, 2015.
 112. Solomon, M., Ragland, J.D., Niendam, T.A., Lesh, T.A., Beck, J.S., Matter, J.C., Frank, M.J., Carter, C.S.: Atypical learning in autism spectrum disorders: An fMRI study of transitive inference. *Journal of the American Academy of Child and Adolescent Psychiatry*, 54(11):947-55, 2016.
 113. Poppe, A., Barch, D., Carter, C., Gold, J., Ragland, J., Silverstein, S., MacDonald, A.: Reduced Frontoparietal Activity in Schizophrenia is Linked to a Specific Deficit in Goal Maintenance: a Multi-site Functional Imaging Study. *Schizophrenia Bulletin*, 42:1149-1157, 2016.
 114. Solomon, M., McCauley, J., Iosif, A.M., Carter, C.S., Ragland, J.D.: Cognitive control and episodic memory in adolescents with autism spectrum disorders. *Neuropsychologia*, 89:31-41, 2016.
 115. Sousa, A., Gomar, J.J., Ragland, J.D., Conejero-Goldberg, C., Buthorn, J., Keehlisen, L., Huey, T.E., Koppel, J., Gordon, M.L., Christen, E., Goldberg, T.E.: The Relational and Item-Specific Encoding Task in Mild Cognitive Impairment and Alzheimer Disease. *Dement Geriatr Cogn Disord*, 42:265-277, 2016.
 116. Barch, D.M., Carter, C.S., Gold, J.M., Johnson, S.L., Kring, A.M., MacDonald, A.W., Pizzagalli, D.A., Ragland, J.D., Silverstein, S.M., Strauss, M.E.: Explicit and implicit reinforcement learning across the psychosis spectrum. *Journal of Abnormal Psychology*, 126:694-711, 2017.
 117. Ragland, J.D., Layher, E., Hannula, D., Niendam, T., Lesh, T., Solomon, M., Carter, C.S., Ranganath, C.: Impact of Schizophrenia on Anterior and Posterior Hippocampus During Memory for Complex Scenes. *NeuroImage: Clinical*, 13:82-88, 2016.
 118. Gomar, J.J., Ragland, J.D., Ullug, A., Sousa, A., Huey, T.E., Conejero-Goldberg, C., Davies, P., Goldberg, T.: Differential Medial Temporal Lobe Morphometric Predictors of Relational and Item Encoded Memories in Healthy Individuals and in Individuals with Mild Cognitive Impairment or Alzheimer's Disease. *Alzheimer's & Dementia: Translational Research & Clinical Interventions*, 3:238-246, 2017.
 119. Greenland-White, S., Niendam, T.A., Ferrer, E., Carter, C.S., Ragland, J.D.: Episodic Memory Functions in First Episode Psychosis and Clinical High Risk Individuals. *Schizophrenia Research*, 188:151-157, 2017.
 120. Ray, K.L., Lesh, T.A., Howell, A.M., Salo, T.P., Ragland, J.D., MacDonald, A.W., Gold, J.M., Silverstein, S.M., Barch, D.M., Carter, C.S.: Functional network changes and cognitive control in schizophrenia. *Neuroimage Clinical*, 15:161-170, 2017.
 121. Smucny, J., Lesh, T.A., Newton, K., Niendam, T., Ragland, J.D., Carter, C.S.: Levels of Cognitive Control: A Functional Magnetic Resonance Imaging-

