

Vijay Anand Mittal

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University of Colorado at Boulder
Department Psychology and Neuroscience
345 UCB
Boulder, CO 80309-0345
<http://psych.colorado.edu/~clinical/mittal>
<http://www.adaptprogram.com>

Phone: 303-492-3303
Fax: 303-492-2967
Email: vijay.mittal@colorado.edu

Current Academic Position

2010 – present Assistant Professor
University of Colorado at Boulder
Department of Psychology and Neuroscience

2010-present Fellow
University of Colorado at Boulder
Center for Neuroscience

Educational Background

2014-Present Licensed Clinical Psychologist, Colorado (PSY.0004100)

2008 – 2010 Postdoctoral Fellowship
University of California Los Angeles
Clinical Neuroscience Lab
Training Program in Clinical Research in Schizophrenia and Mood Disorders
Department of Psychology

2007- 2008 APA Approved Internship in Clinical Psychology
University of California Los Angeles
Adolescent Serious Mental Illness Track
Department of Psychiatry and Biobehavioral Sciences

2008 Ph.D., Clinical Psychology
Emory University
Department of Psychology

2004 M.A., Psychology
Emory University
Department of Psychology

2001 B.A. Psychology
University of California Santa Barbara
Graduated: *magna cum laude*

Academic Honors

Face of the Future Symposium Presenter, Society for Research in Psychopathology

Outstanding Faculty Research Award, University of Colorado Boulder, Department of Psychology and Neuroscience, 2014

National Institute of Health (NIH) Biobehavioral Research Awards for Innovative New Scientist (BRAINS) Recipient, 2011

Smadar Levin Award, honorable mention, Society for Research in Psychopathology, September 2009.

National Institute of Health (NIH), Clinical Research Loan Repayment Program (LRP) Award, 2009-2011, 2011-2012

National Institute of Mental Health (NIMH), Ruth Kirschstein National Research Service Award (NRSA), T32-MH14584-33, 2008-2010

Staglin Family Intern in Adolescent Serious Mental Illness, 2007-2008

National Science Foundation (NSF) Research and Teaching Award, 2006-2007

Emory University, Psychological Center Research Award, 2006-2007

Georgia Psychological Association; Division G (Adolescent and Child Psychology), Presentation Award, 2006

Professional Associations

Schizophrenia International Research Society (SIRS), 2013

Eastern Psychological Association (EPA), 2012

International Graphonomics Society, 2011

Center for Neuroscience, University of Colorado at Boulder, Member, 2010-present

International Early Psychosis Association (IEPA), 2010

Society for Research in Psychopathology (SRP), 2002-present

Association for Psychological Science (APS), 2002-present

American Psychological Association (APA), 2006-present

National Society of Colligate Scholars, 2001-present

Psi Chi, National Honor Society in Psychology, 2001-present

Phi Beta Kappa, 2001-present

University of California Golden Key, 2001-present

Appointed Editorial Positions

Consulting Editor:

2014-present Journal of Abnormal Psychology

Research Experience

2010-present Director
Adolescent Development and Preventive Treatment (ADAPT) Research Program
Lab Website: <http://www.adaptprogram.com>
University of Colorado Boulder
Boulder Adolescent Development and Mental Health Program
Department of Psychology and Neuroscience

2008 - 2010 Postdoctoral Research Fellow
Training in Clinical Research in Schizophrenia and Mood Disorders
University of California Los Angeles
Department of Psychology
Mentors: Tyrone Cannon, Ph.D. and Keith Nuechterlein, Ph.D.

2007 - 2010 Center for the Assessment and Prevention of Prodromal States (CAPPS)
University of California Los Angeles
Department of Psychiatry and Biobehavioral Sciences
Advisors: Tyrone Cannon, Ph.D., Melita Daley, M.D.

2006 - 2007 Neurological Soft-Signs - Psychotic Disorders
Department of Veterans Affairs Atlanta, Medical Center
Advisor: Erica Duncan, Ph.D.

2002 - 2008 Adolescent Neurodevelopment and Psychopathology
Emory University
Mentor: Elaine Walker, Ph.D.

2000 - 2002 Aftercare Program, First-Onset Schizophrenia Longitudinal Study
University of California Los Angeles
Neuropsychiatric Institute (NPI)
Advisors: Kenneth Subotnik, Ph.D., Keith Nuechterlein, Ph.D.

1999 - 2000 Language Development and Cognition Laboratory
University of California Santa Barbara
Psychology Department

Advisor: Arturo Hernandez, Ph.D.

Publications: (note: * indicates the first author was a graduate student or postdoctoral student who worked under my direct mentorship)

Peer Reviewed Articles:

- 1) Corcoran, C., Walker, E. F., Huot, R., Mittal, V. A., Tessner, K., Kestler, K. & Malaspina, D. (2003). The stress cascade and schizophrenia: etiology and onset. *Schizophrenia Bulletin*, 29(4), 671-692.
- 2) Mittal, V. A., Tessner, K., Delawalla Z., McMillan, A., Trotman, H. & Walker, E. F. (2006). Gesture behavior in unmedicated schizotypal adolescents. *Journal of Abnormal Psychology*, 115(2), 351-358.
- 3) Mittal, V. A., Dhruv, S., Tessner, K. D. Walder, D. J., & Walker, E. F. (2007). The relations among putative bio risk markers in schizotypal adolescents: minor physical anomalies, movement abnormalities and salivary cortisol. *Biological Psychiatry*, 61(10), 1179-1186.
- 4) Mittal, V. A., Tessner, K. D., & Walker, E. F. (2007). Elevated social Internet use and schizotypal personality disorder in adolescents. *Schizophrenia Research*, 94(1-3), 50-57.
- 5) Mittal, V. A., Tessner, K. D., Trotman, H. D., Dhruv, S., Esterberg, M., Simeonova, D., McMillan, A. L., Murphy, E., Saczawa, M. & Walker, E. F. (2007). Movement abnormalities and the progression of prodromal symptomatology in adolescents at risk for psychotic disorders. *Journal of Abnormal Psychology*, 116(2), 260-267.
- 6) Mittal, V. A., & Walker, E. F. (2007). Movement abnormalities predict conversion to Axis I psychosis among prodromal adolescents. *Journal of Abnormal Psychology*, 116(4), 796-803.
- 7) Mittal, V. A., Hasenkamp, W., Sanfilipo, M., Wieland, S., Burton, A., Rotrosen, J. & Duncan, E. (2007). Relation of neurological soft signs to psychiatric symptoms in schizophrenia. *Schizophrenia Research*. 94(1-3), 37-44.
- 8) Walker, E. F., & Mittal, V. A. (2007). Movement abnormalities- psychosis: Letter to the Editor. *APA Monitor on Psychology*, 38(8).
- 9) Walker, E. F., & Mittal, V. A., (2007). External and inherent constraints on progress in psychology: reflections on Paul Wachtel's observations. *Applied & Preventive Psychology: Current Scientific Perspectives*, 12, 44-46.
- 10) Mittal, V. A., Neumann, C., Saczawa, M., & Walker, E. F. (2008). The longitudinal progression of movement abnormalities and psychotic symptoms in adolescents at high-risk for psychosis. *Archives of General Psychiatry*, 65(2), 165-170.
- 11) Mittal, V. A., Saczawa, M., Walder, D. J., Willhite, R., & Walker, E.F. (2008). Prenatal

- viral teratogen exposure and conversion among adolescents at high-risk for psychosis. *Schizophrenia Research*, 99, 375-376.
- 12) Walder, D. J., Mittal, V. A., Trottman, H. D., McMillan, A. L. & Walker, E. F. (2008). Neurocognition and conversion to psychosis in adolescents at high-risk. *Schizophrenia Research*, 101, 161-168.
 - 13) Walker, E. F., Mittal, V. A., & Tessner, K. D. (2008). HPA activity and the developmental course of schizophrenia. *Annual Review of Clinical Psychology*, 4, 5.1-5.28.
 - 14) Mittal, V. A., Willhite, R., & Cannon, T. D. (2008). Floaters: A potential confound to the assessment of perceptual abnormalities. *Schizophrenia Research* 104(1-3), 305-306.
 - 15) Mittal, V. A., Ellman, L. M. & Cannon, T. D. (2008). Gene-environment interaction and covariation in schizophrenia: The role of obstetric complications. *Schizophrenia Bulletin* 34, 1083-1094.
 - 16) Mittal, V. A., Willhite, R. W., Niendam, T., Daley, M., Bearden, C. E., Ellman, L. M., & Cannon, T. D. (2009). Obstetric complications and risk for conversion to psychosis among Individuals at high clinical risk, *Early Intervention in Psychiatry* 3, 226-230.
 - 17) Mittal, V. A., Walker, E. F., Walder, D., Trottman, H., Bearden, C. E., Daley, M., Simone, A., & Cannon, T. D. (2010). Markers of basal ganglia dysfunction and conversion to psychosis: Neurocognitive deficits and dyskinesias in the prodromal period. *Biological Psychiatry*, 68, 93-99.
 - 18) Mittal, V. A., Karlsgodt, K. H., Zinberg, J., Cannon, T. D. & Bearden, C. E., (2010). Identification and Treatment of a Pineal Gland Tumor in an Adolescent with Prodromal Psychotic Symptoms. *American Journal of Psychiatry*, 167(9), 1033-1037.
 - 19) Mittal, V.A., & Walker E.F. (2010). Movement Abnormalities and Schizophrenia in DSM V. *Psychological Medicine*, 40(9)1581-1583.
 - 20) Mittal, V.A., Daley, M., Shioda, M.F., Bearden, C.E., O'Neill, J., & Cannon, T.D. (2010). Striatal volumes and dyskinetic movements in youth at high-risk for psychosis. *Schizophrenia Research*, 123(1), 68-70.
 - 21) Mittal, V.A., & Walker, E. F. (2011). Minor physical anomalies and hippocampal system vulnerability in youth at high clinical risk: converging evidence from neurocognitive, endocrine, and symptom profiles. *Schizophrenia Research*. 129, 116-121.
 - 22) Mittal, V.A., Cannon, T.D., Bearden, C.E., (2011). Reply to De Nadai et al, *American Journal of Psychiatry*. 168 (5), 550-551.
 - 23) Tessner, K. D., Mittal, V.A., & Walker, E.F. (2011). Longitudinal study of stressful life events and daily stressors among adolescents with schizotypal personality disorder, *Schizophrenia Bulletin*, 37(2), 432-441.

