

Vijay Anand Mittal

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Northwestern University
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Major Professional Interests: schizophrenia; risk for psychosis; early identification and intervention; neurodevelopmental models; adolescence; biomarkers and digital phenotyping; motor abnormalities and related brain circuit pathology; cognitive and affective dysfunction in psychosis; stress biology and environmental stressors; dimensional models of psychopathology; transdiagnostic approaches; individualized medicine; assessment and task construction.

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*

Pre-doctoral Academic Honors

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

Honors and Recognitions

AT&T Research Chair, 2018-2021
Association for Psychological Science Fellow (APS) 2017
UC Davis ERP Boot-Camp Fellowship, 2017
Brain and Behavior Research Foundation, Independent Investigator, 2017
Early Career Award, Society for Research in Psychopathology (SRP), 2016
Early Career Impact, Federation of Associations in Behavioral and Brain Sciences (FABBS), 2016
Face of the Future Symposium Presenter, Society for Research in Psychopathology, 2014
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

Professional Associations

Society for Biological Psychiatry, 2016-present
Northwestern University Interdepartmental Neuroscience, 2016-present
Institute for Policy Research, Northwestern University, 2016-present
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

Employment

2021 – Present Professor
Department of Psychology
Department of Psychiatry (secondary)
Department of Medical Social Sciences (secondary)

Northwestern University

- 2018 – Present Associate Professor
AT&T Research Chair
Department of Psychology
Department of Psychiatry (secondary)
Department of Medical Social Sciences (secondary)
Northwestern University
- 2015 – 2018 Assistant Professor
Department of Psychology
Department of Psychiatry (secondary)
Department of Medical Social Sciences (secondary)
Northwestern University
- 2016 – Present Faculty Associate
Institute for Policy Research (IPR)
Northwestern University
- 2016 – Present Preceptor
Northwestern University Interdepartmental Neuroscience (NUIN)
Northwestern University
- 2017-Present Co-Director (with Molly Losh)
Institute for Innovations in Developmental Sciences (DevSci), Training Core
Northwestern University
- 2015-2019 Adjunct Professor
University of Colorado at Boulder
Department of Psychology and Neuroscience
- 2010 – 2015 Assistant Professor
University of Colorado at Boulder
Department of Psychology and Neuroscience
- 2010 – 2015 Faculty Member
University of Colorado at Boulder
Center for Neuroscience

Appointed Editorial Positions

Associate Editor:

2019-present *Journal of Psychopathology and Clinical Science* (formally *Journal of Abnormal Psychology*)

Review Editor:

2020-present *Schizophrenia Bulletin*

Consulting Editor:

2020-present *Psychological Review*
2014-2019 *Journal of Abnormal Psychology*
2017-2019 *Schizophrenia Bulletin*

Guest Editor:

Schizophrenia Research, Special Section (2020): Embracing heterogeneity creates new opportunities for understanding and treating those at clinical high-risk for psychosis (co-editor Jean Addington)
Schizophrenia Bulletin, Special Issue (2019): Motor Development Collection
Schizophrenia Research, Special Issue (2018): The biological stress system in schizophrenia (co-editor Elaine Walker)
Journal of Ethics in Mental Health, Special Issue (2018): Prevention and detection of serious mental illness: the Ethics of Prediction

Ad Hoc Reviewer:

Journal of the American Academy of Child and Adolescent Psychiatry
The Lancet Psychiatry
Schizophrenia Bulletin
Human Brain Mapping
Psychological Medicine
Journal of Abnormal Psychology
Cortex
Clinical Psychology Review
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
Biological Psychiatry: CNI
Journal of Psychiatric Research
Psychoneuroendocrinology
European Psychiatry
Comprehensive Psychiatry
Psychiatry Research: Neuroimaging
British Journal of Psychiatry
The Journal of Psychiatric Research
Acta Psychiatrica Scandinavica
Schizophrenia Research

Grant Review

2021-2025	NIMH APDA, Standing Panel
2020	NIMH APDA, ZRG1 BBBP-S 60 C
2019	NIMH Special Emphasis Panel- Neural basis of psychopathology, addiction and sleep disorders study section, ZRG1 BDCN J 02
2018	NIMH Special Emphasis Panel- Neural basis of psychopathology, addiction and sleep disorders study section, ZRG1 BDCN J 02
2018	NIMH Special Emphasis Panel- Career Development and Fellowships in Mental Health Services Panel, ZMH1 ERB-I
2017	NIMH Biobehavioral Research Awards for Innovative New Scientists - BRAINS award review panel
2016	NIMH Special Emphasis Panel, Memory, Cognition, and Attention, ZRG1 BBBP-Z
2014-2015	Qatar National Research
2013	Medical Research Council, UK (MRC)
2013-2016	French National Research Agency: Evaluation Committee of the Mental Health/Addictions Ad Hoc Reviewer

Related Service

2020	NIMH Clinical High-Risk International Consensus Meeting
2019	NIMH Research Domain Criteria (RDoC) Development and Environment Workgroup
2016-2019	NIMH Research Domain Criteria (RDoC) Motor Domain Workgroup
2017	-Group Co-Moderator

Research Experience

2010-Present	Director Adolescent Development and Preventive Treatment (ADAPT) Research Program Lab Website: http://www.adaptprogram.com Northwestern University Department of Psychology
2016-Present	Co-Director (with Christine Hooker) Chicago Early Intervention Network Northwestern/Rush University Medical Center
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., Carrie Bearden, Ph.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.

Research Funding, Intramural/Extramural Support

A. Active

National Institute of Mental Health 1R01MH112545-01

2/3 Community psychosis risk screening: An instrument development study

Principal Investigator: Vijay Mittal, Lauren Ellman, Jason Schiffman

Project Period: 7/2017-7/2022

Total Direct Costs: \$2,500,000.00

CO-Is: Thomas Olino, Waren Bilker

Goal: This study, including sites in Chicago, Philadelphia, and Baltimore, will recruit 12,000 adolescent and young adult participants with the aim of developing a screening designed to identify non help-seeking community youth who are likely to meet criteria for a psychosis risk syndrome.

National Institute of Mental Health R01 MH118741

An examination of psychomotor disturbance in current and remitted MDD: An RDoC Study
(passed through council, selected for funding, awaiting NOA)

PIs: Stewart Shankman, Vijay Mittal, Sebastian Walther

Total Direct Costs: \$2,500,000

Project Period: 4/1/2019-3/31/2024

Co-Is: Jessica Bernard, Alex Leow

Consultant: Vinod Menon

Goal: Study motor symptoms in depression from RDoC Framework, and develop a mobile platform for utilizing these markers as an early identification/treatment decision informatics system.