- Based Test of an RDoC Domain Across Bipolar Disorder and Schizophrenia. *Neuropsychopharmacology*, 43:598-606, 2018.
122. Carrion, R.E., Walder, D.J., Auther, A.M., McLaughlin, D., Zyla, H.O., Adelsheim, S., Calkins, R., Carter, C.S., McFarland, B., Melton, R., Niendam, T., Ragland, J.D., Sale, T.G., Taylor, S.F., McFarland, W.R., Cornblatt, B.A.: From the psychosis prodrome to the first-episode of psychosis: No evidence of a cognitive decline. *J. Psychiatric Research*, 96:231-238, 2017.
 123. Ermel, J., Carter, C. S., Gold, J. M., MacDonald, A. W., Ragland, J. D., Silverstein, S. M., & Strauss, M. E., & Barch, D. M.: Self versus informant reports on the specific levels of functioning scale: Relationships to depression and cognition in schizophrenia and schizoaffective disorder. *Schizophrenia Research: Cognition*, 9:1-7, 2017.
 124. Javitt, D.C., Carter, C.S., Krystal, J.H., Kantrowitz, J.T., Girgis, R.R., Kegeles, L.S., Ragland, J.D., Maddock, R.J., Lesh, T.A., Tanase, C., Corlett, P.R., Rothman, D.L., Mason, G., Qiu, M., Robinson, J., Potter, W.Z., Carlson, M., Wall, M.M., Choo, T.H., Grinband, J., Lieberman, J.A.: Utility of Imaging-Based Biomarkers for Glutamate-Targeted Drug Development in Psychotic Disorders: A Randomized Clinical Trial. *JAMA Psychiatry*, 75:11-19, 2018.
 125. Savill, M., Skymba, H.V., Niendam, T.A., Loewy, R.L., Lesh, T.A., Ragland, J.D., Carter, C.S., Goldman, H.H.: Acceptability, Barriers, and Facilitators to Implementing a Psychosis Screening Procedure in Different Healthcare Settings – A Qualitative Interview Study of Healthcare Providers. *Psychiatric Services*, 69:689-695, 2018.
 126. Ramsay, I.S., Ma, S., Fisher, M., Loewy, R.L., Ragland, J.D., Niendam, T., Carter, C.S., Vinogradov, S.: Model selection and prediction of outcomes in recent onset schizophrenia patients who undergo cognitive training. *Schizophr Res Cogn*, 11:1-5, 2017.
 127. Niendam, T.A., Ray, K.L., Iosif, A.M., Lesh, T.A., Ashby, S., Patel, P., Smucny, J., Ferrer, E., Solomon, M., Ragland, J.D., Carter, C.S.: No evidence for deterioration of prefrontal functioning following the onset of schizophrenia: A longitudinal fMRI study. *JAMA Psychiatry*, in press.

Invited Commentaries, Editorials, Reviews, Chapters (print or other media):

128. Ragland, J.D.: Book Review of, Megargee, E.J. "A guide to obtaining a psychology internship". *Clinical Psychology Review* 11:782-783, 1992.
129. Gur, R.C., Ragland, J.D., Gur, R.E.: Cognitive changes in schizophrenia - a critical look. *International Review of Psychiatry* 9:449-457, 1997.
130. Gur, R.C., Moelter, S.T., Ragland, J.D.: "Learning and memory in schizophrenia". In, Sharma, T., & Harvey, P. (Eds.), *Cognition in Schizophrenia*. Oxford University Press: Oxford, G.B., 1999.
131. Ragland, J.D.: Profiles of Neuropsychologic Function in Schizophrenia. *Current Psychiatry Reports*, 5:299-302, 2003.
132. Ragland, J.D.: "Left prefrontal function and semantic organization during encoding and retrieval in healthy and psychiatric populations". In, Risberg

- & Grafman (Eds.), *The Frontal Lobes: Development, Function and Pathology*. Cambridge University Press: Cambridge, G.B., 2006.
133. Ragland, J.D.: "Functional Imaging in Schizophrenia". In Hillary & DeLuca (Eds.), *Functional Neuroimaging in Clinical Populations*. Guilford Publications, Inc.: New York, N.Y., 2007.
134. Flegal, K.E., Ranganath, C., Ragland, J.D.: "Episodic Memory in Schizophrenia". In, Mishara, Corlett, Fletcher & Schwartz (Eds.), *Phenomenological Neuropsychiatry: How Patient Experience Bridges Clinic with Clinical Neuroscience*. Springer Clinical Medicine & Bioscience Group: New York, N.Y., 2012.
135. Ragland, J.D., Solomon, M.: "Categorical Dimensions of Social Impairment and Disrupted Functional Connectivity in Autism Spectrum Disorders: When Does Continuous Become Discrete?" *Biological Psychiatry*, 80:90-91, 2016.
136. Krystal, J.H., Abi-Dargham, A., Akbarian, S., Arnsten, A.F.T., Barch, D.M., Bearden, C.E., Braff, D.L., Brown, E.S., Bullmore, E.T., Carlezon Jr., W.A., Carter, C.S., Cook Jr., E.H., Daskalakis, Z.J., DiLeone, R.J., Duman, R.S., Grace, A.A., Hariri, A.R., Harrison, P.J., Hiroi, N., Kenny, P.J., Kleinman, J.E., Krystal, A.D., Lewis, D.A., Lipska, B.K., Marder, S.R., Mason, G.F., Mathalon, D.H., McClung, C.A., McDougle, C.J., McIntosh, A.M., McMahon, F.J., Mirnics, K., Monteggia, L.M., Narendran, R., Nestler, E.J., Neumeister, A., O'Donovan, M.C., Öngür, D., Pariante, C.M., Paulus, M.P., Pearlson, G., Phillips, M.L., Pine, D.S., Pizzagalli, D.A., Pletnikov, M.V., Ragland, J.D., Rapoport, J.L., Ressler, K.J., Russo, S.J., Sanacora, G., Sawa, A., Schatzberg, A.F., Shaham, Y., Shamy-Tsoory, S.G., Sklar, P., State, M.W., Stein, M.B., Strakowski, S.M., Taylor, S.F., Turecki, G., Turetsky, B.I., Weissman, M.M., Zachariou, V., Zarate Jr., C.A., Zubieta, J-K.: "Constance E. Lieber, Theodore R. Stanley, and the Enduring Impact of Philanthropy on Psychiatry Research" *Biological Psychiatry*, 80:84-86, 2016.
137. Bauman, M.D., Ragland, J.D., Schumann, C.M.: *Feeling and Remembering: Effects of Psychosis on the Structure and Function of the Amygdala and Hippocampus* In, Tamminga, Iviena, Reininghaus & van Os (Eds.), *Psychosis: Transdiagnostic Conceptualizations and Implications for Treatment*. Oxford University Press; New York, N.Y., 2018