- 24) Mittal, V.A., Jalbrzikowski M, Bearden, C.E., Daley M., Roman C., Cannon T.D. (2011). Abnormal movements are associated with poor psychosocial functioning in adolescents at high risk for psychosis. *Schizophrenia Research*, 130 (1 -3), 164-169.
- 25) Mittal, V.A. & Walker, V. A. (2011). Dyskinesias, tics, and psychosis in the next Diagnostic and Statistical Manual of Mental Disorders. *Psychiatry Research* 189, 158-159.
- 26) Mittal, V.A., Dean, D., Pelletier, A., Caligiuri, M., (2011). Associations between instrumentally gauged movement abnormalities and attenuated psychotic symptoms in healthy young adults. *Schizophrenia Research*, 132, 194-196.
- 27) Pelletier, A. & Mittal, V.A. (2012). An Autism Dimension for Schizophrenia in the Next Diagnostic and Statistical Manual, *Schizophrenia Research*. 137(1-3) : 269-270.
- 28) Mittal, V.A., Dean, D., & Pelletier, A. (2012). Dermatoglyphic asymmetries and fronto-striatal dysfunction in young-adults reporting non-clinical psychosis. *Acta Psychiatrica Scandinavica*, 126:290-297.
- 29) Mittal, V.A., Smolen, A., Dean, D.J. Pelletier, A. Avery, J., Smith, A. (2012) BDNF val66met and spontaneous dyskinesia in non-clinical psychosis. *Schizophrenia Research*, 140, 65-70.
- 30) Golembo-Smith, S, Walder, D, Daly, M., Mittal, V.A., Kline, E. Reeves, G., Schiffman, J (2012). The presentation of dermatoglyphic abnormalities in schizophrenia: a meta-analytic review. *Schizophrenia Research* 142(1-3)1-11.
- 31) *Pelletier, A. Dean, D. Lunsford-Avery, J.L., Orr, J., Gupta, T., Mittal, V.A. (2013). Facial emotion recognition deficits are associated with broader social/role dysfunction in non-clinical psychosis. *Schizophrenia Research* 143, 70-73
- 32) *Pelletier, A. Mittal, V.A (2013). Negative symptom measurement in individuals at-risk for psychosis. *Psychiatry Research*, 205(1-2):181-182.
- 33) Mittal, V.A., Orr, J.M. Pelletier, A.L., Dean, D.J., Lunsford-Avery, J. Smith, A. (2013). Hypothalamic-Pituitary-Adrenal Axis Dysfunction in Non-Clinical Psychosis. *Psychiatry Research*, 206(2-3):315-317.
- 34) *Smith, A.K., & Mittal., V.A. (2013). Delusions of Body Image in the Prodrome. *Schizophrenia Research*, 146(1-3):366-367.
- 35) Mittal, V.A., Dean, D., & Pelletier, A. (2013). Internet addiction, Reality Substitution, and Longitudinal Changes in Psychotic-like Experiences in Young Adults. *Early Intervention in Psychiatry*. 7(3) 261-9, DOI: 10.1111/j.1751-7893.2012.00390.x
- 36) Frank, G., Schott, M, Hagman J., Mittal, V.A. (2013). Alterations in brain structures related

- to taste reward circuitry in ill and recovered anorexia, but also bulimia nervosa. *American Journal of Psychiatry*, 10(170):1152-1160. doi: 10.1176/appi.ajp.2013.12101294
- 37) *Dean, D., Caligiuri, M., Tuelings, H., & Mittal, V.A. (2013). Handwriting Analysis Indicates Spontaneous Dyskinesias in Adolescents at high-risk for schizophrenia. *Journal of Visual Experiments*, 81 e50852, doi:10.3791/50852
- 38) *Dean, D.J. & Mittal, V.A. (2013). Tinnitus: A potential confound when assessing perceptual abnormalities ultra-high risk youth. *Schizophrenia Research*, 147: 410-411 doi:10.1016/j.schres.2013.04.033.
- 39) *Lunsford-Avery, J. & Mittal, V.A. (2013). Sleep dysfunction prior to the onset of schizophrenia: a review and neurodevelopmental diathesis-stress conceptualization. *Clinical Psychology: Science and Practice*, 20 (3): 291-320 DOI: 10.1111/cpsp.12041.
- 40) Mittal, V.A., Gupta, T., Orr, J.M. Pelletier, A.L., Dean, D.J., Lunsford-Avery, J. Smith, A., Robustelli, B.R., Leopold, D.R., Millman, Z. (2013). Physical activity level and medial temporal health in youth at ultra high-risk for psychosis. *Journal of Abnormal Psychology*, 122(4), 1101-1110.
- 41) *Lunsford-Avery, J.R., Orr, J.M., Gupta, T., Pelletier, A.L., Dean, D.J Bernard, J., Smith, A., Bernard, J., Millman, Z., Mittal, V.A. (2013). Sleep Dysfunction and Thalamic Abnormalities in Adolescents at Ultra High-Risk for Psychosis. *Schizophrenia Research* 151(1-3):148-53. doi: 10.1016/j.schres.2013.09.015.
- 42) Mittal, V, Orr, J. Turner, J. Pelletier, A., Dean, D., Lunsford-Avery, J. Gupta, T. (2013). Striatal abnormalities and Spontaneous Dyskinetic Movements in Non-Clinical Psychosis. *Schizophrenia Research*, 151 (1-3) 141-147. doi: 10.1016/j.schres.2013.10.003
- 43) Frank, G., Schott, M., Haggman, J. Mittal, V (2013). Reply to Keating and Rossell. *American Journal of Psychiatry*, 170(11), 1367.
- 44) *Dean, D.J., Bernard, J.A., Orr, J., Pelletier, A.L., Gupta, T., Carol, E., Mittal, V.A. (2014). Cerebellar morphology and procedural learning impairment in youth at ultra high-risk of psychosis, *Clinical Psychological Science*, 2(2)152-164.
- 45) Mittal, V.A., Dean, D.J., Bernard, J.A., Orr, J.M., Pelletier, A., Carol, E., Gupta, T., Turner, J., Leopold, D., Robustelli, B., Millman, Z. (2014) Neurological Signs predict cerebellar-thalamic tract development and negative symptoms in adolescents at high risk for psychosis: a longitudinal perspective. *Schizophrenia Bulletin*, 40(6) 1204-1215 doi:10.1093/schbul/sbt199
- 46) *Bernard, J. Dean, D., Kent, J., Pelletier, A.L., Gupta, T Mittal, V.A. (2014). Cerebellar Networks in Individuals at Ultra High-Risk of Psychosis: Impact on Postural Sway and Symptom Severity. *Human Brain Mapping*. 35(8), 4064-4078. DOI; 10.1002/hbm.22458

- 47) *Orr, J, Turner, J., Mittal, V (2014). Widespread brain disconnectivity associated with psychotic-like experiences in the general population. *Neuroimage: Clinical* (4) 343-351.
- 48) *Pelletier, A.L., Dean, D.J., Lunsford-Avery, Smith, A.K., Orr., J., Gupta, T., Millman, Z., Mittal, V.A. (2014). Orbitofrontal cortex volume and intrinsic religiosity in non-clinical psychosis. *Psychiatry Research, Neuroimage* 22(3), 124-130.
- 49) *Wu, SS., Mittal, V.A., Pennington B Willcutt, E.G. (2014). Mathematics achievement scores highlight psychosis risk in school-aged children. *Schizophrenia Research*, 156, 133-134.
- 50) *Carol, E., & Mittal, V.A. (in press). Self-Reported Cannabis Use is Inconsistent with the Results From Drug-Screening in Youth at Ultra High-Risk for Psychosis, *Schizophrenia Research*, doi: 10.1016/j.schres.2014.05.032. [Epub ahead of print]
- 51) *Millman, Z, Goss, J., Schiffman, J., Gupta., T., Mittal, V.A. (in press). Mismatch and Lexical Retrieval Gestures are Associated with Visual Information Processing, Verbal Production, and Symptomatology in Youth at High Risk for Psychosis. *Schizophrenia Research*
- 52) *Bernard, J., & Mittal, V.A. (2014). Dysfunctional activation of the cerebellum in schizophrenia: A functional neuroimaging meta-analysis. *Clinical Psychological Science*, doi: 10.1177/2167702614542463
- 53) Schott, M.E., Cornier, M.A., Mittal, V.A., Pryor, T.L., Orr, J., Brown, M.S., Frank, G.K.W. (in press). Bigger is better, Orbitofrontal gyrus rectus volume predicts taste reward learning response, but not in obesity. *International Journal of Obesity*
- 54) *Gupta, T., Mittal, V (in press) Nicotine is associated with elevated processing speed and spatial working memory in youth at ultra high-risk for psychosis. *Psychiatry Research*
- 55) Schiffman, J, Mittal, V.A., Kline, E., Michelsen, N., Ekstrom, M., Mortensen, E., Mednick, S., Sorenson, H (in press). Childhood dyspraxia predictive of adult-onset schizophrenia spectrum disorder, *Development and Psychopathology*
- 56) *Bernard, J. & Mittal, V.A. (in press). Cerebellar Motor Dysfunction In Schizophrenia and Psychosis Risk: the Importance of Regional Cerebellar Analysis Approaches. *Frontiers in Psychiatry*
- 57) *Bernard, J.A., Leopold, D., Calhoun, V., Mittal, V.A. (in press) Regional Cerebellar Volume and Cognitive Function From Adolescence to Late Middle Age. *Human Brain Mapping*
- 58) *Dean, D.J. & Mittal, V.A., Spontaneous Parkinsonisms and striatal impairment in neuroleptic free youth at ultra high risk for psychosis (in press), *NPJ Schizophrenia*
- 59) Mittal, V.A., Dean, D., Mittal, J., Saks, E. (in press). Is disclosing and attenuated