National Institute of Mental Health (NIMH) R01 120088

CAPER: Computerized Assessment for Psychosis Risk 1R01MH120088-01A1

Principal Investigators: Jim Gold, Vijay Mittal

Total Direct Costs: \$8,125,402

Project: 4/01/2020-3/30/2025

Site PIs: Jim Gold, Vijay Mittal, Lauren Ellman, Gregory Strauss, Phil Corlett/Scott Woods

Co-Is: Elaine Walker, Steve Silverstein, Albert Powers, Rick Zinbarg, Shou Chen

Goal: To examine the value of including markers sensitive to disease course and amenable to computational approaches and utilize these to develop a new computerized battery for risk assessment of youth at clinical high-risk for psychosis.

National Institute of Mental Health R01MH116039-01A1

Prodromal Inventory for Negative Symptoms: Development and Validation

Principal Investigator: Greg Strauss, Vijay Mittal,

Project: 3/01/2019-11/30/2023

Total Direct Costs: \$2,458,416

Co-Is: Elaine Walker, Brain Kirkpatrick, Bill Horan, Paul Grant, Rick Zinbarg

Goal: To develop a high sensitive inventory for detecting early negative symptomatology in youth at risk for psychotic disorders

Brain Behavior Research Foundation Independent Investigator Award, (NARSAD)

Brain stimulation targeting cerebellar-cortical circuits and verbal working memory in psychosis

Principal Investigator: Vijay Mittal

Project Period: 3/15/2018-3/14/2021

Total Direct Costs: \$100,000

Co-I: Jessica Bernard

Goal: A functional magnetic resonance imaging (fMRI), double-blind cross over study designed to determine if targeted cerebellar brain stimulation will normalize brain activation and behavioral task performance in individuals with schizophrenia performing a verbal working memory task.

National Institute of Mental Health (NIMH) U01 MH124639-01

Psychosis-risk outcomes network: ProNET

Principal Investigators: Scott Woods (Yale), Carrie Bearden (UCLA), John Kane

Site PIs: Vijay Mittal (Northwestern), Fred Sabb (Oregon), William Stone (Harvard, Shanghai),

Barbara Cornblatt (Northwell), Diana Perkins (UNC), Kristin Caadenhead (UCSD), , Jean

Addington, (Calgary), Daniel Mathalon (UCSF), Monica Calkins/Daniel Wolf (Penn), Cheryl

Corcoran, Mt. Sinai, Leslie Horton (Pittsburgh), Jason Schiffman (UMBC), Laruen Ellman,

(Temple), Greg Strauss (UGA), Daniel Mamah (Washington University), Jimy Choi, Godfrey

Pearlson (Hartford), , Jai Shah (Montreal), Paolo Fusar-Poli (Kings College, Pavia), Celso Arango

(Madrid), Jesus Perez (Cambridge), Nikos Koutsouleris (Munich), Jun Soo Kwon (Seoul).

Co-Is: Stewart Shankman

Proposed Project Period: 9/1/20-8/2025

Total Direct Costs: 55 million (Northwestern Site Directs: 1.24 million)

Goal: Develop a treatment development network capable of examining treatment related biomarkers as well as mapping in-depth clinical outcome measures.

National Institute of Mental Health R21 MH119677

Language features and High-Risk Psychosis Youth

Principal Investigators: Matthew Goldrick, Vijay A Mittal

Project Period: 4/2019-4/30/2021

Total Direct Costs: \$275,000

Goal: Project will examine vocal features from the perspective that they may represent a sign of motor dysfunction in youth at high risk for psychosis. We will use a computational approach to linguistic feature and pattern analysis and follow high-risk youth over time to track course and develop predictive models.

National Institute of Mental Health R21 MH115231
High-Risk Psychosis Youth and Caregivers: Emotion in Interaction
Principal Investigators: Claudia Haase, Vijay A Mittal
Project Period: 9/2017-8/30/2020 (NCE)
Total Direct Costs: \$275,000
Goal: Project will examine adolescents at high-risk for psychosis and caretakers in a dyadic interaction task to evaluate if patterns of aberrant emotional arousal and regulation predict course of illness.

National Institute of Mental Health R21, Supplement
High-Risk Psychosis Youth and Caregivers: Emotion in Interaction
PIs: Haase, Mittal
Start Date: Rolling
Total Direct Costs: \$30,000
Goal: To evaluate interactive variables from pairs of care-taker/youth in the context of clinical course.

National Institute of Mental Health R01
Title: Social Processing Deficits in Remitted Adolescent Depression Dates: 12/9-12/24
PA: PA-18-484
MPI: Corresponding PI: Randy P. Auerbach; PI: Stewart A. Shankman
Co-Investigators: Vijay Mittal; Jürgen Kayser; Laura Mufson; Linda Valeri; Nicholas Allen
Total Direct Costs: 2.5 Million
Goal: examine several modalities of social processing, including a novel eye-tracking gestures social perception task

Substance Abuse and Mental Health Services SAMHSA CHP-R Federal Grant SM-18-012
Community Programs for Outreach and Intervention with Youth and Young Adults at Clinical High Risk for Psychosis
Total Direct Costs: \$1,600,000
PIs: State of Illinois, Thresholds
Project Period: 12/2018-11/2022
Consultant: Mittal, Hooker
Goal: To implement a stepped care model to treatment of prodromal syndromes in the Illinois healthcare system.

C. Current Mentored Awards

NIMH National Research Service Award. NRSA 1F31MH121018-01A1
Neurocorrelates of alterations in facial expressivity in youth at clinical high-risk for psychosis
Tina Gupta 2019-2021
Mentor: Mittal, Haase
Goal: To examine underlying neural circuitry in motor and limbic networks of alterations in facial expressivity in psychosis risk.

NIMH National Research Service Award. NRSA 1F31MH119776-01A1
Cumulative environmental risk exposure in youth at clinical high-risk for psychosis
Teresa Vargas 2019-2022

Mentor: Mittal, McDade

Goal: To examine if stress during different developmental periods influences adult brain dysfunction and psychosis risk.

National Academy of Science, Ford Fellowship

Early life stress and adult brain structure and cognition

PI: Teresa Vargas

Project Period 6/2019-5/2022

Mentor: Vijay Mittal

Goal: To examine how early experience shape brain development and influence the way people interact with the world they live in.