Abstracts: (past 5 years)

1. Libby, L.A., Ragland, J.D., Montchal, M.E., Varadarajan, A.J., Ranganath, C., Functional connectivity of the perirhinal and parahippocampal cortices in schizophrenia. (67th Annual Meeting of the Society of Biological Psychiatry, Philadelphia, PA, USA, 2012).
2. Niendam, T.A., Lesh, T.A., Miskovich, T., Solomon, M., Ragland, J.D., Yoon, J., Minzenberg, M., Carter, C.S. Associations Between Age-at-Onset and Context Processing in First Episode Schizophrenia. (67th Annual Meeting of the Society of Biological Psychiatry, Philadelphia, PA, USA, 2012).
3. Lesh, T.A., Niendam, T.A., Minzenberg, M., Yoon, J., Ragland, J.D., Solomon, M., Carter, C.S. Distinct Trajectories of Cognitive Control Deficits in First

- Episode Psychosis Patients with Schizophrenia and Bipolar Disorder. (67th Annual Meeting of the Society of Biological Psychiatry, Philadelphia, PA, USA, 2012).
4. Solomon, M., Yoon, J., Niendam, T.A., Ragland, J.D., Minzenberg, M., Lesh, T.A., Fairbrother, W., Carter, C.S. Neural Correlates of the Development of Cognitive Control in Adolescents with Autism Spectrum Disorders. (67th Annual Meeting of the Society of Biological Psychiatry, Philadelphia, PA, USA, 2012).
 5. Niendam, T., Ragland, J.D., Floyd, E., Aurher, A., Carter, C. Multi-site Investigation of Impaired Prefrontal Functioning as a Potential Marker of Psychosis Risk State. (8th Annual Meeting of Early Intervention in Psychiatry, San Francisco, CA, USA 2012).
 6. Niendam, T., Hutchinson, N., Ragland, J.D., Yoon, J., Solomon, M., Minzenberg, M. Cognitive Control in Clinical-High-Risk Youth: Potential Marker of Risk and Recovery. (8th Annual Meeting of Early Intervention in Psychiatry, San Francisco, CA, USA 2012).
 7. Moylan, C., Niendam, T., Ragland, J.D., Minzenberg, M., Pakyurek, A.M., Charles, K., Greene, W, Bertaccini, L., Carter, C.S. Community-Based Intervention for Early Psychosis: Implementation Strategies and Early Outcomes. (8th Annual Meeting of Early Intervention in Psychiatry, San Francisco, CA, USA 2012).
 8. Flegal, K.E., Marín-Gutiérrez, A., Ragland, J.D., Ranganath, C. Brain Mechanisms of Successful Recognition Through Retrieval of Semantic Context. (Annual Meeting of the Society for Neuroscience, New Orleans, LA, USA 2012).
 9. Lesh, T.A., Tanase, C., Niendam, T, Yoon, J., Ragland, J.D., Minzenberg, M., Solomon, M., Carter, C. The Functional Significance of Antipsychotic-related Cortical Thinning in First Episode Schizophrenia. (51st Annual meeting of the American College of Neuropsychopharmacology, Hollywood, FL, USA 2012).
 10. Ragland, J.D., Phillips, J., Minzenberg, M., Lesh, T.A., Niendam, T., Solomon, M., Yoon, J., Carter, C., Ranganath, C. Theta Power Modulation of Selective Encoding in Schizophrenia. (51st Annual meeting of the American College of Neuropsychopharmacology, Hollywood, FL, USA 2012).
 11. Solomon, M., Frank, M.J., Smith, A., Ragland, J.D., Yoon, J., Niendam, T., Lesh, T.A., Carter, C. Probabilistic Reinforcement Learning in Young Adults with Autism Spectrum Disorder Reflects Cognitive Control Deficits. (51st Annual meeting of the American College of Neuropsychopharmacology, Hollywood, FL, USA 2012).
 12. Phillips, J.D., Hannula, D.E., Le Veque, J.F., Libby, L.A., Carter, C.S., Ranganath, C., Ragland, J.D. Dissociation of Item-Specific and Relational Memory in Schizophrenia Using Simultaneous Eye-Tracking and fMRI Methods. (20th Annual meeting of the Cognitive Neuroscience Society, San Francisco, CA, USA 2013).
 13. Wang, W., Montchal, M.E., Yonelinas, A.P., Ragland, J.D. Medial Temporal Lobe Structure and Its Relationship to Recollection and Familiarity in