psychosis syndrome diagnosis ultimately helpful or harmful? *Bioethics*.

- 60) *Dean D., Bernard, J., Orr, J. Pelletier, A., Carol, E., Gupta, T. Earls, H., Mittal, V.A. (in press) Increased postural sway predicts negative symptom progression in ultra high-risk for psychosis. *Schizophrenia Research*
- 61) Thompson, L., Kline, E., Ellman, L. Mittal, V.A., Schiffman, J., (in press). Emotional and Behavioral symptomatology reported by help-seeking youth at clinical high-risk for psychosis. *Schizophrenia Research*
- 62) *Bernard, J.A. & Mittal, V.A., (in press) Hippocampal-thalamic tract development in the psychosis prodrome: A multi-time point probabilistic tractography approach. *NPJ Schizophrenia*

Chapters:

- 1) Mittal, V. A., Kalus, O., Bernstein, D. P., & Siever, L. J. (2007). Schizoid Personality Disorder. Chapter in O'Donohue, W. O., Lilienfeld, S. T. & Fowler, K. A. (Eds.) *Handbook of Personality Disorders: Towards the DSM V*. Thousand Oaks: Sage Publications, p. 63-81.
- 2) Walker, E. F., McMillan, A., & Mittal, V. A. (2007). *Neurohormones, Neurodevelopment and the Prodrome of Psychosis in Adolescence*. In Walker, E. F. & Romer, D. (Eds.). *Adolescent psychopathology and neurodevelopment: integrating brain and preventive science*. Oxford University press: USA. p. 264-284.
- 3) Walker, E. F., McMillan, A., Tessner, K., Mittal, V. A., & Trottman, H. (2007). Adolescent neurodevelopment: A critical period for preventive intervention. In M. Tsuang, W. Stone, & M. Lyons (Eds.), *Recognition and Prevention of Major Mental and Substance use Disorders*. American Psychological Publishing, Inc: Arlington. p. 187-213.
- 4) Walker, E. F., Bollini, A., Hochman, K., Kestler, L. & Mittal, V. A., (2007). Schizophrenia. In J. E. Maddox & B. A. Winstead (Eds.) *Psychopathology: Foundations for a Contemporary Understanding* (2nd edition). Lawrence Erlbaum Associates: New York.
- 5) Walker, E. F., Mittal, V. A., & Tessner, K. D., & Trottman, H. (2008). Schizophrenia and the Psychotic spectrum. In Craighead, EW, Miklowitz, DJ, & Craighead, LW (Eds.), *Psychopathology: History, Diagnosis, and empirical foundations*. John Wiley & Sons, Inc.: New Jersey, p. 402-434.
- 6) Cornblatt, B. A., Walker, E. F., Green, M. F., & Mittal, V. A., (2008). Schizophrenia: Etiology and Neurocognition. In T. Millon, P. H. Blaney, & R. D., Davis (Eds.) *Oxford Textbook of Psychopathology* (2nd edition). Oxford University Press: New York.
- 7) Mittal, V. A., & Walker, E. F. (2009). Movement abnormalities: a putative biomarker of risk for Psychosis. In Ritsner, M.S. (Ed.) *The Handbook of Neuropsychiatric Biomarkers, Endophenotypes, and Genes*. Springer: NY p. 239-258.

- 8) Karlsgodt, K. Ellman, LE. Sun, F., Mittal, VA., Cannon TD. (2011). Is the neural developmental model of schizophrenia still alive? In *Schizophrenia, The Final Frontier: A Festschrift-Tribute for Robin Murray*. Edited by David, A., Kapur, S., & McGuffin, P. London: Maudsley Publication by Routledge-Taylor Francis.
- 9) Kestler, L. Bollini, A., Hochman, K., Mittal, V. A., Walker, E. F., (2012). Schizophrenia. In J. E. Maddox & B. A. Winstead (Eds.) *Psychopathology: Foundations for a Contemporary Understanding* (3rd edition). Routledge: New York
- 10) Trottman, H., Mittal, V. A., Tessner, K. D., & Walker, E. F., (2013). Schizophrenia and the Psychotic spectrum. In Craighead, EW, Miklowitz, DJ, & Craighead, LW (Eds.), *Psychopathology: History, Diagnosis, and empirical foundations* (2nd Edition). John Wiley & Sons, p. 403-445.
- 11) Mittal, V.A., Pelletier, A.L., Kestler, L. Bollini, Hochman, K., & Walker, E.F. (in press). Schizophrenia. In J.E. Maddox & B.A. Winstead (Eds.) *Psychopathology: Foundations for a contemporary understanding* (4th edition) Routledge: New York.

Under Review:

- *Dean, D., Orr, J.M, Bernard, J., Gupta, T., Pelletier-Baldelli, A., Carol, E., Mittal, V.A. (under review) Hippocampal shape abnormalities predict disease progression in youth at ultrahigh risk for psychosis, *Schizophrenia Bulletin*
- Mittal, VA, Gupta, T., Keane, B., Silverstein, S., (under review) Visual context processing dysfunction in youth at high-risk for psychosis: Resistance to the Ebbinghaus illusion, symptoms and functioning. *Journal of Abnormal*
- Schiffman, V.A. & Mittal, V.A., (under review). Treatments for the psychosis prodrome. *Journal of Nervous and Mental Disease*.
- *Bernard, J., Millman, Z., Mittal, V.A. (under review) Metaphoric and beat gestures are differentially associated with cortical and regional cerebellar volumes. *Journal of Cognitive Neuroscience*.
- *Pelletier, A., Bernard, J., Mittal., VA. Functional connectivity abnormalities and impaired social processing in youth at high risk for psychosis (under review). *PloS One*
- * Carol, E., Mittal, V. (under rev). Negative self-concept is associated with elevated resting cortisol and putative familial environment in youth at ultra high-risk for psychosis. *Psychoneuroendocrinology*.
- *Lunsford-Avery, J., Gupta, T., LeBourgeois, M., Mittal., V.A. (under review). Sleep actigraphy indicates poorer sleep efficiency in youth at-risk for psychotic disorders.
- *Earls, H., Mittal, V.A. (under review). Social deficits in early perceptual stages in schizophrenia: A systematic review of the P100 during face processing. *Schizophrenia Bulletin*

*Pelletier, A., Ives, L., Mittal, V.A., Increased Internet Use is associated with poorer ability to manage emotions in youth at ultra, *Development Psychopathology*

Related Service:

Ad Hoc Journal Reviewer-

Journal of the American Academy of Child and Adolescent Psychiatry
Schizophrenia Bulletin
Psychological Medicine
Journal of Abnormal Psychology
Cortex
Psychiatric Services
American Journal of Psychiatry
Archives of General Psychiatry/JAMA Psychiatry
Psychiatry and Clinical Neuroscience
Clinical Psychology: Science and Practice
Journal of Clinical Psychiatry
Psychiatry Research
Social Psychiatry and Psychiatric Epidemiology
Progress in Neuro-psychopharmacology and Biological Psychiatry
Public Library of Science (PLoS ONE)
Development and Psychopathology
Biological Psychiatry
Journal of Psychiatric Research
Psychoneuroendocrinology
European Psychiatry
Comprehensive Psychiatry
Psychiatry Research: Neuroimaging
British Journal of Psychiatry
The Journal of Psychiatric Research
Schizophrenia Research
Acta Psychiatrica Scandinavica

Grant Review

2014 Qatar National Research
2013 Medical Research Council, UK (MRC)
2013 French National Research Agency: Evaluation Committee of the Mental Health/Addictions Ad Hoc Reviewer
2011 Karolinska Institute, Sweden

Research Funding, Intramural/Extramural Support:

Ongoing Research Support

National Institute of Health, R01MH094650

Project Title: Frontal-Subcortical Development, Movement Abnormalities, and Risk for Psychosis
Principal Investigator: Vijay A. Mittal, Ph.D.

Project Period: 06/01/2011-02/29/2016

Total Direct Cost: \$1,820,544

CO-Is: Randal Ross, M.D., Marie Banich Ph.D., Mark Brown Ph.D., David Miler, Ph.D.