Canadian Institutes of Health Research (CIHR), Doctoral Foreign Study Award (DFSA)

Cortical Midline Structures and Self-Reflection in youth at ultra-high risk for psychosis

PI: Raffles Cowan

Dates: 9/2017-8/2020

Mentors: Dan McAdams, Vijay Mittal

Goal: To use narrative interviewing and resting stage imaging methods to understand aberrant self-reflection in high-risk youth.

Brain and Behavior Research Foundation, NARSAD Young Investigator Award

Emotion, Mental Health, and Epigenetic clock in high-risk caregivers

Principle Investigator: Claudia Haase

Project Period: 12/2017-11/19

Total Direct Costs: \$60,000

Goal: To determine how negative emotion during dyadic interaction predicts accelerated epigenetic aging in caregivers of youth at risk for psychosis.

Sponsors: Mittal, Alexander

Brain and Behavior Research Foundation, NARSAD Young Investigator Award

Elucidating the Role of Abnormal Motor Resonance in Social Cognition Deficits in Schizophrenia

PI: Jerilyn Kent

Project Period: 12/2017-11/19

Total Direct Costs: \$60,000

Sponsors: Scott Sponheim

Mentoring Collaborator: Vijay Mittal

NIMH National Research Service Award. F31MH123121 decisions)

The Neural Mechanisms of Motor Dysfunction in Clinical High-Risk Youth

Juston Osborne 2020-2022

Mentor: Mittal

Goal: To examine motor psychophysiology (e.g., LRP, CNV) and develop biomarkers in CHR youth.

D. Under Review

National Institute of Mental Health R01

Emotion in Marriage and Cognitive Aging

Principal Investigator: Claudia M. Haase

Project Period: 9/1/2020-8/31/2025

Total Direct Costs: \$ TBD (ca. \$2,500,000)

Goal: To determine how emotions in married couples contribute to cognitive function through cardiovascular and brain health pathways in late life

E. In Revision

National Institute of Mental Health (NIMH) R21 (in revision, not scored)

TDCS Cerebellar Dysfunction in Clinical High-Risk Participants

Principal Investigators: Vijay A. Mittal, Ph.D., Jessica A. Bernard, Ph.D.

Project Period

Total Direct Costs: \$275k

Goal: To examine motor-signs of cerebellar dysfunction to supplement traditional diagnostic tools.

National Institute of Mental Health R01 (status, first round not scored, revision is being prepared for November resubmission)

Classifying Adolescents Based on Neural Markers of Anhedonia to Predict Clinical Course and Function

PIs: Auerbach, Mittal

Earliest Start Date: TBD

Total Direct Costs: 2.5 million

Co-I: Pizagalli, Shankman, Nusslock

Goal: Predict psychiatric outcomes in adolescents with abnormal reward processing

F. Completed Research Support

Northwestern Weinberg College Research and Innovation Grant W Award

Using motor control disruptions in speech to predict risk for psychotic disorders

Direct Costs: \$35,000

Project Period: 9/2017-8/2018

Goal: To develop software for analyzing speech patterns indicating increased 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: 07/2014-6/2020 (NCE)

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.

National Institute of Mental Health R21 MH110374

Neural Habituation in Ultra High-Risk Youth

Principal Investigators: Vijay Mittal

Project Period: 4/2017-3/30/2021

Total Direct Costs: \$275,000

Co-Is: Timothy Curran, Robin Nusslock

Consultant: Holly Earls

Goal: This project will examine how neural habituation (i.e., a decrease in neural activation to repeated stimuli) is related to social processing deficits in ultra high-risk youth (UHR), a group at imminent risk for transitioning to a psychotic disorder. The project utilizes electroencephalography (EEG) to examine whether neural habituation abnormalities in the P100 component (associated with early visual perception), and N170 repetition effect (associated with visual object recognition and learning) are specific to social stimuli (emotional and/or neutral faces) or generalize to non-face objects.

National Institute of Health, R01MH094650

Project Title: Motor Measures of Basal Ganglia and Cerebellar Circuit Dysfunction in Psychosis

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

Project Period: 06/01/2011-02/29/2018

Total Direct Cost: \$1,820,544

CO-Is: Randal Ross, M.D., Marie Banich 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.

Northwestern Data Science Initiative Award

Automated analysis of vocal characteristics for early detection of schizophrenia

Total Award: \$30,000

06/2016-05/2017

P.Is Matthew Goldrick, Emily Cibelli, Vijay Mittal

Goal: To Evaluate early motor dysfunction in speech signifying risk for psychosis.

Buffett Institute for Global Study, Scholars in Israel Collaboration

P.Is Matthew Goldrick, Vijay Mittal, Emily Cibelli, Joseph Keshet, Yossi Adi, Jennifer Cole

Date: 06/2017-5/2017

Total Award: \$25,000

A Multidisciplinary Approach to Predicting Schizophrenia

Goal: To use machine learning to evaluate movement markers of risk for psychosis.

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 and Research in Integrating Science and Math (PRISM)

Awards #DGE0536941 and #DGE0231900

Principal Investigator: Patricia Marsteller, Ph.D.

Role: Research Fellow, Teacher

Completed Mentored Award

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

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

Publications

Note: * indicates the author was a graduate student or postdoctoral student who worked under my direct mentorship