- Schizophrenia. (20th Annual meeting of the Cognitive Neuroscience Society, San Francisco, CA, USA 2013).
14. Poppe, A., Barch, D.M., Carter, C.S., Ragland, J.D., Silverstein, S., MacDonald, A.W. Test-retest reliability of ICA and GLM analysis in schizophrenia patients during a cognitive task. (14th Annual Meeting of the International Congress on Schizophrenia Research, Orlando, FL, USA 2013).
 15. Carter, C.S., Lesh, T.A., Tanase, C., Niendam, T.A., Yoon, J., Ragland, J.D., Minzenberg, M., Solomon, M. The functional significance of antipsychotic-related cortical thinning in first episode schizophrenia. (14th Annual Meeting of the International Congress on Schizophrenia Research, Orlando, FL, USA 2013).
 16. Lesh, T.A., Niendam, T.A., Minzenberg, M.J., Yoon, J.H., Ragland, J.D., Solomon, M., Carter, C.S. Stable cognitive control deficits in first episode schizophrenia: A one year longitudinal fMRI study. (14th Annual Meeting of the International Congress on Schizophrenia Research, Orlando, FL, USA 2013).
 17. Vinogradov, S., Fisher, M., Loewy, R., Niendam, T.A., Ragland, J.D., Carter, C.S. Neuroscience-informed cognitive training in recent onset schizophrenia using laptop computer. (14th Annual Meeting of the International Congress on Schizophrenia Research, Orlando, FL, USA 2013).
 18. Sheffield, J.M., Gold, J.M., Ragland, J.D., Carter, C.S., MacDonald, A.W. III., Silverstein, S.M., Strauss, M., Barch, D.M. Common and apecific cognitive deficits in schizophrenia: Relationships to function. (14th Annual Meeting of the International Congress on Schizophrenia Research, Orlando, FL, USA 2013).
 19. Carter, C.S., Kring, A., Ranganath, C., Swaab, T., Ragland, J.D., Lesh, T., Solomon, M., Niendam, T., Luck, S. Specific impairments in prefrontal control mechanisms generalize across domains of cognition and emotion in schizophrenia. (68th Annual Meeting of the Society of Biological Psychiatry, San Francisco, CA, USA, 2013).
 20. Lesh, T.A., Niendam, T.A., Yoon, J.H., Minzenberg, M.J., Ragland, J.D., Solomon, M., Carter, C.S. Stable cognitive control deficits in first episode schizophrenia: A one-year longitudinal fMRI study. (68th Annual Meeting of the Society of Biological Psychiatry, San Francisco, CA, USA, 2013).
 21. Niendam, T.A., Ragland, J.D., Floyd, E., Auther, A., Cornblatt, B., Adelsheim, S., Calkins, R., Melton, R., Sale, T., Spring-Nichols, E., Taylor, S., Cook, W., McFarlane, W., Carter, C.S. Multi-site investigation of impaired prefrontal functioning as a potential marker of long-term outcome in psychosis risk state. (68th Annual Meeting of the Society of Biological Psychiatry, San Francisco, CA, USA, 2013).
 22. Ragland, J.D., Ranganath, C., Barch, D.M., Gold, J.M., Harms, M.P., Layher, E., MacDonald, A., Phillips, J., Poppe, A., Silverstein, S.M., Thompson, D., Carter, C.S. Neural correlates of relational and item-specific encoding and retrieval (RiSE) in schizophrenia. (52nd Annual Meeting of the American College of Neuropsychopharmacology, Hollywood, FL, USA, 2013).