Goal: Investigate spontaneous movement abnormalities as a potential biomarker for white matter and grey matter development components of frontal-subcortical circuits, in adolescents at high-risk for psychosis.

National Institute of Mental Health Translational Research for the Development of Novel Interventions for Mental Disorders: R21/R33 Award, MH103231

Exercise and markers of medial temporal health in youth at ultra high-risk for psychosis

Principal Investigators: Vijay Mittal, Ph.D., Angela Bryan

Project Period: 07/2014-6/2019

Total Direct Costs: \$850,000

Co-I: Randal Ross, M.D.

Goal: To test feasibility and to design a pilot controlled trial investigation of cardiovascular exercise and medial temporal neurogenesis and cognitive/functioning remediation in youth at high-risk for schizophrenia.

Brain Behavior Research Foundation (formally NARSAD): Young Investigator Award

Cerebello-Prefrontal Involvement in Error Processing and Rule Learning in Youth at Ultra High-Risk for Psychosis

The Proposed Project Period: 1/1/2015-1/1/2017

Total Direct Costs: \$60,000

P.I. Jessica Bernard, Ph.D.

Mentor: Vijay Mittal, Ph.D.

Co Mentor: Banich

National Research Service Award (NRSA), 1F31MH100821-01A1

The neural basis of social cognition in adolescence

10/01/2013-9/30/2016

P.I. Andrea Pelletier, M.A.

Mentor: Vijay Mittal, Ph.D.

Co-Mentors: Tor Wager, Jessica Turner

National Research Service Award (NRSA) 1F32MH102898-01

Cerebellar contributions to disease course in youth at high-risk of psychosis

10/01/2013-9/30/2015

P.I. Jessica Bernard, Ph.D.

Mentor: Vijay Mittal, Ph.D.

Co-Mentor: Marie Banich, Jessica Turner

Emotional Processing Deficits during the High-Risk Period, A functional imaging perspective
9/14-6/15

P.I.s Vijay Mittal, Andrea Pelletier (Student)

Funding from the University of Colorado Boulder

Frontal-Subcortical Functioning Abnormalities and Youth At-Risk for Psychosis

9/14-6/15

P.I.s Vijay Mittal, Randy O'Reilly, Derek Dean (Student)
Funding from the University of Colorado Boulder

Under Review

National Institute of Mental Health R21
Neurohabituation in ultra high-risk youth
Principal Investigators: Holly Earls
The Proposed Project Period: 2015-2017
Total Direct Costs: \$200,000
Co-Is: Vijay Mittal, Timothy Curran
Goal: To examine gamma band oscillations in a UHR group

National Institute of Mental Health R01
Markers of Cognitive Dysfunction and Risk for Psychosis: A Systems Approach
Principal Investigators: Marie Banich, Ph.D., Vijay A. Mittal, Ph.D.
The Proposed Project Period: 04/01/2014-05/01/2019
Total Direct Costs: \$2,272,396.00
CO-Is: Tor Wager, Ph.D., Mark Brown Ph.D.
Goal: Examine role of inhibitory system dysfunction and utilize novel machine learning approaches for understanding specific sub processes of verbal fluency and clinical course in youth at risk for psychosis

National Institute of Mental Health R01
Perceptual Processing Abnormalities and Vulnerability to Psychosis
Principal Investigator: Steve Silverstein, Ph.D.
Proposed Project Period: 7/15-6/20
Total Direct Costs: \$2,400,396.00
CO-Is: Vijay A. Mittal, Ph.D., Thomas Papatomas, M.D.
Goal: To examine perceptual impairments in the prodrome and in first-episode patients with psychosis utilizing the hallow mask paradigm.

National Institute of Mental Health R01
Valid screening for those at risk for psychosis: A multi-site instrument development study
Principal Investigator: Vijay Mittal, Lauren Ellman, Jason Schiffman
Proposed Project Period: 7/15-6/20
Total Direct Costs: \$2,500,000.00
CO-Is: Lauren Alloy
Goal: To develop a screener for indicating psychosis risk for college aged populations

National Research Service Award (NRSA)
Computational Modeling of Cerebellar Function in Psychosis
P.I. Derek Dean
Mentor: Vijay Mittal, Ph.D.

National Institute of Mental Health BD2K
Novel sharing approaches for imaging data
P.I. Vincent Calhoun

Goals: Psychosis Core

NARSAD: Young Investigator Award

Neural mechanisms underlying the voluntary control over goal-directed behavior in UHR adolescents

Total Direct Costs: \$60,000

P.I. Joseph Orr, Ph.D.

In Preparation

National Institute of Mental Health R21

Prediction of post-partum psychosis: a population based study

PIs Vijay Mittal and Sona Dimidjian

Total Direct Cost: \$275,000

Project Period (under preparation)

Goal: To utilize Kaiser Health datasets from 6 cities to examine predictors of postpartum psychosis.

Completed Research Support

Intermountain Neuroimaging Consortium (INC) Pilot Award

Default Mode Network Hyperconnectivity Across the Schizophrenia Spectrum

PI: Mittal and Turner

Project Period: 2012-2013

Goal: To examine potential hyperconnectivity patterns across the psychosis spectrum

National Institute of Health (NIH) Clinical Research Loan Repayment Award (2009-2012)

Dyskinetic Movements and Glucocorticoids in Adolescents At-Risk for Psychosis

Principal Investigator: Vijay A. Mittal, Ph.D.

NIH- L30 MH087258:01-02

Goal: This project is designed to investigate the roles between stress reactivity, reciprocal dopamine activation, and potentially consequent neuromotor dysfunction

National Institute of Mental Health (NIMH) Career Development Award: 08/01/07-07/31/12

The Neurobiological Basis of Prodromal States and Psychosis in Adolescence

Principal Investigator: Melita Daley, M.D.

NIMH 5K23MH79028-3

Goal: Longitudinal ¹H MRSI/MRI study of the brain in prodromal psychosis and schizophrenia in adolescents and young adults.

Role: Biostatistician, 2.5 months

National Alliance for Research in Schizophrenia and Affective Disorders (NARSAD). Young Investigator Award 07/01/07 – 06/30/09

The Neurobiological Basis of Early Phases of Schizophrenia and Bipolar Disorder in Adolescence

Principal Investigator: Melita Daley, M.D.

Goal: Longitudinal structural MRI study of the medial temporal lobe, basal ganglia structures and the prefrontal cortex in adolescents and young adults with schizophrenia and bipolar disorder.

Role: Biostatistician, 3 months.

National Institute of Mental Health (NIMH) National Research Service Award (NRSA)/Training

Principal Investigator: Keith Nuechterlein, Ph.D.

NIMH NRSA T32 MH14584-33
University of California Los Angeles, Department of Psychology
Role: Postdoctoral Fellow

National Science Foundation (NSF) GK12 Program
Problems in Science in Math and Science (PRISM)
Awards #DGE0536941 and #DGE0231900
Principal Investigator: Patricia Marsteller, Ph.D.
Role: Research Fellow, Teacher

Emory University Travel Award (2003; 2004; 2005; 2006; 2007)
Emory University Department of Psychology
Role: Attending Academic Conferences to Present Poster Presentations

Emory University Scholarships (2003-2008)
Principal Investigator (Mentor): Elaine F. Walker, Ph.D.
Role: Graduate Student in Clinical Psychology Research Program

Emory University, Psychological Center, Research Award, 2006-2007
Principal Investigator: Elaine Walker, Ph.D.
Role: Partial Funding for Dissertation Research Provided by Emory Clinical Therapy Center

Select Research Presentations:

Conference and Academic Symposia

Invited Presentation: Clinical Science and Translational Approaches to the Schizophrenia
Prodrome
Clinical Psychological Science, 2015
Vanderbilt University

Invited Presentation: Translational Clinical Science in the Psychosis Risk Period
Department of Psychology, 2014
Northwestern University

Symposium Presentation: Verbal and nonverbal communication deficits in schizophrenia
European Congress of Schizophrenia Research
Berne, Germany
2015
Speakers: Mittal, Walther, Kircher, Straube

Symposium Presentation: Translational Clinical Science in the Psychosis Prodrome
Early Career Symposium
Society for Research in Psychopathology, 2014
Evanston, IL
Speakers: Mittal, Hicks, Sellbom, LeMoult

Invited Colloquium: Translational Science in the Psychosis Prodrome

Emory University
Atlanta, GA, 2014
Speaker: Mittal

Invited Presentation: Paper Session: Schizophrenia
Society for Research in Psychopathology (SRP)
Oakland, CA 2013
Speakers: Levy, Orr, Wynn, Keane, Lewandowski
Chair: Vijay Mittal

Symposium: Mittal, V.A. Movement Abnormalities Across the Psychosis Continuum, A Tribute to Elaine Walker.
Association for Psychological Science (APS)
Washington DC, 2013
Co-Presenters: Michael Green, M.D., Deborah Walder, Ph.D., Elaine Walker, Ph.D.

