

**J. Daniel Ragland, Ph.D.**  
**Curriculum Vitae**

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**Home Address:** 250 Tern Place  
Davis, CA 95616

**Office Address:** University of California at Davis  
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**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, Department of Psychiatry and Behavioral Sciences, University of California at Davis
July, 2010- Present	Professor of Psychiatry and Behavioral Sciences, 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-present	Psychologist, Early Detection and Intervention for the Prevention of Psychosis Program, University of California at Davis
2007-present	Member, Neuroscience Advisory Group, Center for Neuroscience, University of California at Davis
2007-2019	Member, Psychology Graduate Group, Department of Psychology, University of California at Davis
2013-present	Consulting Psychologist, Sacramento County Mental Health Treatment Center, Sacramento, California

**Licensure:**

**Psychologist**

California License #: PSY21739

**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.

Past 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 *Schizophrenia Research and Treatment*  
 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, Psychiatry Research: Neuroimaging, 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 <sup>th</sup> Annual Meeting of the International Congress on Schizophrenia Research, Orlando, FL, USA).
2013	Co-Chair, “Cognition in psychosis”, (14 <sup>th</sup> 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.
2017-present	Review Member, NIMH Adult Psychopathology and Disorders of Aging Study Section (APDA). National Institutes of Health, Bethesda, MD.
2019, 2020	Co-Chair, NIMH Adult Psychopathology and Disorders of Aging Study Section (APDA). 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
2016-2020	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	Review Member, Medical Student Research Fellowship Program (MSRF), UC Davis School of Medicine
2018-present	Member, Faculty Personnel Committee, UC Davis School of Medicine
2019	Search Chair, Associate Professor in Residence for Pediatric Neuroimaging, Department of Psychiatry and Behavioral Sciences, UC Davis School of Medicine
2019-present	Co-Chair, Professional Improvement Committee (PIC), UC Davis School of Medicine
2020-2021	Member, Compensation Planning Committee, Department of Psychiatry and Behavioral Medicine, UC Davis School of Medicine
2021	Search Chair, Associate Professor of Clinical Psychiatry, Department of Psychiatry and Behavioral Sciences, UC Davis School of Medicine
2021	Member, LCME Self-Study Committee, UC Davis School of Medicine
2021	Member, Research Strategic Planning Committee, Department of Psychiatry and Behavioral Medicine, UC Davis School of Medicine
2021	Member, Pre-Clerkship Intersession Curriculum Committee, UC Davis School of Medicine
2022	Member, UC Davis Internal Fellowship Review Committee, UC Davis Graduate Studies

- 2022 Member, Associate Dean for Students Reappointment Review Committee, UC Davis School of Medicine
- 2022 Review Member, MS1 Research Applications, 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<sup>th</sup> 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
- 2019 Ad-hoc Reviewer, Promotion and Tenure Review, Temple University
- 2020-present Member, American College of Neuropsychopharmacology (ACNP), Liaison 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.
51. 2018 Instructor, Doctoring II, School of Medicine, University of California at Davis.
52. 2019 Instructor, Doctoring II, School of Medicine, University of California at Davis.
53. 2020 Instructor, Doctoring II, School of Medicine, University of California at Davis.
54. 2021 Co-Instructor, Transition to Clerkship (T2C), School of Medicine, University of California at Davis.



55. 2021 Instructor, Doctoring II, School of Medicine, University of California at Davis.
56. 2022 Lecturer, PGY2 Inpatient Psychiatry Seminar, "Psychological Testing", School of Medicine, University of California at Davis
57. 2022 Instructor, Doctoring II, School of Medicine, University of California at Davis.

**Lectures by Invitation: (past 10 years)**

- 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", 65<sup>th</sup> Annual Meeting, Society of Biological Psychiatry, New Orleans, LA, USA
- August 13, 2010 "Eye Movement Monitoring of Item and Relational Memory In Schizophrenia", 118<sup>th</sup> Annual Convention, American Psychological Association, San Diego, CA., USA
- October 8, 2010 "Memory of Items and their Relations: The RISE Task", 24<sup>th</sup> Annual Meeting, Society for Research in Psychopathology, Seattle, WA, USA
- April 3, 2011 "Memory of Items and their Relations: The RISE Task", 13<sup>th</sup> 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", 165<sup>th</sup> Annual Meeting of the American Psychiatric Association, Philadelphia, PA, USA
- April 23, 2013 "Neural Correlates of Recollection and Familiarity Deficits in Schizophrenia", 14<sup>th</sup> 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", 68<sup>th</sup> 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", 5<sup>th</sup> 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
- April 12, 2019 "Relational Memory Deficits in Schizophrenia: What is Wrong With the Hippocampus and Frontal Lobe?", 2019, Schizophrenia International Research Society, Orlando, FL, USA
- May 15, 2019 "Specificity of Episodic Memory Encoding & Retrieval Deficit in People with Schizophrenia", Gordon Conference, Hong Kong, China
- July 20, 2020 "Neuropsychological and Psychological Assessment", PGY2 Inpatient Crash Course, University of California at Davis, School of Medicine, Department of Psychiatry, Sacramento, CA, USA
- Feb. 16, 2022 "Balancing Obligations", MS1 Pre-Clerkship Intersession, University of California at Davis, School of Medicine, Sacramento, CA, USA