23. Niendam, T., Ferrer, E., Lesh, T.A., Ashby, S., Solomon, M., Ragland, J.D., Yoon, J., Minzenberg, M.J., Carter, C.S. Age-at-onset and cognitive control-related brain circuitry in first episode schizophrenia. (52nd Annual Meeting of the American College of Neuropsychopharmacology, Hollywood, FL, USA, 2013).
24. Solomon, M., Lesh, T.A., Niendam, T., Beck, J., Matter, J., Whitmore, N., Carter, C.S., Ragland, J.D. Learning in the absence of intact cognitive control: the neural substrates of transitive inference in adolescents with autism spectrum disorders. (52nd Annual Meeting of the American College of Neuropsychopharmacology, Hollywood, FL, USA, 2013).
25. Lesh, T.A., Geib, B., Niendam, T., Minzenberg, M.J., Yoon, J., Ragland, J.D., Solomon, M., Carter, C.S. Fronto-parietal dysfunction and cognitive control deficits in first-episode psychosis patients with schizophrenia and bipolar disorder. (52nd Annual Meeting of the American College of Neuropsychopharmacology, Hollywood, FL, USA, 2013).
26. Yoon, J., Grandelis, A., Cui, E.D., Minzenberg, M.J., Niendam, T., Ragland, J.D., Lesh, T.A., Solomon, M., Carter, C.S. High-resolution fMRI reveals reward anticipation signaling of the substantia nigra that is modulated by reward magnitude in healthy subjects and blunted responses in schizophrenia. (52nd Annual Meeting of the American College of Neuropsychopharmacology, Hollywood, FL, USA, 2013).
27. Solomon, M., Lesh, T.A., Niendam, T.A., Matter, J.C., Beck, J.S., Carter, C.S., Ragland, J.D. The neural substrates of the generalization of learning in autism spectrum disorders (ASD). (69th Annual Meeting of the Society of Biological Psychiatry, New York, NY, USA, 2014).
28. White, S., Niendam, T.A., Maryuama, B., Lesh, T.A., Yoon, J.H., Solomon, M., Carter, C.S., Ragland, J.D. Performance on the relational and item specific memory encoding task (RiSE) in individuals at clinical high risk for psychosis. (69th Annual Meeting of the Society of Biological Psychiatry, New York, NY, USA, 2014).
29. Lesh, T.A., Geib, B., Niendam, T.A., Minzenberg, M.J., Yoon, J., Ragland, J.D., Solomon, M., Carter, C.S. Fronto-parietal dysfunction and cognitive control deficits in first-episode psychosis patients with schizophrenia and bipolar disorder. (69th Annual Meeting of the Society of Biological Psychiatry, New York, NY, USA, 2014).
30. Poppe, A., Barch, D., Carter, C., Ragland, D., Silverstein, S., MacDonald, A. Test-retest reliability of GLM and ICA in schizophrenia patients and healthy controls. (69th Annual Meeting of the Society of Biological Psychiatry, New York, NY, USA, 2014).
31. Lesh, T., Maddock, R.J., Salo, T., Tanase, C., Ragland, J.D., Niendam, T.A., Solomon, M., Carter, C. Diffusion measures of free water and 1J-MRS measures of glutathione in first episode patients with schizophrenia – A multi-modal investigation of an inflammatory model for psychosis. (53rd Annual Meeting of the American College of Neuropsychopharmacology, Phoenix, AZ, USA, 2014).
32. Solomon, M., McCauley, J., Lesh, T., Niendam, T., Beck, J., Carter, C., Ragland, J.D. Bootstrapping the hippocampus? Atypical learning characterizes