Invited Presentation: Frontal subcortical dysfunction and the progression of dyskinesia in adolescents at ultra-high risk for psychosis.
Mind Research Network (MRN)
New Mexico, 2013

Invited Talk: Vulnerability characteristics, the motor system, and high-risk youth
Eastern Psychological Association (EPA)
New York, 2013

Symposium: Spontaneous Dyskinesia Across a Psychosis Continuum
International Early Psychosis Association (IEPA)
San Francisco, 2012
Speakers: Vijay Mittal, Danny Koren, Alana Scully, Larry Seidman, Helene Barder, Christine Hooker
Chair: Larry Seidman, Barbara Cornblatt

Invited Presentation: White-matter correlates of abnormal motor behaviors in psychosis
University of Indiana Bloomington (2012)
Clinical Science Colloquium
Hosts: William Hetrick, Jerilyn Kent

Inter-mountain Neuroimaging Consortium Talk: DMN hyperconnectivity in the prodrome and schizophrenia: a Cross sectional approach
Boulder Colorado, 2012
Host: INC- Banich

Grand Rounds: Movement Abnormalities and Prodromal Research
University of Colorado Denver, Anschutz Medical Campus
Denver, Colorado, 2011
Host: Robert Freedman, MD (Chair of Psychiatry)

Symposium: Brains Award Address: Adolescent neural development and risk for psychosis
Society for Neuroscience

Washington DC, 2011

Chairs: Thomas Insel, Kathleen Anderson

Symposium. Neurodevelopmental precursors to schizophrenia: Evidence of risk from womb to adolescence.

Society for Research in Psychopathology

Seattle, Washington, 2010

Co-presenters: Elaine Walker, Vijay A. Mittal, Lauren Ellman, Scott Schobel

Symposium. Correlates of prodromal symptom progression in youth at-risk for psychosis.

Schizophrenia International Research Society (SIRS),

Florence, Italy.

Co-presenters: Elaine Walker, Ph.D. Vijay A. Mittal, Ph.D., Michael Compton, MD.

Invited Speaker. Biomarkers and Adolescent Maturation in the Prodromal Stage.

Psychology Department Colloquia,

State University of New York, Stony Brook (November 2009), University of Iowa (January 2010),

University of South Carolina, (November 2009), University of Colorado Boulder (Feb, 2009),

University of Missouri (December, 2009)

Invited Speaker. Community based mental health and early psychosis

29th Nordic Congress of Psychiatry

Stockholm Sweden, (September, 2009)

Speakers: Vijay A Mittal, Erik Simonsen, Lena Flyckt

Chair: Nils Linefors, Christina Hultman

Invited Speaker for Live teleconference and web-cast for Schizophrenia E-Journal Club.

Longitudinal progression of movement abnormalities in relation to psychotic symptoms in adolescents at high risk for schizophrenia.

Live teleconference and web-cast for Schizophrenia E-Journal Club (August, 2008).

Network for Continuing Medical Education (NCME):

Moderator: Dr. John M. Kane

Clinical Neuroscience Rounds. Putative markers of biological risk and schizophrenia.

University of California Los Angeles, 2008

Department of Psychiatry and Biobehavioral Sciences

Instructors: Melita Daley, MD, Tyrone Cannon, Ph.D.

Schizophrenia Scholar Consortium. Motor function and psychotic disorders.

University of California Los Angeles, 2008

Department of Psychology.

Instructor: Constance Hammen Ph.D., Cindy Yee-Bradbury, Ph.D., Keith Nuechterlein, Ph.D.

Community Lectures

Community Open House: Behavioral Health Resources for Families

University of Colorado

ADAPT services and Schizophrenia

Boulder, CO 2013

Co-Presenters: Chhabildas, Schneck, Dimidjian, Hepburn, Taylor

Symposium: Your Brain on Art: The Brain and Music

Boulder Museum of Contemporary Art (BMoCA)

Boulder Colorado, 2013

Co-Presenters: Vijay Mittal, Scott O'Neil, Otis Taylor

Community Awareness of Ultra High-Risk Syndromes for Schizophrenia

Boulder High School

Fairview High School

April 13

Symposium: Your Brain on Art: Neuroaesthetics

Boulder Museum of Contemporary Art (BMoCA)

Boulder Colorado, 2012

Co-Presenters: Vijay Mittal, William Stoehr, Lew Harvey

Invited Talk: Early recognition of a schizophrenia risk-syndrome

Denver Health School Based Health Centers (school based mental health therapists in DPS)

Denver, Colorado, 2012

Host: Jenifer Koch

Invited Talk: The schizophrenia prodrome and CU Boulder's ADAPT program

Denver Health, Adolescent in-patient unit

Denver, Colorado, 2011

Host: Jonathan Kusumi (Director of Inpatient Unit)

Invited Talk: The schizophrenia Prodrome and CU Boulder's ADAPT program

Boulder Community Hospital, Adult in-patient unit

Boulder, Colorado, 2011

Host: Peggy Caspari (Director of Inpatient Unit)

Symposium: Your Brain on Art: The neuroscience of improvisation

Boulder Museum of Contemporary Art (BMoCA)

Boulder Colorado, 2011

Co-Presenters: Vijay Mittal, William Stoehr, Richard Cummings, Robert Sher-Machherndl

Other

Staff Research Talk- The ADAPT lab Research Program

University of Colorado Boulder

January 2013

Conference Participation:

2014 Society for Research in Psychopathology, Chicago

2013 Society for Research in Psychopathology, Oakland

2013 Association for Psychological Science, Washington D.C.

2013 International Congress for Schizophrenia Research, Orlando Florida
-International Prodromal Research Network, (IPRN)

2013	Eastern Psychological Association, New York
2012	International Association for Early Psychosis (IEPA), San Francisco
2012	Society for Research in Psychopathology, Ann Arbor
2012	Society for Biological Psychiatry, Philadelphia
2011	Society for Neuroscience, Washington DC
2011	International Congress for Schizophrenia Research, Colorado Springs -International Prodromal Research Network, (IPRN)
2011	Society for Research in Psychopathology, Boston
2010	Society for Research in Psychopathology, Seattle, Washington
2009	29 th Nordic Congress of Psychiatry, Stockholm, Sweden
2009	Society for Research in Psychopathology, Minneapolis, Minnesota
2009	International Congress for Schizophrenia Research, San Diego, California -International Prodromal Research Network, (IPRN)
2008	Society for Research in Psychopathology, Pittsburg, Pennsylvania
2007	Society for Research in Psychopathology, Iowa City, Iowa.
2006	Society for Research in Psychopathology, San Diego, California
2005	Georgia Psychological Association; Atlanta, Georgia
2004	Society for Research in Psychopathology; St. Louis, Missouri
2003	Association for Psychological Science; Atlanta, Georgia
2003	Society for Research in Psychopathology; Montreal, Canada

Abstracts from Conference Poster Presentations:

Mittal V.A., & Dean (2015). Novel Technologies to Investigate Motor Behavior in the Psychosis Spectrum. Poster Symposium. International Congress of Schizophrenia Research, Colorado Springs

*Bernard, J. Mittal VA (2015). Cerebello-cortical resting state connectivity and symptom course in individuals at ultra high-risk for psychosis. HBM, Oahu HA

* Mittal, V.A. (2015) Exercise-based remediation for youth at ultra high-risk for psychosis. International Congress of Schizophrenia Research

*Bernard, J.A., & Mittal, V.A. (2014). Dysfunctional activation of the cerebellum in schizophrenia: a functional neuroimaging meta-analysis. The Twentieth Annual Meeting of the Organization for Human Brain Mapping, Hamburg, Germany.

*Bernard, J., Mittal, V.A. (2014). Cerebello-thalamo-cortical Tractography In Individuals At Ultra High-risk For Psychosis. Poster presented in Society for Research in Psychopathology, Evanston, IL.

*Carol, E., Mittal, V.A. (2014). Self-reported Cannabis Use Is Inconsistent With The Results From Drug-screening In Youth At Ultra High-risk For Psychosis In Colorado. Poster presented in Society for Research in Psychopathology, Evanston, IL.

*Dean, D.J., Bernard, J., Orr, J., Gupta, T., Pelletier-Baldelli, A., Carol, E., Mittal, V.A. (2014). Psychosocial Distress And Increased Cortico-striatal Connectivity In Youth At

Risk For Psychosis. Poster presented in Society for Research in Psychopathology, Evanston, IL.

- *Gupta, T., Ives, L., Silverstien, S.M., Papathomas, T.V., Keane, B.P., Mittal, V.A. (2014). Dysfunctional Top-down Modulation Of Incoming Sensory Information In Youth At Ultra High-risk For Psychosis: Evidence From The Hollow Mask Illusion. Poster presented in Society for Research in Psychopathology, Evanston, IL.
- *Millman, Z.B., Gupta, T., Bernard, J., Mittal, V.A. (2014). Gesture-speech Mismatch Reflects Cognitive Instability And Aberrant Neural Connectivity Among Youth At High Risk For Psychosis. Poster presented in Society for Research in Psychopathology, Evanston, IL.
- *Orr, J., Mittal, V.A. (2014). Examining The Neural Correlates Of Disease Insight In Adolescents At Risk For Psychosis. Poster presented in Society for Research in Psychopathology, Evanston, IL.
- *Pelletier-Baldelli, A., Bernard, J., Mittal, V.A. (2014). Resting State Functional Connectivity Associations With Facial Emotion Recognition, Social Functioning And Psychotic Symptoms In Youth At Ultra High-risk For Psychosis. Poster presented in Society for Research in Psychopathology, Evanston, IL.
- * Pelletier-Baldelli A., Mittal., V.A. (2014) White matter integrity as a predictor of social anhedonia in youth at ultra high-risk for psychosis. Social and Affective Neuroscience Society, Denver,
- Frank, G., Schott, ME., Mittal., V A., (2013) Taste reward circuitry related brain structures characterize ill and recovered anorexia nervosa and bulimia nervosa, Biological Psychiatry, 73(9), 90S-91S. San Francisco
- *Bernard, JA., Mittal, V (2013) White Matter of the Middle and Superior Cerebellar Peduncles and Symptom Severity in Individuals at Ultra High-Risk of Psychosis. Society for Research in Psychopathology, Oakland, California
- *Dean, D. Mittal, V (2013) Handwriting Analysis reveals Spontaneous Dyskinesias in Youth at Ultra-High Risk for Psychosis, Society for Research in Psychopathology, Oakland, California
- *Pelletier, A., Mittal, V (2013) MVPA analyses highlight novel early identification strategy for the schizophrenia high-risk period, Society for Research in Psychopathology, Oakland, California
- *Orr, J. Mittal, V (2013) Volumetric differences related to positive and negative symptoms in youth at high risk for psychosis. Society for Research in Psychopathology, Oakland, California
- Mittal, V.A. (2013). Elaine Walker's Contribution to Our Understanding of Neurodevelopment and Schizophrenia. Association for Psychological Science, Washington DC