A. 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., Trottman, 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., Trottman, 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., Trottmann, 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., Trottmann, 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., Shiode, 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. PMC3404232
- 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. PMC3423560
- 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. PMC3615096
- 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. PMC3913833
- 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, S.S., 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. (2014). Self-Reported Cannabis Use is Inconsistent with the Results From Drug-Screening in Youth at Ultra High-Risk for Psychosis, *Schizophrenia Research*, 157(1-3): 317-318 doi: 10.1016/j.schres.2014.05.032.
- 51) *Millman, Z, Goss, J., Schiffman, J., Mejias, J., Gupta, T., Mittal, V.A. (2014). Mismatch and Lexical Retrieval Gestures are Associated with Visual Information Processing, Verbal Production, and Symptomatology in Youth at High Risk for Psychosis. *Schizophrenia Research*, 158(1-3): 64-68. doi: 10.1016/j.schres.2014.06.007.
- 52) *Bernard, J. & Mittal, V.A. (2014). Cerebellar Motor Dysfunction In Schizophrenia and Psychosis Risk: the Importance of Regional Cerebellar Analysis Approaches. *Frontiers in Psychiatry*, 5:160, doi: 10.3389/fpsy.2014.00160
- 53) *Gupta, T., Mittal, V (2014) Nicotine is associated with elevated processing speed and spatial working memory in youth at ultra high-risk for psychosis. *Psychiatry Research*, 15;220(1-2):687-; doi: 10.1016/j.psychres.2014.07.085.
- 54) Schott, M.E., Cornier, M.A., Mittal, V.A., Pryor, T.L., *Orr, J., Brown, M.S., Frank, G.K.W. (2015). Orbitofrontal cortex and brain reward response in obesity. *International Journal of Obesity*, 39(2):214-221, doi: 10.1038/ijo.2014.121.
- 55) *Bernard, J.A., Leopold, D., Calhoun, V., Mittal, V.A. (2015) Regional Cerebellar Volume and Cognitive Function From Adolescence to Late Middle Age. *Human Brain Mapping*, 36:1102-1120, doi: 10.1002/hbm.22690
- 56) *Dean, D.J. & Mittal, V.A., Spontaneous Parkinsonisms and striatal impairment in neuroleptic free youth at ultra high risk for psychosis (2015), *NPJ Schizophrenia*, 1, DOI:10.1038/NPJSCHZ.2014.6, PMC4657751
- 57) *Dean D., *Bernard, J., *Orr, J. *Pelletier, A., *Carol, E., *Gupta, T. *Earls, H., Mittal, V.A. (2015) Increased postural sway predicts negative symptom progression in ultra high-risk for psychosis. *Schizophrenia Research*, 162(1-3), 86-89. doi: 10.1016/j.schres.2014.12.039, PMC4339540
- 58) Thompson, L., Kline, E., Ellman, L. Mittal, V.A., Schiffman, J., (2015). Emotional and Behavioral symptomatology reported by help-seeking youth at clinical high-risk for psychosis. *Schizophrenia Research*, 162, 29-85
- 59) *Carol, E., Mittal, V.A. (2015). Resting cortisol level, self-concept, and putative familial environment in adolescents at ultra high-risk for psychotic disorders. *Psychoneuroendocrinology*, 57, 26-36. doi:10.1016/j.psneuen.2015.03.018, PMC4437835
- 60) *Lunsford-Avery, J.R., LeBourgeois, M.K., *Gupta, T., Mittal, V.A. Actigraphic-measured sleep disturbance predicts increased positive symptoms in adolescents at ultra high-risk for psychosis: a longitudinal study. *Schizophrenia Research*, 26:164(1-3):15-20, doi: 10.1016/j.schres.2015.03.013, PMC4409558

- 61) *Bernard, J.A. *Orr, J., & Mittal, V.A., (2015) Abnormal Hippocampal-thalamic tract development in individuals at ultra high-risk for psychosis. *NPJ Schizophrenia*, doi:10.1038/npjschz.2015.9, PMC4479398
- 62) Thompson, E., Millman, Z., Okuzawa, N., Mittal, V.A., DeVlyder, J., Skadberg, T., Reeves, G., Schiffman, J (2015). Evidence-Based Early Interventions for Individuals at clinical high risk for psychosis: a review of treatment components. *Journal of Nervous and Mental Disease*, 203(5), 342-351.
- 63) *Hagerty, S.L., *York-Williams, S.L. Mittal, V.A. Hutchison, K (2015) Cannabis Conundrum: thinking outside the THC box. *Journal of Clinical Pharmacology*, 55(8) 839-841.
- 64) *Bernard, J., Mittal, V.A. (2015) Updating the research domain criteria: the utility of a motor dimension. *Psychological Medicine*, 45(13):2685-9. doi: 10.1017/S0033291715000872. PMC4565742
- 65) *Carol, E., Mittal, VA (2015). Normative adolescent experiences may confound assessment of positive symptoms in youth at ultra-high risk for psychosis. *Schizophrenia Research*, 166 (1-3)358-359.
- 66) *Bernard, J., & Mittal, V.A. (in press). Dysfunctional activation of the cerebellum in schizophrenia: A functional neuroimaging meta-analysis. *Clinical Psychological Science*, doi: 10.1177/2167702614542463
- 67) *Schiffman, J, Mittal, V.A., Kline, E., Michelsen, N., Ekstrom, M., Mortensen, E., Mednick, S., Sorenson, H (2015). Childhood dyspraxia predictive of adult-onset schizophrenia spectrum disorder, *Development and Psychopathology*, doi:10.1017/S0954579414001436
- 68) Mittal, V.A., *Dean, D., Mittal, J., Saks, E. (2015). Ethical, legal, and clinical considerations when disclosing a high-risk syndrome for psychosis. *Bioethics*, 29, 543-56. doi: 10.1111/bioe.12155
- 69) *Dean, D., *Orr, J.M, *Bernard, J., *Gupta, T., *Pelletier-Baldelli, A., *Carol, E., Mittal, V.A. (2016) Hippocampal shape abnormalities predict symptom progression and impaired tolerance to stress in youth at ultrahigh risk for psychosis, *Schizophrenia Bulletin*, 42, 161-169. doi:10.1093/schbul/sbv086
- 70) Mittal, VA, *Gupta, T., Keane, B., Silverstein, S., (2015) Visual context processing dysfunctions in youth at high risk for psychosis: Resistance to the Ebbinghaus illusion and its symptom and social and role functioning correlates. *Journal of Abnormal Psychology*, 124(4) 953-60. doi: 10.1037/abn0000082
- 71) *Earls, H., Curran, T., Mittal, V.A. (2016). Social deficits in early perceptual stages in schizophrenia: A systematic review of the P100 during face processing. *Schizophrenia Bulletin*, 42(2):519-527. PMC4753590
- 72) *Bernard, J., *Millman, Z., Mittal, V.A. (2015) Beat and metaphoric gestures are differentially associated with regional cerebellar and cortical volumes. *Human Brain Mapping*, 36(10), 4016-30.
- 73) *Pelletier, A., *Bernard, J., Mittal, V.A. Functional connectivity abnormalities and impaired

social processing in youth at high risk for psychosis (2015). *PLOS One*, doi:10.1371/journal.pone.0134936

74) *Pelletier, A., *Ives, L., Mittal, V.A., (2015) Increased Internet Use is associated with poorer ability to manage emotions in youth at high-risk for psychosis, *Schizophrenia Research, Cognition*

75) *Bernard, J.A., *Orr, J., Mittal, V.A. (2016) Differential motor and prefrontal cerebello-cortical network development: evidence from multimodal neuroimaging. *Neuroimage*, 1:124, 591-601. doi: 10.1016/j.neuroimage.2015.09.022. PMC4651741