- adolescents with autism spectrum disorders. (53rd Annual Meeting of the American College of Neuropsychopharmacology, Phoenix, AZ, USA, 2014).
33. Maddock, R., Fernandez, D., Casazza, G., Tanase, C., Maddock, M., Ragland, J.D., Rokem, A., Silver, M., Yoon, J. The brain state induced by physical activity: Effects on cortical glutamate, GABA and neuroplasticity in humans. (53rd Annual Meeting of the American College of Neuropsychopharmacology, Phoenix, AZ, USA, 2014).
 34. Ragland, J.D., Hannula, D.E., Layher, E., Phillips, J., Carter, C.S., Lesh, T.A., Niendam, T.A., Solomon, M., Ranganath, C. Dissociation of Hippocampally Mediated Relational versus Item-Specific Memory Deficits in Schizophrenia using Eye-Movement Monitoring During fMRI. (53rd Annual Meeting of the American College of Neuropsychopharmacology, Phoenix, AZ, USA, 2014).
 35. Flegal, K.E., Ragland, J.D., Ranganath, C. Adaptive task difficulty influences functional neuroplasticity in cognitive training. (Annual Meeting of the Cognitive Neuroscience Society, San Francisco, CA, USA, 2015)
 36. Lesh, T., Niendam, T., Ragland, J.D., Carter, C. Effects of past moderate cannabis use on cognition in first episode schizophrenia. (54th Annual Meeting of the American College of Neuropsychopharmacology, Hollywood, FL, USA, 2015).
 37. Carter, C.S., Phillips, R., Fassbender, C., Lesh, T.A., Ragland, J.D., Niendam, T. A. Attention lapses, perception and cognitive control in schizophrenia. (15th Annual Meeting of the International Congress on Schizophrenia Research, Colorado Springs, CO, USA 2015).
 38. Lesh, T.A., Maddock, R.J., Salo, T., Tanase, C., Ragland, J.D., Niendam, T.A., Solomon, M., Carter, C.S. Diffusion measures of free water and 1h-mrs measures of glutathione in first episode patients with schizophrenia - a multi-modal investigation of an inflammatory model for psychosis. (15th Annual Meeting of the International Congress on Schizophrenia Research, Colorado Springs, CO, USA 2015).
 39. Lesh, T.A., Mawla, A., Minzenberg, M., Yoon, J., Niendam, T.A., Ragland, J.D., Solomon, M., Carter, C.S. Effects of past mild cannabis use on cognition in first episode schizophrenia: a multimodal analysis of brain structure and function. (15th Annual Meeting of the International Congress on Schizophrenia Research, Colorado Springs, CO, USA 2015).
 40. Loewy, R., Fisher, M., Carter, C.S., Niendam, T.A., Ragland, J.D., Mathalon, D., Vinogradov, S. Improved cognition and positive symptoms with targeted auditory processing training in recent-onset schizophrenia: 6-month follow-up. (15th Annual Meeting of the International Congress on Schizophrenia Research, Colorado Springs, CO, USA 2015).
 41. Ragland, J.D., Hannula, D.E., Layher, E., Phillips, J., Carter, C.S., Lesh, T.A., Niendam, T.A., Solomon, M., Ranganath, C. Use of simultaneous eye-movements and fmri to reveal specific relational memory deficits in schizophrenia. (15th Annual Meeting of the International Congress on Schizophrenia Research, Colorado Springs, CO, USA 2015).

42. Ray, K.L., Lesh, T.A., Ragland, J.D., MacDonald, A.W., Gold, J.M., Silverstein, S.M., Barch, D.M., Carter, C.S. Functional Network Properties of Cognitive Control in Health and Schizophrenia. (3rd Whistler Scientific Workshop on Brain Functional Organization, Connectivity, and Behavior, Whistler, B.C. 2016).
43. Ragland, J.D., White, S., Niendam, T.A., Ferrer, E., Carter, C.S. Relational and Item Specific Memory Markers of Psychosis Risk. (5th Biennial Schizophrenia International Research Society Conference, Florence, Italy, 2016).
44. Tully, L.M., Howell, A.M., Lesh, T.A., Ursu, S., Johnson, S., Ragland, J.D., Niendam, T.A., Carter, C.S. Neural Abnormalities During Reward Processing in First Episode Psychosis: Relationship to Symptoms and Functioning. (71st Annual Society of Biological Psychiatry Conference, Atlanta, Georgia, USA. 2016).
45. Barch, D.M., Carter, C.S., Gold, J.M., Kring, A., Johnson, S., Luck, S.J., MacDonald, A.W., Ragland, J.D., Silverstein, S.M., Strauss, M. Diagnostically Cross-Cutting Relationships of Cognitive Systems and Positive Valence Constructs with Life Function and Motivation. (71st Annual Society of Biological Psychiatry Conference, Atlanta, Georgia, USA. 2016).
46. Lesh, T.A., Maddock, R.J., Tanase, C., Ragland, J.D., Niendam, T., Solomon, M., Carter, C.S. Extracellular Free Water and Prefrontal Glutathione in First Episode Psychosis – A Multi-Modal Investigation of an Inflammatory Model for Psychosis. (71st Annual Society of Biological Psychiatry Conference, Atlanta, Georgia, USA. 2016).
47. Roberts, B., Wang, S.F., Montchal, M., Wade, A., Bouffard, N., Ragland, J.D., Carter, C., Ranganath, C. Effects of Transcranial Direct Current Stimulation (tDCS) on Neural Oscillations During Episodic Memory Encoding and Retrieval. (Annual Meeting, Society for Neuroscience, San Diego, CA, USA, 2016).
48. Ragland, J.D., Hsieh, L.T., Lam, J., White, S., Carter, C.S., Lesh, T.A., Niendam, T.A., Ranganath, C. Task Specific Disruptions in Theta Oscillations During Working Memory in People with Schizophrenia. (55th Annual American College of Neuropsychopharmacology Conference, Hollywood, FL, USA, 2017).
49. Caton, M., Ragland, J.D., Maddock, R. Use of a GABA-Optimized MEGA-PRESS Sequence for Glutamate Measurement. (55th Annual American College of Neuropsychopharmacology Conference, Hollywood, FL, USA, 2017).
50. Niendam, T.A., Ragland, J.D., Solomon, M., Ferrer, E. No Evidence for Degeneration of Prefrontal Functioning After First Episode of Schizophrenia. (55th Annual American College of Neuropsychopharmacology Conference, Hollywood, FL, USA, 2017).
51. Savill, M., Skymba, H., Niendam, T., Loewy, R., Lesh, T., Ragland, J.D., Carter, C.S., Goldman, H. Acceptability, Barriers and Facilitators to Screening for Psychosis in Different Mental Health Settings. (16th International Congress on Schizophrenia Research, San Diego, CA, USA, 2017).