**Bibliography:** (*h-index = 59; 13,024 citations*)

**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.
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### **Abstracts: (past 5 years)**

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36. Williams, A., Liu, X., Hsieh, L., Niendam, T.A., Carter, C., Ranganath, C., Ragland, J.D. Temporal Sequence Learning in People with Schizophrenia. (Society of Biological Psychiatry, New York, NY, USA, 2020).
37. Minor, G.N., Gordon, A., Hannula, D.E., Ragland, J.D., Solomon, M. Behavioral and Eye-Movement Correlates of Item-Specific and Relational Memory in ASD. (International Neuropsychological Society, 2021).
38. Kwashie, A., Smucny, J., Barch, D., Carter, C., Ragland, J.D., Gold, J., Silverstein, S., MacDonald, A. Examining the Role of Race in the Relationship between Disorganization and Cognitive Control Processes across the Psychosis Spectrum. (Schizophrenia International Research Society, Virtual meeting due to COVID-19 restrictions, 2021).

### **Grant Funding (current):**

R01MH122139 (Carter)	7/1/20 – 4/23/25	1.2 calendar
NIH/NIMH	Annual Direct Costs \$492,685	
Pathophysiology Informed Biomarkers of Treatment Response in Early Psychosis (PIB)		
A substantial proportion of early psychosis EP individuals show minimal symptom reduction despite receiving the full range of evidence-based practices provided by coordinated specialty care (CSC). Currently, clinicians have no way to predict which EP individuals entering CSC will respond and who will not. In this project we will leverage recent progress in the development of pathophysiologically informed MRI based imaging biomarkers along with novel computational image analysis, to develop a precision medicine tool that can identify early psychosis patients entering CSC who are at high risk for non-response and thereby inform clinical decision making to optimize the recovery of young individuals following the onset of psychotic illness.		
R01MH119546 (Carter)	9/1/19 - 7/31/24	1.2 calendar
NIH/NIMH	Annual Direct Costs: \$350,388	
Effects of DLPFC tDCS on Cognition, Oscillations and GABA Levels in Schizophrenia		
The primary goals of this project are to use tDCS, a non-invasive brain stimulation method, EEG recordings and Magnetic Resonance Spectroscopy to modulate oscillatory activity in the prefrontal cortex and measure the impact of stimulation on frontal lobe GABA concentrations. This project will provide new insights into the neural mechanisms underlying cognitive disability in the disorder.		
2 R01 MH084826-08A1 (Carter)	9/01/19-6/30/24	1.2 calendar
NIH/NIMH	Annual Direct Costs: \$456,840	

Cognitive Neurocomputational Task Reliability & Clinical Applications Consortium  
(CNTRaCS)

This multi-site study will develop and apply next-generation cognitive tasks to characterize cognition in schizophrenia. If successful, the project will develop an integrated computational and experimental approach for assessing cognitive and neural changes transdiagnostically in psychotic and mood disorders.

**Completed Research Support (selected):**

R01MH105411-01 (PIs: Ragland and Ranganath) 1/01/14-11/30/19  
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.

R01MH084895 (PI: Ragland) 3/17/10-2/28/15  
NIH/NIMH Annual Direct Costs: \$350,903  
Brain mechanisms of impaired episodic memory in schizophrenia  
This grant uses a multimodal functional imaging approach 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.

R01 MH62103 (PI: Ragland JD) 12/01/01-11/30/05  
NIMH Annual Direct Costs: \$650,000  
Word Encoding and Recognition in Schizophrenia  
This R01 provides support for neuropsychological and functional magnetic resonance imaging (fMRI) memory studies of schizophrenia.

R29 MH53326 (PI: Ragland, JD) 5/1/96 – 5/30/01  
NIH/NIMH Annual Direct Costs: \$271,105  
PET CBF Study of Memory Components In Schizophrenia.  
The objective was to develop neuropsychological tests of working and declarative memory suitable of physiologic neuroimaging (PET CBF), and to investigate performance of patients and healthy controls in, and outside of PET to relate to performance and CBF to illness and clinical symptomatology.

Young Investigator Award (PI: Ragland, JD) 12/01/97-11/30/00  
EJLB Foundation Annual Direct Costs: \$100,000 CAN  
Working and Declarative Memory in Schizophrenia  
The objective was to develop measures of item recognition and temporal recency that could be used to assess prefrontal and temporal-limbic function during positron emission tomography in healthy volunteers and patients with schizophrenia.

Independent Investigator Award (PI: Ragland, JD) 09/15/04-09/14/06  
NARSAD Annual Direct Costs: \$100,000

Delay in trace conditioning during: fMRI: A probe of Hippocampal Function in Schizophrenia  
The purpose of this application is to develop a line of translational neurobehavioral and functional neuroimaging research of delaying trace conditioning. Complementary tasks will be developed to study mice and humans, and preliminary fMRI data will be obtained to provide support for future R01 applications.