76) *Dean, D.J. Mittal, V.A. (2016). Motor behavior reflects reduced hemispheric asymmetry in the psychosis risk period, *Schizophrenia Research*, 170(10) 137-142. doi:10.1016/j.schres.2015.10.017. PMC4707112

77) Walther, S., Mittal, VA (2016). Why we should take a closer look on gestures. *Schizophrenia Bulletin*, 42(2) 259-261. doi: 10.1093/schbul/sbv229

78) *Russuk, O., *Ives, L., Mittal, V.A. *Dean, D., (2016) Fluctuating dermatoglyphic asymmetries in youth at high-risk for psychosis, *Schizophrenia research*, 170(2-3) 301-303. doi: 10.1016/j.schres.2015.12.013. PMC4740197

79) *Earls, H, Curran, T, & Mittal V. (2016). A Meta-Analytic Review of Auditory Event-Related Potential Components as Endophenotypes for Schizophrenia: Perspectives from first-degree relatives. *Schizophrenia Bulletin*, 42(6) 1504-1516.

80) *Carol, E, Mittal, V.A. (2016). Sex differences in morning cortisol in youth at ultra high-risk for developing psychosis. *Psychoneuroendocrinology*, 72, 87-93. PMID: PMC4996727. DOI:10.1016/j.psyneuen.2016.06.013

81) Mittal, V.A., (2016). Crosscutting advancements usher in a new era for motor research in psychosis. *Schizophrenia Bulletin*. 42(6): 1322-1325. DOI: <https://doi.org/10.1093/schbul/sbw123>

82) Gorka, S, Hee, D., Leiberman, L, Mittal, V, Phan, L, Shankman, S. (2016) Reactivity to uncertain threat as a familial vulnerability factor for alcohol use disorder. *Psychological Medicine*, 46(16), 3349-3358.

83) Rakhsan, P, Sorensen, H, DeVylder, J, Mittal, V, Mortensen, E, Mednick, S, Schiffman, J. (2016). Childhood pegboard task predicts adult-onset psychosis spectrum disorder among a genetic high-risk sample. *Schizophrenia Res* 178 68- 73.

84) *Gupta, T., Silverstein, S., Papatomas, T., Keane, B., Mittal, V.A. (2016). Depth inversion illusion insensitivity and aberrant connectivity in youth at high-risk for psychosis. *Neuroimage, Clinical*, 12, 681-690. doi: 10.1016/j.nicl.2016.09.022

85) Mittal, V.A., *Gupta, T, *Vargas, T, *Osborn, J, *Ristanovic, I, Hooker, C, Shankman S (2017). Exercise treatment psychosis. *Current Treatment Options in Psychiatry*. 4 152-166.

86) *Osborn, J, Bernard, J, *Millman, Z, *Gupta, T, *Ristanovic, I, *Gupta, T, *Vargas, T,

- Mittal, V, (2017) Beat gestures frequency and postural control in youth at ultrahigh risk for psychosis. *Schizophrenia Research*, 185 197-199.
- 87) Millman, Z, Weintraub, M.J., Bentley, E, DeVlyder, J, Mittal, V, Pitts, S, Thompson, E, Demro, C., Reeves, G, Schiffman, J (2017). Differential relations of locus of control to perceived stress among help-seeking adolescents at low vs. high Clinical Risk of Psychosis. *Schizophrenia Research*, 184. 39-44.
- 88) *Robustelli, B. *Newberry, R. Whisman, M., Mittal, V.A., (2017). Social relationships and romantic relationships for youth at risk for psychosis: do they benefit? *Psychiatry Research*, 247,345-51.
- 89) Andorko, N.D., Mittal, VA, Thompson, E, Denenny, D Epstein, G, Demro, C, Wilcon, C, Sun, S, Klingaman, E, DeVlyder, J, Postolache, O.H, Reeves, G.,M., Shiffman, J., (2017). The association between sleep dysfunction and psychosis-like experiences among college students. *Psychiatry Research*, 248 6-12.
- 90) Mittal, V.A.M., Wakschlag, L.S., (2017). RDoC Grows Up: Strengthening neurodevelopmental investigation within the RDoC Framework. *Journal of Affective Disorders*. 216, 30-35.
- 91) *Pelletier, A. Strauss, G., Visser, K., Mittal, VA. Initial development and preliminary psychometric properties of the Prodromal Inventory of Negative Symptoms (PINS), (2017) *Schizophrenia Research* 189:43-49; doi: 10.1016/j.schres.2017.01.055
- 92) Avery, J, Goncalves, B, Auerbach, R., Mittal, V.A. (2017) Adolescents at clinical-high risk for psychosis: Circadian rhythm disturbances predict worsened prognosis at 1-year follow-up. *Schizophrenia Research*, 189, 37-42
- 93) Bernard, JA. *Russell, CE, *Newberry, R., Goen, J, Mittal, V.A. (2017). Patients with schizophrenia show aberrant patterns of basal ganglia activations: Evidence from ALE Meta-Analysis. *Neuroimage: Clinical*, 14 450-463.
- 94) Bernard, J., Orr, J., Mittal, V.A. (2017). Cerebello-thalamo-cortical networks predict positive symptom progression in individual sat ultra-high risk for psychosis: evidence from functional and structural connectivity. *Neuroimage Clinical*, 14 622-628.
- 95) Lunsford-Avery, J. *Dean, D., Mittal, V.A. (2017). Self-Reported Sleep Disturbances Associated with Procedural Learning Impairment in Adolescents at Ultra High-risk for Psychosis. *Schizophrenia Research*, 190:160-163. DOI: <http://dx.doi.org/10.1016/j.schres.2017.03.025>
- 96) *Vargas, T., Mittal, V.A. Improving reliability and validity of early life stress interviews for psychosis. (2017) *Schizophrenia Research*, 192 465-466.
- 97) *Gupta, T., Hespos, S., Horton, S., Mittal, V.A. Automated analysis of written narratives reveals abnormalities in referential cohesion in youth at ultra high risk for psychosis 2018). *Schizophrenia Research*, 192 82-88.
- 98) *Carol, E., Spencer, R., Mittal, V.A. (2017), The relationship between cannabis use and

cortisol levels in youth at ultra high-risk for psychosis, *Psychoneuroendocrinology*, 83:58-64. doi: 10.1016/j.psyneuen.2017.04.017

99) *Dean, DJ, Bryan, A, *Gupta, T., *Carol, E, *Pelletier-Baldelli, A., *Newberry, R., Mittal, VA. (2017) A supervised exercise intervention for youth at risk for psychosis: An open-label pilot study, *Journal of Clinical Psychiatry*, 78(9) e1167-e1173, doi: 10.4088/JCP.16m11365.