52. Greenland-White, S., Niendam, T., Ferrer, E., Lesh, T., Solomon, M., Carter, C., Ragland, J.D. Atypical Memory Structure Related to Recollective Ability. (16th International Congress on Schizophrenia Research, San Diego, CA, USA, 2017).
53. Lesh, T., Maddock, R., Howell, A., Tanase, C., Ragland, J.D., Niendam, T., Carter, C. Extracellular Free Water and Glutathione in First Episode Psychosis – a Multi-Modal Investigation of an Inflammatory Model for Psychosis. (16th International Congress on Schizophrenia Research, San Diego, CA, USA, 2017).
54. MacDonald, A., Patzelt, E., Kurth-Nelson, Z., Barch, D., Carter, C., Gold, J., Ragland, J.D., Silverstein, S. Exploration Not Perseveration: Computational Modeling of Probabilistic Reversal Learning Impairments in Psychosis. (16th International Congress on Schizophrenia Research, San Diego, CA, USA, 2017).
55. Niendam, T., Loewy, R., Ragland, J.D., Lesh, T., Skymba, H., Savill, M., Pierce, K., Fedechko, T., Delucchi, K., Goldman, H., Cress, R., Carter, C. A Technology-Enhanced Intervention to Reduce the Duration of Untreated Psychosis Through Rapid Identification & Engagement. (16th International Congress on Schizophrenia Research, San Diego, CA, USA, 2017).
56. Hogeveen, J., Ragland, J.D., Lesh, T.A., Niendam, T.A., Carter, C.S., Krug, M.K., Solomon, M. Distinct Brain Regions Associated with Item and Relational Encoding Impairments in ASD. (Annual Meeting of the International Society for Autism Research, San Francisco, CA, USA, 2017).
57. Ray, K.L., MacDonald, A.W., Ragland, J.D., Gold, J.M., Silverstein, S.M., Barch, D.M., Carter, C.S. Dynamic network reorganization of the frontal-parietal, salience, and default mode networks during cognitive control and episodic memory. (Annual Meeting of the Organization of Human Brain Mapping, Vancouver, Canada, 2017).
57. Caton, M., Ragland, J.D. Delusional Ideation in Psychosis Correlates with Decreased Left Prefrontal NAA. (72nd Annual Meeting of the Society of Biological Psychiatry, San Diego, CA, USA, 2017).
58. Scangos, K., Roberts, B., Ragland, J.D., Ranganath, C., Carter, C.S. Effects of tDCS on Cognitive Control and Cortical Network Oscillations in Schizophrenia. (72nd Annual Meeting of the Society of Biological Psychiatry, San Diego, CA, USA, 2017).
59. Ray, K., MacDonald III, A.W., Ragland, J.D., Gold, J.M., Silverstein, S.M., Barch, D.M., Carter, C.S. Dynamic Network Reorganization of the Frontal-Parietal, Salience, and Default Mode Networks during Cognitive Control and Episodic Memory. (72nd Annual Meeting of the Society of Biological Psychiatry, San Diego, CA, USA, 2017).
60. Solomon, M., Krug, M.K., Coleman, C., Elliott, M., Hogeveen, J., Niendam, T.A., Ragland, J.D., Carter, C.S. Functional Connectivity Underlying Cognitive Control Deficits in Adolescents and Young Adults with Autism Spectrum Disorder. (Annual Meeting of the International Society for Autism, 2018, Rotterdam, Netherlands).