- Mittal, V.A. (2013). Vulnerability characteristics, the motor system, and high-risk youth. Eastern Psychological Association. New York.
- Mittal, V.A. & Orr, J. (2013), Structural and Connective Tract Correlates of Spontaneous Movement Abnormalities in High Risk Youth, International Congress of Schizophrenia Research, *Schizophrenia Bulletin*, 39(1)S189.
- Mittal, V.A. & Caliguri M. (2012), Spontaneous Dyskinesias and Non-Clinical Psychosis: A Continuum of Vulnerability: International Association for Early Psychosis. *Early Intervention in Psychiatry*, 6(1):25
- *Dean, D.J. & Mittal, V.A. (2012, October). Non-Declarative Learning and Cerebellar Morphology in Youth at-risk for psychosis. Society for Research in Psychopathology, Ann Arbor, MI.
- *Lunsford-Avery, J.R. & Mittal, V.A. (2012, October). Sleep disturbance in youth at high risk for psychosis. Society for Research in Psychopathology, Ann Arbor, MI.
- *Pelletier, AL, Mittal, V.A., (2012, October). Neural correlates of autistic traits and emotion perception in youth at high-risk for psychosis. Society for Research in Psychopathology, Ann Arbor, MI.
- Fleisher, C. Jimenez, A. Daley M., Doz-Abadia, M. Mittal, V. Cannon, T.D. (2012). Hippocampal volume deficits predict declines in social functioning for high-risk youth one year later. American Academy of Child and Adolescent Psychiatry, San Francisco
- *Pelletier, A.L., Dean, D.J. Mittal, V.A. (2012) Minor Physical Anomalies and Early Prenatal Development in Youth Vulnerable for Psychotic Disorders. The Rocky Mountain Neuroscience Conference, Denver.
- *Pelletier, A., Dean, D. Wadjtach, J., Hauge, E., Mittal, V. 2012. MPAs and Vulnerability in Prodrome. Rocky Mountain Regional Neuroscience Group, Denver.
- *Case, C., Mittal, V.A., Walker, (2012). Minor physical Anomalies and prodromal youth. Society for Biological Psychiatry, Philadelphia
- Pelletier, A., Dean, D.J., & Mittal, V.A., (2011). Developmental dysfunction, striatal dysfunction, and psychotic-like experiences in adolescents and young adults. Society for Research in Psychopathology, Boston
- Mittal, V.A., Jalbrzikowski, M. Daley, M., Bearden, C.E., Cannon, T. D (2011). Abnormal movements and the longitudinal course of social and role functioning in adolescents at risk for psychosis. *International Congress on Schizophrenia Research; Schizophrenia Bulletin* 37(1), p. 275
- Mittal, V. A. (2010). Basal ganglia pathology and adolescents at-risk for schizophrenia. Society

for Research in Psychopathology, Seattle.

- Walker, E. F., Mittal, V. A., Compton, M. (2010). Correlates of prodromal symptom progression in youth at risk for psychosis, *Schizophrenia International Research Society*.
- Daley, M., Mittal, V.A., Cannon, T.D., (2010) Basal ganglia volumes and hyperkinetic movements in the schizophrenia prodrome. *American Academy of Child and Adolescent Psychiatry*.
- Mittal, V. A. (2009). Early psychosis prediction, *Nordic Congress of Psychiatry*.
- Mittal, V. A., Walker, E.F., Laskowski, C. M., Simone, A., & Cannon T. D. (2009). Markers of basal ganglia and conversion: Neurocognitive deficits, dyskinesia, and individuals at high-risk for psychosis. *Society for Research in Psychopathology, Minneapolis*.
- Doud, T. Mittal, V., Daley, M., Bearden, C. E., van Erp, T. G. M., Thompson, P. M., O'Neill, J., Cannon, T.D. (2009). Amygdala volumes in post traumatic stress and psychosis. *Amygdala, Trauma, & Stress Conference*.
- Daley, M. & Mittal, V., van Erp, T. G., O'Neill J., Bearden, C. Loesch, I., Altshuler, L. F. Cannon., T. D. (2009). Medial temporal lobe volumes in early onset schizophrenia and Bipolar Disorder. *American Academy of Child and Adolescent Psychiatry*.
- Mittal, V. A. & Cannon, T. D. (2009). Obstetric complications: a putative marker for cumulative risk among prodromal individuals. *International Congress on Schizophrenia Research*.
- Mittal, V. A. & Cannon, T. D. (2008). Obstetric complications and vulnerability for psychosis. *Society for Research in Psychopathology*.
- Mittal, V. A., Libby, A., & Walker, E. F. (2007). Movement abnormalities predict conversion among adolescents at high-risk for schizophrenia. *Society for Research in Psychopathology*.
- Simeonova, D., Hamann, S. B., Tessner, K. D., Mittal., V.A. & Walker, E.F. (2007). Effects of acute cortisol administration on visual memory encoding: An event-related fMRI investigation. *Society for Research in Psychopathology*.
- Walder, D. J., Mittal, V. A., McMillan, A. Walker, E. F. (2007). Sex Differences in neurocognitive prediction of conversion to Axis I psychosis in a sample of at-risk youth. *Society for Research in Psychopathology*.
- Tessner, K. Dhruv, S, Mittal, V. A. & Walker, (2006). Influence of life events, daily stressors, and cortisol levels on symptoms severity in adolescents with schizotypal personality disorder. *Society for Research in Psychopathology*.
- Simeonova, D. I., Attalla, A., Mittal, V. A., Tessner, K., & Walker, E. F. (2006). The role of verbal memory and sustained attention as potential vulnerability markers for bipolar

disorder. *Society for Research in Psychopathology*.

Mittal, V. A., Dhruv, S. & Walker, E. F. (2006). Movement abnormalities predict the longitudinal development of the schizophrenia prodrome. *Society for Research in Psychopathology*.

Mittal, V. A. & Walker E. F. (2006). Emergent suicidality in adolescents with depression, OCD, and anxiety. *Georgia Psychological Association*.

Mittal, V. A., Walker, E. F. & Trotzman, H. (2004). Gesture behavior in unmedicated schizotypal adolescents. *Society for Research in Psychopathology*.

Bollini, A., Walker, E. F. & Mittal, V. A. (2003). Course of cognitive functioning in schizophrenia and the relation to later brain morphology. *Society for Research in Psychopathology*.

Mittal Laboratory Graduate Students Masters and Dissertation Projects:

2014- Masters Advisor for Derek Dean (Mentor: Vijay Mittal): Cerebellar and Striatal Contributions to Velocity Scaling Deficits in Youth at Ultra High-Risk for Psychosis: A Resting-State Approach

2014- Masters Advisor for Emily Carol (Mentor: Vijay Mittal): Expressed Emotion, Self Schema and Cortisol Levels in Youth at High-Risk for Psychosis

2012/2013- Comprehensive Exam Committee/Dissertation for Jessica Lunsford (Mentor: Vijay Mittal): Sleep Dysfunction in Adolescents at High-Risk for Psychosis

2012/2013- Masters Advisor for Andrea Pelletier (Mentor: Vijay Mittal): The Neural Basis of Social Processing Impairments in Adolescents at High Clinical Risk for Psychotic Disorders

Current Positions Mittal Lab Students:

Joseph Orr (Postdoctoral Scholar in my lab 2012-2015): Assistant Professor, Texas A & M, Department of Psychology

Jessica Bernard (Postdoctoral Scholar in my lab 2013-2015): Assistant Professor, Texas A & M, Department of Psychology

Jessica Lunsford-Avery (Graduate Student in my lab 2011-13): Postdoctoral Scholar, Duke University, Department of Psychology

Experience as a Research Mentor:

2011-present

University of Colorado at Boulder, Department of Psychology and Neuroscience.

Mentor of graduate students examining the relationship between social processing deficits and abnormalities in brain development (Andrea Pelletier: Masters project/Dissertation), effects of stressful familial environment on self esteem and biological stress response (Emily Carol, Masters Project), the role of disordered sleep in the etiology of schizophrenia (Jessica Lunsford-Avery: Dissertation project), and cognitive correlates of cerebellar

abnormalities (Derek Dean: Masters project) in youth at-risk for psychotic disorders.

2011-present

University of Colorado at Boulder, Department of Psychology and Neuroscience.