100) *Dean D.J., *Kramer, K., *Samson, A.T., Vijay A. Mittal (in press) Motion energy analysis reveals altered body movement in youth at risk for psychosis. *Schizophrenia Research*

101) Millman, Z, Pitts, S, Thompson, L, Kline, E., Schimunek, C, Weintraub, M., DeVlyder, J., Mittal, VA Reeves, G., Schiffman, J. (in press). Perceived social stress and attenuated symptom severity in a sample of help-seeking adolescents with and without clinical high-risk for psychosis. *Schizophrenia Research*

102) *Osborne, K.J, Wilroth, E.C., DeVlyder, J.E., Mittal, V.A., Hilimire, M.R. (in press) Emotion regulation and distress from subclinical psychotic experiences in the general population. *Psychiatry Research*.

103) Mittal, V.A., Bernard, J.A., Northoff, G. (2017). What can different motor circuits tell us about psychosis? An RDoC perspective. *Schizophrenia Bulletin*, 43 (5), 949-955.

104) van Harten, P. Walther, S., Kent, J, Sponheim, S., Mittal, V.A, The clinical and prognostic value of motor abnormalities in psychosis, and the importance of instrumental assessment (2017). *Neuroscience and Biobehavioral Reviews*, 80, 476-487.

105) *Clark, S., Mittal, V.A., Bernard, J., A., Ahmadi, A., Turner, J., (2018) Stronger default mode network connectivity is associated with poorer clinical insight in adolescents at ultra high-risk for psychosis. *Schizophrenia Research*, 193 244-250.

106) Bondy, E., Stewart, J.G., Hajcak, G., Weinberg, A., Tarlow N., Mittal, V.A., Auerbach, R.P. (in press) Emotion processing in female youth: testing the stability of the late positive potential. *Psychophysiology*

107) Gruber, J. Strauss, G., Dombrecht, L., & Mittal, V. (2018). Neuroleptic free youth at Ultrahigh risk for psychosis evidence diminished motion reactivity that is predicted by depression and anxiety. *Schizophrenia Research*, 193 428-434, doi: 10.1016/j.schres.2017.08.013

108) Strauss, G., Raugh, IM, Mittal, V.A., Gibb, B., Coles, M., (2018). Bullying victimization and perpetration in a community sample of youth at clinical high-risk for psychosis. *Schizophrenia Research*, 195 534-536

109) Mittal, V.A., (2017). Systems neuroscience of psychosis (SyNoPsis) provides a promising framework for advancing the field. *Neuropsychobiology*, 75 119-121.

110) *Vargas, T., Dean, D., Osborne, K., Gupta, T., Ristanovic, I, Ozturk, S., Turner, J, van Erp, T., Mittal, V. (2018) Hippocampal subregions and psychosis spectrum. *Schizophrenia Bulletin*, 44(5), 1091-1099.

- 111) Walther S., Mittal, V.A. (2017) Motor system pathology in psychosis. *Current Psychiatry Reports*, 19(12):97.
- 112) *Gupta, T., DeVlyder, J., Schiffman, J., Auerbach, R., Mittal, V. (2018) Speech Illusions and working memory performance in non-clinical psychosis. *Schizophrenia Research*, 195. 391-395.
- 113) *Pelletier-Baldelli, A., Andrews-Hanna, J. R., & Mittal, V. A. (2018). Resting state connectivity dynamics in individuals at risk for psychosis. *Journal of Abnormal Psychology*, 127(3), 314.
- 114) *Cowan, R., McAdams, D., Mittal, V.A. (2019). Core Beliefs in healthy youth and youth at ultra high-risk for psychosis: dimensionality and links to depression, anxiety, and attenuated psychotic symptoms. *Development and Psychopathology* 31(1), 379-92
- 115) *Osborn, K.J. Mittal V. (2018) Every-day coincidences and referential thinking: differentiating normative experiences from symptoms in psychosis. *Schizophrenia Research* 197, 570.
- 116) *Gupta, T, Dean, D, Kelley, N, Bernard, J, Ristanovic, I, Mittal, V (2018). Cerebellar transcranial direct current stimulation (tDCS) improves procedural learning in non-clinical psychosis: a double-blind crossover study. *Schizophrenia Bulletin*, 44(6) 1373-1380. PMID: 29301026
- 117) * Damme, K. S., Gupta, T., Nusslock, R., Bernard, J. A., Orr, J. M., & Mittal, V. A. (2018). Cortical morphometry in the psychosis risk period: A comprehensive perspective of surface features. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*. doi.org/10.1016/j.bpsc.2018.01.003
- 118) Glazer, J., Kelley, N., Mittal, V., Nusslock, R. (2018). Beyond the FRN: Broadening the time-course of EEG and ERP components implicated in reward-processing. *International Journal of Psychophysiology*, 132 184-202. doi: 10.1016/j.ijpsycho.2018.02.002
- 119) Bernard, JA, Orr, J, Dean, D, Mittal VA. (2018) The Cerebellum and Learning of Non-Motor Associations in Individuals at Clinical-High Risk for Psychosis, *Neuroimage Clinical* 19 137-146.
- 120) *Dean, D., Walther, S., Bernard, J., Mittal, V.A. (2018). Motor clusters reveal differences in risk for psychosis, cognitive functioning, and thalamocortical connectivity: evidence for vulnerability subtypes. *Clinical Psychological Science*. 6(5) 721-734. doi: 10.1177/2167702618773759
- 121) *Carol, E., Mittal, V, (2018). Ethical considerations associated with providing a psychosis risk diagnosis: proposed model of vulnerability and psychosocial interactions. *Journal of Ethics in Mental Health (JEMH)*, 10, 1-20
- 122) *Gupta, T., Bernard, J., Mittal, V.A. (2018) Transcranial direct current stimulation, symptomatology, and cognition in psychosis: A qualitative review, *Frontiers in Behavioral Neuroscience*, 12(94) doi.org/10.3389/fnbeh.2018.00094
- 123) Mittal, V. (2018) Ethical considerations in predicting and proving early intervention for serious mental illness, *Journal of Ethics in Mental Health (JEMH)* 10 1-7.