61. Solomon, M., Krug, M.K., Coleman, C., Elliott, M., Hogeveen, J., Niendam, T.A., Ragland, J.D., Carter, C.S. Adolescents and Young Adults with Autism Spectrum Disorder Show Differences in Dynamics and Recruitment of Cognitive Control Networks. (Annual Meeting of the International Society for Autism, 2018, Rotterdam, Netherlands).
62. Dager, A.D., Marjanska, M., Mason, G.F., Tice, M.R., Ragland, J.D., Silveri, M.M., Book, G.A., Meagher, C., Assaf, M., Stevens, M.C., Pearlson, G.D. Nonverbal Memory and fMRI Response in Young Adult Marijuana Users. (73rd Annual Meeting of the Society of Biological Psychiatry, New York, NY, USA, 2018).
63. Dager, A.D., Marjanska, M., Mason, G.F., Tice, M.R., Ragland, J.D., Silveri, M.M., Book, G.A., Meagher, C., Assaf, M., Stevens, M.C., Pearlson, G.D. Investigation of Neurochemistry and fMRI Response During Nonverbal Memory in Emerging Adult Marijuana Users. (73rd Annual Meeting of the Society of Biological Psychiatry, New York, NY, USA, 2018).
64. Ragland, J.D., Hsieh, L.T., Carter, C.S., Hurtado, M., Lam, J., Lesh, T.A., Niendam, T.A., Solomon, M., Ranganath, C. Impact of Schizophrenia on Temporal Context versus Item Memory. (73rd Annual Meeting of the Society of Biological Psychiatry, New York, NY, USA, 2018).
65. Lesh, T.A., Tanase, C., Wang, H., Steinbauer, E., Bennet, J., Iosif, A., Van de Water, J., Maddock, R.J., Ragland, J.D., Niendam, T.A., Styner, M., Amaral, D., Bauman, M., Carter, C.S. Diffusion Measures of Extracellular Free Water in First Episode Schizophrenia and a Non-Human Primate Model of Maternal Immune Activation – Exploring Neuroimmune Mechanisms of Psychiatric Disorders. (73rd Annual Meeting of the Society of Biological Psychiatry, New York, NY, USA, 2018).

Grant Funding (current):

1R01MH105411-01 (PIs: Ragland and Ranganath) 1/01/14-12/30/18 4 calendar
NIH/NIMH Annual Direct Costs: \$350,903

Neural Mechanisms of Memory Dysfunction in Schizophrenia

This grant uses a multimodal functional imaging approach (EEG, fMRI and MRS) to examine the relationship between the function of prefrontal and hippocampal circuitry supporting item-specific and relational memory in the brain to schizophrenia diagnosis, daily function and symptoms in schizophrenia.

1R01MH106518 (PI: Solomon) 1/01/16-12/31/21 1 calendar
NIH Annual Direct Costs: \$410,533

Neurodevelopment of cognitive control in autism: adolescence to young adulthood

This study examines the adolescent to young adulthood development of cognitive control and its relationship to functional outcomes using fMRI and behavioral measures.

1R01 MH104235-01 (PI: Carter, CS) 9/1/14-8/30/18 1 calendar
NIH/NIMH Annual Direct Costs: \$491,640

Reducing Duration of Untreated Psychosis Through Rapid Identification and Engagement

This grant will consecutively test the impact of two interventions to reduce duration of untreated psychosis (DUP). First, we will test the ability of standard targeted provider education plus novel technology-enhanced screening to improve early identification. Secondly, we will test the ability

of a mobile community-based, telepsychiatry enhanced engagement method to promote early and stable treatment engagement and, thereby, reduce DUP.

No Overlap with Current Proposal.

5R01MH059883-11 (PI: Carter, CS)
NIH/NIMH

6/1/13-6/1/18

1 calendar

Annual Direct Costs: \$353,757

Pathophysiology of Cognitive Disability in Schizophrenia: Using fMRI and two cognitive tasks evaluating unique aspects of cognitive control and approach motivation we will test the hypothesis that during a first episode of psychosis both schizophrenia that bipolar disorder patients will show cognitive control deficits that in schizophrenia will remain as stable trait deficits during the first year of illness but that in Bipolar disorder will show substantial improvement with clinical remission. In contrast Bipolar Disorder patients will show an enhanced sensitivity to repeated rewards that will be stable across clinical states, while schizophrenia patients will show intact or reduced responses to incentives across the course of the first year of illness.

No Overlap with Current Proposal.

5R01MH084826-05 (PI: Carter, CS)
NIH/NIMH

10/12/2013-10/1/2018

1 calendar

Annual Direct Costs: \$191,809

Cognitive Neuroscience Task Reliability and Clinical Application Consortium

Behavioral tasks measuring the RDoC constructs of reward sensitivity and working memory capacity will be validated, optimized, and characterized psychometrically. Optimized measures and their psychometric characteristics will then be publically available for use in treatment development studies.