Mentor of Postdoctoral Students utilizing neuroimaging and psychophysiological approaches for examining cerebellar dysfunction (Jessica Bernard, developmental neuroscience), executive function abnormalities (Joseph Orr, cognitive neuroscience), and affective processing (Holly Earls, affective neuroscience) in psychosis.

2011-present

University of Colorado at Boulder, Department of Psychology and Neuroscience.

Supervision of 11 independent projects examining psychosis symptoms and makers of vulnerability to psychosis in the general population. This involves examining movement abnormalities, deficits in emotional recognition, and markers of early developmental upset (dermatoglyphic asymmetries) to explore an empirical approach to understanding dimensionality in the schizophrenia spectrum. The supervision has led to a student authorship in posters and peer-reviewed manuscripts.

2010

University of Colorado at Boulder, Department of Psychology and Neuroscience.

Supervision of undergraduate in an independent project examining Internet behavior in relation to depressive and anxious symptoms over time. The supervision has led to a student authorship in a manuscript in preparation.

2009

University of California Los Angeles, Department of Psychiatry and Biobehavioral Sciences.

Supervision of undergraduates in a project examining neuropsychological pilot data: The collaboration resulted in an authorship on a presentation at a professional conference (See C. Lakowsky).

2008-Present

University of California Los Angeles, Department of Psychology.

Supervising two Masters level imaging technicians in a project designed to integrate Magnetic Resonance Imaging (MRI) into a longitudinal study of adolescents at high-risk for developing schizophrenia and a separate ongoing study examining bipolar disorder sub-types. The focus of the mentorship is to foster research skills, helping these students to bridge the gap between a highly specialized technical background, and implementation of this knowledge in a clinical research setting.

2009

University of California Los Angeles, Department of Psychiatry and Biobehavioral Sciences

Mentoring Psy.D. student in research project examining amygdala volumes in a subtype of prodromal individuals who had also been diagnosed with trauma (PTSD). I was responsible for mentoring my colleague throughout the

process of choosing a topic, designing a study, conducting statistics, interpreting results, and preparing this information for presentation. The subsequent poster was accepted for presentation at an international conference (see. T. Doud).

2008- Present

University of California Los Angeles, Department of Psychology

Mentorship of four undergraduate students conducting movement coding in the laboratory of Tyrone Cannon, Ph.D. In addition to developing mastery of advanced research methodologies, the students are learning to conduct literature reviews and explore data with statistical software.

2007- 2008

University of California Los Angeles, Department of Psychiatry and Biobehavioral Sciences.

Supervision of B.S. level student in movement abnormality project and poster preparation: The collaboration resulted in an authorship on a presentation at a professional conference (See A. Libby).

2004 – 2007

Emory University

Supervision and training of undergraduates honor students in gesture, and movement abnormality coding: The yielded several authorships in journal publications for the undergraduates (See A. McMillan; Z. Delawalla; M. Saczawa; E. Murphy).

2004 – 2006

Emory University

Supervision of Masters level graduate students in statistical methodology, literature review, and manuscript preparation: yielded several authorships in journal publications for the students (See D. Simeonova; M. Esterberg; H. Trottman).

Professional Service

Editorial Service

2014-Present *Journal of Abnormal Psychology*, Consulting Editor

Professional Societies

2014-Present Diversity Committee, Society for Research in Psychopathology

2013-2017 Conference Co-Host (with June Gruber), Society for Research in Psychopathology, Boulder CO (2017)

2014-Present Smadar Levin Award Committee, Society for Research in Psychopathology

2012-2013 Conference Program Committee, Society for Research in Psychopathology (SRP)

2011-Present Newsletter Coordinator. Society for Research in Psychopathology (SRP)

National Organizations

2014-Present National Alliance for the Mentally Ill (NAMI) on Campus Faculty Advisor for CU Boulder

University of Colorado Boulder

2014 Search Committee, Clinical Administrative Staff

2014 Search Committee, Cognitive Neuroscience Faculty

2013-Present Strategic Planning Committee

2013-Present Space Committee

2012-Present Undergraduate Honors Program Committee

2012-Present Search Committee, Clinical Faculty

2012 Graduate education workgroup.

2012 Undergraduate education workgroup
 -Subgroup for Research Methods and Statistics

2011 Faculty Meeting Secretary

Committees:

Undergraduate Honor's Projects

2013- Amanda Walker (Mentor: Mark Whisman): Asian Americans and Latino Americans: Interracial Couple Functioning in a National Sample

2013- Joseph Malicke (Mentor: Bernadette Park): Gender Ideology and Evaluations of a Male versus Female Target: Effects of Emphasizing versus Downplaying Gender Differences

2013- Ariel Jensen (Mentor: Yuko Munakata): Relationship between BDNF genotype, hippocampus volume, and anxiety

2013- Honors Committee for Roxanne Ross: Don't worry, it's not real: How humor and violation severity varies with hypothetical psychological distance

2013- Jeff Kamp (Mentor: Louise Silvern): Perceived Social Support and Individual Differences in Childhood Traumatic Grief

2013- Honors Committee for Emmie Matsuno: Attitude Extremity and Party Identification Strength on Perceived Polarization

2013- Ross Kaslow (Mentor Angela Bryan): Cognition and Stress between Groups of Drinkers and amounts of Exercise

2012- Tess Adams (Mentor: Matthew Keller): Judging a Book By Its Cover: Are First Impressions Accurate?

Masters Defenses

2014- Briana Robustelli (Whisman) Marital, Family, and Friend Relationship Quality: Associations with Mental and Physical Health Outcomes

2014- Daniel Leopold (Willcutt) Evaluating the construct validity of adult ADHD and SCT among college students

2013- Hollis Karoly (mentor: Hutchinson) Preliminary functional MRI results from a combined stop-signal/alcohol-cue task

2013- Rachel Thayer (mentor: Hutchinson) Alcohol and marijuana use interact with associations between structural and functional connectivity among high-risk adolescents

Comprehensive Exams

2015- Coral Cabrera-Montalvo (Mentor: J. Stitzel) Evaluating schizophrenia related behaviors in mice with the CHRNA5 D398N human polymorphism

2014- Christopher Hawkey (Mentor: Miklowitz)

2014- Daniel Johnson (Mentors: Soo Rhee, Mark Whisman)

2014- Mikaela Kinnear (Mentor: Erick Willcutt)

2014- Ashley Smith (Mentor: Soo Rhee)

2013- Ryan Newsom (Mentor: Serge Campeau)

2013- Sarah Wu (Mentor: Erick Willcutt)

2012- Jenifer Felder (Mentor: Sona Dimidjian)

2012- Chad Osterlund (Mentor: Robert Spencer)

Student Progress

2014- Rachel Thayer (Mentor: Hutchinson)

2014-Daniel Leopold (Mentor: Willcutt)

2014- Hollis Karoly (Mentor: Hutchinson)

Dissertation Projects

2014 Chris Hawkey (Mentor: Miklowitz): Risk factors for suicide in pediatric bipolar disorder.

2014 E. Woodruff (Spencer)

2014 Coral J. Cabrera-Montaivo

2014- Daniel Johnson (Mentors: Soo Rhee, Mark Whisman): Rumination as a transdiagnostic risk factor for psychopathology

2014- Mikaela Kinnear (Mentor: Erick Willcutt): Social functioning in DSM-IV Attention-Deficit/Hyperactivity Disorder: A multi-dimensional examination of adolescents and young adults

2014- Ashley Smith (Mentor: Soo Rhee) Longitudinal examination of genetic and environmental influences on the association between temperament and self-restraint in toddlerhood and executive function abilities in late adolescence

2013: Chad Osterlund (Mentor: Bob Spencer) Negative feedback control over the hypothalamic-pituitary-adrenal axis response to stress is a function of temporal, spatial and physiological actions of corticosterone

2013- Ryan Newsom (Mentor: Serge Campeau): Endogenous Cannabinoid signaling and the habituation to repeated stress.

2013- Sarah Wu (Mentor: Erick Willcutt): Measurement and Classification Issues in Mathematics and Reading Disorders.

2012- Jenifer Felder (Mentor: Sona Dimidjian): Targeting Barriers to Care for Pregnant Women at Risk for Depression: Examining The Role of Stigma and the Feasibility of a Web-Based Depression Prevention Program

Teaching Experience

Courses

- 2014 *University of Colorado Boulder, Department of Psychology and Neuroscience, Adult Psychopathology 5433* (Fall Semester 3 credits). A graduate course designed to provide in-depth coverage into the pathogenesis and clinical presentation of mental illness. Students work closely with Dr. Mittal to complete a “letter to the editor” writing assignment in which they address current issues relating to a respective research domain and learn about journal writing and peer review.
- 2014 *University of Colorado Boulder, Department of Psychology and Neuroscience, Abnormal Psychology 4303* (Spring Semester 3 credits). A large undergraduate course (150 students) designed to cover a variety of the major psychiatric disorders, causes, and empirically supported treatments.
- 2012 *University of Colorado Boulder, Department of Psychology and Neuroscience, Adult Psychopathology 5433* (Fall Semester 3 credits). A graduate course designed to provide in-depth coverage into the pathogenesis and clinical presentation of mental illness.