- 124) *Newberry, R., Dean, D.J., Sayyah, M.D., Mittal, V.A. (2018). What prevents youth at clinical high risk for psychosis from engaging in physical activity? An examination of the barriers to physical activity. *Schizophrenia Research* 201, 400-405.
- 125) *Vargas, T., Schneider, H, Banich, Mittal, V.A. (2018). Altered selection during language processing in individuals at high risk for psychosis. *Schizophrenia Research*, 202, 303-309.
- 126) *Azis, M., Struass, G.P., Walker, E.,F., Revelle, W., Zinbarg, R., Mittal. V (in press). Factor analysis of negative symptom items on the structured interview for prodromal syndromes. *Schizophrenia Bulletin*, doi: 10.1093/schbul/sby177.
- 127) *Pelletier-Baldelli, A., Bernard, J., Orr, J., Mittal. V.A. (2018). Social reward processing: A biomarker for predicting psychosis risk?. *Schizophrenia Research*, 10.1016/j.schres.2018.07.042
- 128) *Sichlinger, L, Cibelli, E., Goldrick, M, Mittal, VA, (2019) Clinical correlates of aberrant conversational turn-taking in youth at clinical high-risk for psychosis. *Schizophrenia Research*, 204 419-420.
- 129) *Vargas, T., Osborn, J, Cibelli, E., Mittal, V.A. (2019). Separating Hearing Sensitivity from Auditory Perceptual Abnormalities in Clinical High Risk (CHR) Youth. *Schizophrenia Research*, 204:437-438. doi.org/10.1016/j.schres.2018.08.034
- 130) Walther, S., Mittal, V, Bernard, & Shankman, S., (2019). The utility of an RDoC motor domain to understand psychomotor dysfunction in depression. *Psychological Medicine*, 49(2) 212-216.
- 131) *Vargas, T., Lam, P., Aziz, M., Osborn, J., Lieberman, A., Mittal, V. (in press) Childhood trauma and neurocognition in adults with psychotic disorders: A systematic review and meta-analysis. *Schizophrenia Bulletin*, doi.org/10.1093/schbul/sby150
- 132) Lunsford-Avery, J., Collins, S., Mittal VA. (2019), Eveningness diurnal preference associated with better socioemotional cognition and social functioning among healthy adolescents, *Chronobiology International*, 36(3):439-444. doi: 10.1080/07420528.2018.1538156.
- 133) Phalen, P., Rakhshan, P., Milman, Thompson, E., DeVlyder, J., Mittal, V.A., Carter, E., Reeves, G., Schiffman, J. (2018). Validity of a Two-Item Early Psychosis Screen. *Psychiatry Research*, 861-868.
- 134) Chapman, H. C., Visser, K. F., Mittal, V. A., Gibb, B. E., Coles, M. E., Strauss, G. P. (in press). Emotion regulation across the psychosis continuum. *Development and Psychopathology*.
- 135) Mittal, V.A., Walther, S., (2018). As motor system pathophysiology returns to the forefront of psychosis research, clinical implications should hold center stage. *Schizophrenia Bulletin*. DOI: 10.1093/schbul/sby176
- 136) Vargas, T., Damme, K., Mittal, V.A., (in press). Bullying victimization in typically developing and clinical high risk adolescents: A multimodal imaging study. *Schizophrenia Research*. doi.org/10.1016/j.schres.2018.11.017

- 137) *Kent, J., Caligiuri, M, Skorheim, M, Lano, T, Mittal, V, Sponheim, S., (2019) Instrument-based assessment of motor function yields evidence of dyskinesia in individuals with schizophrenia but not first-degree biological relatives. *Psychiatry Research*, 272 135-140.
- 138) *Gupta, T., Haase, C., Strauss, G., Cohen, A., Mittal, V.A. (in press) Alterations in facial affect in youth at clinical high-risk for psychosis. *Journal of Abnormal Psychology*, doi: 10.1037/abn0000413
- 139) Schiffman, J., Ellman, L., Mittal, V.A. (2019). Individual differences and psychosis-risk screening: Practical suggestions to improve the scope and quality of Early identification. *Frontiers in Psychiatry: Special issue Identifying individuals at clinical high risk for psychosis in different cultures and countries*. 10(6) doi: 10.3389/fpsy.2019.00006
- 140) Andorko, N.D., Rakhshan Rouhakhtar, P., Hinkle, C., Mittal, V., McAllister, M., DeVylder, J., & Schiffman, J. (2019). Assessing validity of retrospective recall of physical activity in individuals with psychosis-like experiences. *Psychiatry Research*. 273, 211-217. <https://doi.org/10.1016/j.psychres.2019.01.029>
- 141) *Severan, K., Osborne, J., Mittal, V.A., Implications of religious practices for youth at clinical high-risk for psychosis. *Schizophrenia Research* 2019; 208:481-482. doi: 10.1016/j.schres.2019.01.033
- 142) *Osborn, J., Vargas, T., Mittal, V.A. Early childhood social communication deficits in youth at clinical high-risk for psychosis. *Development and Psychopathology*. 2019 May 8:1-14. doi: 10.1017/S0954579419000385
- 143) *Ristanovic, I, Osborn, J., Vargas, T., Gupta, T, Mittal, V.A. (2019). Postural Control and Verbal and Visual Working Memory Correlates in Sway in Non-Clinical Psychosis. *Neuropsychobiology*. DOI: 10.1159/000498921
- 144) Millman, Z., Gold, J., Mittal, V, Schiffman, J. The critical need for help-seeking control groups in clinical high-risk research (in press), *Clinical Psych Sci*. doi.org/10.1177/2167702619855660
- 145) *Vargas, T., Damme, K., Gupta, T., Cowan, R., Hooker, C., Mittal, V.A. Differentiating implicit and explicit theory of mind associate with neural networks in youth at clinical high-risk for psychosis. *Schizophrenia Research*, 2019; 208:173-181. doi: 10.1016/j.schres.2019.03.013
- 146) *Vargas, T., Maloney, J, Gupta, T., Mittal V.A. (in press) Measuring facets of reward sensitivity inhibition and impulse control in individuals with problematic Internet. *Psychiatry Research*, 2019;275:351-358. doi: 10.1016/j.psychres.2019.03.032
- 147) *Damme, K.S.F., Gallagher, N., Vargas, T., Osborne, K. J., Gupta, T., & Mittal, V.A. (in press) Motor Sequence Learning and Pattern Recognition in Youth at Clinical High-Risk for Psychosis. *Schizophrenia Research*. 2019; 208:454-456. doi: 10.1016/j.schres.2019.03.023
- 148) *Damme, K, Pelletier-Baldelli, A, Cowan, R., Orr, J., Mittal, V.A. (2019) Distinct and opposite profiles of connectivity during self reference task and rest in youth at clinical high-risk for psychosis. *Human Brain Mapping*. 40(11) 3254-3264. doi: 10.1002/hbm.24595