- 2011 *University of Colorado Boulder, Department of Psychology and Neuroscience, Adult Psychopathology 5433* (Fall Semester 3 credits). A graduate course designed to provide in-depth coverage into the pathogenesis and clinical presentation of mental illness. Students work closely with Dr. Mittal to complete a “letter to the editor” writing assignment in which they address current issues relating to a respective research domain and learn about journal writing and peer review- the assignment yielded a total of 7 peer review publications in journals such as Biological Psychiatry, Schizophrenia Research and Addiction.
- 2010 *University of Colorado Boulder, Department of Psychology and Neuroscience, Psychopathology 3313* (Fall Semester, 4 credits): A large undergraduate course designed to cover a variety of psychiatric disorders/treatments in greater-depth than a prototypical Abnormal Psychology seminar. The course also includes weekly lab section and focuses on in-class exercise and discussion.
- 2011 *University of Colorado Boulder, Department of Psychology and Neuroscience, Psychopathology 3313* (Spring Semester, 4 credits): A large undergraduate course designed to cover a variety of psychiatric disorders/treatments in greater-depth than a prototypical Abnormal Psychology seminar. The course also includes weekly lab section and focuses on in-class exercise and discussion.
- 2009 *University of California Los Angeles, Department of Psychology, Advanced Research Seminar, PSYC 199 I & II:* In this series, advanced undergraduate students work closely with a teacher to design and develop individual research projects. The students are mentored throughout the process of conducting literature reviews, designing studies, analyzing data, and presenting research.
- 2008 *University of California Los Angeles, Department of Psychology, Undergraduate Research Seminar, PSYC 196:* A course designed to provide a small group of undergraduate students with intensive hands on research training and specialization within specific topics in clinical neuroscience. Students develop advanced skills (e.g., Magnetic Resonance Imaging ((MRI)): delineating structures; coding movements and nonverbal behavior).
- 2005 *Emory, Co-instructor – Research Methods:* Teaching a weekly lab in which students completed three major research projects and wrote a formal research paper for each project. I taught scientific writing in APA style and applications of research methodology techniques.
- 2004 *Emory University, Teaching Assistant – Statistics* –Designing tests, lectures, and running a weekly lab that involved teaching students to use a statistical package to complete assignments.

Guest Lectures

- 2014 *University of Colorado Boulder, Department of Psychology and Neuroscience*, lecture for Linda Watkins, Neuroscience Grand Round Series
- 2015 *University of Colorado Boulder, Department of Psychology and Neuroscience*, lecture for June Gruber, Human Emotion
- 2014 *University of Colorado Boulder, Department of Psychology and Neuroscience*, lecture for Tor Wager, Affective Neuroscience Guest Lecture (NRSC4015)
- 2013 *University of Colorado Boulder, Department of Psychology and Neuroscience*, lecture for Sam Strife, Internship and Careers in Psychology
- 2013 *University of Colorado Boulder, Department of Psychology and Neuroscience*, lecture for Sam Strife, Clinical Issues Survey
- 2013 *University of Colorado Boulder, Department of Psychology and Neuroscience*, Guest lecture for Kent Hutchinson, Abnormal Psychology (Spring Semester). Schizophrenia
- 2013 *University of Colorado Boulder, Department of Psychology and Neuroscience*, Guest lecture for Joanna Arch, Psychopathology (Spring Semester). Schizophrenia
- 2012 *University of Colorado Boulder, Department of Psychology and Neuroscience, Adult Psychotherapy 7673 (Fall Semester)*: Guest lecture for graduate class on pharmacological and psychosocial treatment for schizophrenia spectrum illness.
- 2012 *University of Colorado Boulder, Department of Psychology and Neuroscience, Developmental Psychopathology (Guest Lecture for Erik Willcutt, Ph.D.)*. Prenatal, child, and adolescent neurodevelopment.
- 2011 *University of Colorado Boulder, Department of Psychology and Neuroscience, Introduction to Neuroscience: (Spring Semester)* Two guest lectures for undergraduate class on etiological factors of psychosis for Dr. Ryan Bachtell.
- 2010 *University of Colorado Boulder, Department of Psychology and Neuroscience, Adult Psychotherapy 7673 (Fall Semester)*: Guest lecture for graduate class on pharmacological and psychosocial treatment for schizophrenia spectrum illness.

Related Training Experiences

- 2006 – 2007 *National Science Foundation (NSF) Fellowship: Problems and Research to Integrate Science and Mathematics (PRISM)*: An NSF funded program developed to apply active learning strategies in teaching science. The fellowship included bi-weekly lectures implementing science projects in a 7th grade science class in the metropolitan Atlanta area.

- 2006 *National Science Foundation (NSF)- Problems and Research to Integrate Science and Mathematics (PRISM):* An intensive summer course designed to help teachers develop active and problem based learning skills. The course was designed to teach PRISM participating faculty to develop courses, as well as learn the necessary skills to implement problem based learning.
- 2003-2004 *Emory University Teaching Practicum.* Weekly seminar with a faculty supervisor and other graduate teaching assistants surveying teaching strategies, active learning techniques, as well as addressed issues raised while teaching.
- 2003-2004 *Emory University Teaching Assistant Training and Teaching Opportunity Program (TATTO):* A training series to develop teaching skills through classroom instruction and supervised experience. Includes a three-day course on teaching, a semester-long Teaching Practicum course, supervised teaching experience, and guest lecturing for a large lecture class.

Clinical Experience

- 2014-present **Licensed Clinical Psychologist, Colorado**
- 2010-present **Clinical Supervisor**
- Graduate student supervision in comprehensive report writing, diagnostic interviews, and neuropsychological functioning assessment in adolescents with serious mental illness. I supervise between 3-5 students each semester.
- 2008-Present **Postdoctoral Clinical Training**
David Geffen School of Medicine, Department of Psychiatry and Biobehavioral Sciences, Semel Institute for Neuroscience & Human Behavior and the Resnick Neuropsychiatric Hospital:
University of California Los Angeles
Supervisors: Carrie Bearden, Ph.D. Melita Daley, M.D., Tyrone Cannon, Ph.D.
Description: Advanced Clinical Diagnosis and Treatment of Serious Mental Disorders.
- 2007 - 2008 **Clinical Psychology Internship**
David Geffen School of Medicine, Department of Psychiatry and Biobehavioral Sciences, Semel Institute for Neuroscience & Human Behavior and the Resnick Neuropsychiatric Hospital:
University of California Los Angeles
Supervisors: Tyrone Cannon, Ph.D., Carrie Bearden, Ph.D., Mary O'Brien, Ph.D., Sandra de Silva, Ph.D. Cindy Pikus, Ph.D., David Rudnick, M.D.
Description: Predoctoral Clinical Psychology Internship: Adolescent Serious Mental Illness Track; Adult Eating Disorder Group therapy
- 2008 **Supervision**
Supervision and mentorship of Masters, Psy.D. and Ph.D. level externs and interns at UCLA, NPI in a case management and clinical diagnostic

assessment, focusing on adolescent and serious mental health issues.

- 2006 - 2007* **Treatment Team Practicum**
Inpatient Unit, Department of Veterans Affairs Hospital, Atlanta
Supervisor: Ericka Duncan, M.D.
Description: Working with a multidisciplinary treatment team composed of a psychiatrist, pharmacologist, drug rehabilitation counselor, and a social worker. The team is charged with interviewing patients and then working to devise, coordinate, and implement clinical treatment and long-term care. The population consisted of individuals with severe psychopathology, (predominately schizophrenia, schizoaffective, PTSD and bipolar and major depressive disorders).
- 2002 - 2007* **Intern-Therapist Practicum**
Emory University Psychological Center, Emory University
Supervisors: Cynthia Messina Ph.D., Elaine Walker Ph.D., David Freides, Ph.D., Ann Abramowitz, Ph.D., Regina Pyke, Ph.D.
Description: Conducting cognitive behavioral therapy (CBT), interpersonal therapy, and emotionally focused therapy in a community outpatient clinic.
- 2002 – 2007* **Psychological and Neuropsychological Testing Practicum**
Emory University Psychological Center, Emory University
Supervisor(s): Cynthia Messina Ph.D., Elaine Walker Ph.D., David Freides, Ph.D., Ph.D., Anne Abramowitz, Ph.D.
Description: Conducting, interpreting, and writing comprehensive assessments for child, adolescent and adult psychological and neuropsychological testing.
- 2002 - 2007* **Adolescent Development and Psychopathology Practicum**
Affiliated with Emory University
Supervisor: Elaine Walker, Ph.D.
Description: Conducted clinical diagnostic interviews, personality assessment, and neuropsychological testing with adolescents at-risk for psychopathology and their families.
- 2005 - 2007* **Adolescent and Adult Suicide Awareness Practicum**
Supervisor(s): Mark McCloud Ph.D., Cynthia Messina, Ph.D.
Description: Visited undergraduate classes at Emory University and facilitated the discussion of material compiled by the National Society for Suicide Awareness. The discussion was designed to increase awareness of suicide risk factors and inform students of the various pathways to care.
- 2005 - 2007* Mentorship of Masters level graduate students beginning therapy at Emory University.
- 2004 - 2007* Supervising pre-Masters level graduate students in psychological assessment.

Professional References

Elaine Walker, Ph.D.,
Professor, Department of Psychology
Emory University
Email: psyefw@emory.edu

Tyrone Cannon, Ph.D.
Professor, Department of Psychology and Psychiatry
Yale University
Email: Tyrone.Cannon@Yale.edu

William Hetrick, Ph.D.
Professor, Department of Psychological & Brain Science
Indiana University Bloomington
Email: whetrick@indiana.edu

Keith Nuechterlein, Ph.D.
Professor, Departments of Psychology and Psychiatry
University of California Los Angeles
Email: Keithn@ucla.edu