- 149) Nunez, M., Mittal, V., Zinbarg, R. (2019). Efficacy and Mechanisms of Non-Invasive Brain Stimulation to Enhance Exposure Therapy: A Review. *Clin Psychol Review*, 70:64-78. doi: 10.1016/j.cpr.2019.04.001.
- 150) *Osborne, J., Mittal, V.A., External Validation and Extension of the NAPLS-2 and SIPS-RC Personalized Risk Calculators in an Independent Clinical High-Risk Sample. *Psychiatry Research*, 2019 Sep;279:9-14. doi: 10.1016/j.psychres.2019.06.034
- 151) *Vargas, T., Zou, D., Conley, R., Mittal, VA (2019). Assessing developmental environmental risk factor exposure in Clinical High Risk for psychosis individuals: preliminary results using the Individual and Structural Exposure to Stress in Psychosis-risk states scale. *JCM*. 98(7) pii: E994. doi: 10.3390/jcm807099
- 152) *Vargas, T., Ahmed, A., Strauss, G.P., Brandes, C.M., Walker, E., Gold, J., Buchanan, R., Mittal, V. (2019) The Latent Structure of Depressive Symptoms Across Clinical High Risk and Chronic Phases of Psychotic Illness. *Translational Psychiatry*, 16(9):229. doi: 10.1038/s41398-019-0563-x.
- 153) *Damme, K.S.F., Vargas T., Calhoun, V., Turner, J., Mittal, VA (2020). Global and specific cortical volume asymmetries in individuals with psychosis risk syndrome and schizophrenia: A mixed cross-sectional and longitudinal perspective. *Schizophrenia Bulletin*. 46(3) 713-721. doi.org/10.1093/schbul/sbz096
- 154) *Yee, C.I, Strauss, G.P., Allen, D.N., Haase, C.M., Kimhy, D., Mittal, V.A., (in press) Trait emotional experience in individuals with schizophrenia and youth at clinical high-risk for psychosis. *British Journal of Psychiatry- Open* 5(5): e78. PMC6737516
- 155) *Damme, K.S.F, Osborne, K.J., Gold, J.M, Mittal, V.A. Detecting motor slowing in clinical high-risk for psychosis in a computerized finger tapping model. *Eur Arch Psychiatry Clin Neurosci* 270, 393–397 (2020). <https://doi.org/10.1007/s00406-019-01059-0>
- 156) Mittal, V.A., Walker, EF Advances in the neurobiology of stress and psychosis. *Schizophrenia Research*. 2019 Nov;213:1-5. doi: 10.1016/j.schres.2019.08.030
- 157) Mittal, V.A. Motor Development Collection Introduction: *Schizophrenia Bulletin*, 2019. <https://academic.oup.com/schizophreniabulletin/pages/motor-development-collection>
- 158) Kogan, S., Ospina L.H., Mittal, VA, Kimhy D, (in press). The impact of inflammation on neurocognition and risk for psychosis: a critical review. *European Archives of Psychiatry and Clinical Neuroscience*. doi: 10.1007/s00406-019-01073-2
- 159) *Vargas, T., Conley, R., Mittal, VA. (2020) Chronic stress, structural exposures and neurobiological mechanisms: a stimulation, discrepancy and deprivation model of psychosis. *Stress and Brain Health: In Clinical Conditions* (152) 41-69.
- 160) *Gupta, T., Mittal, V.A. Advances in clinical staging, early intervention, and the prevention of psychosis. *F1000Research* 2019, 8(F1000 Faculty Rev):2027 doi.org/10.12688/f1000research.20346.1

- 161) *Osborne, J., Damme, K., Gupta, T., Dean, D.J., Bernard, J., Mittal, V.A. Timing dysfunction and cerebellar resting state functional connectivity abnormalities in youth at clinical high-risk for psychosis. *Psychol Med.* 2020 3:1-10. doi: 10.1017/S003329171900416
- 162) *Vargas, T., Schiffman, J., Mittal, Neighborhood crime, socioeconomic status, and suspiciousness in adolescents and young adults at clinical high-risk for psychosis. *Schizophrenia Research*, 2020 215:74-80. doi: 10.1016/j.schres.2019.11.024
- 163) *Yee, C., Gupta, T., Mittal, V.A., Haase, C., (in press). Coping with family stress in individuals at clinical high-risk for psychosis. *Schiz Res.* doi: 10.1016/j.schres.2019.11.057.
- 164) Lunsford-Avery, J, Damme, K., Englehard, Kollins, Mittal, V.A., Regularity of sleep/wake patterns associated with default mode network structure among healthy adolescents and young adults. *Scientific Reports*.
- 165) Kimhy, D., Lister, A., Liu, Y, Vakrusheva, J, Delespaul, P, Malaspina, D., Ospina, L.H., Mittal, V.A. Gross, J.J., Wang, (2020) The impact of emotion awareness and regulation on psychotic symptoms during daily functioning. *NPJ Schizophrenia*. 6:7 ; <https://doi.org/10.1038/s41537-020-0096-6>
- 166) Shankman, S.A., Mittal, V.A., & Walther, S. An examination of psychomotor disturbance in current and remitted MDD: An RDoC Study. *Journal of Psychiatry and Brain Science*. 2020;5:e200007. <https://doi.org/10.20900/jpbs.20200007>
- 167) *Ristanovic, I, Vargas, T., Cowan, R, Mittal, VA. Consistent exposure to psychosocial stressors and progressive intolerance to stress in individuals at clinical high risk for psychosis. *Schizophrenia Bulletin Open*, doi:10.1093/schizbullopen/sgaa004w
- 168) Frith, J., Schuch, F., Mittal, V., Clinical-high risk state as an optimal timeframe for using **exercise** interventions to protect physical and mental health. In press *Research in Psychotherapy, Psychopathology, Process, Outcome (RIPPO)*
- 169) *Osborne, KJ, Kraus, Lam, P, Vargas, T. Mittal, VA. Contingent Negative Variation Blunting and Psychomotor Dysfunction in Schizophrenia: A Systematic Review. *Schizophrenia Bulletin* 2020 pii: sbaa043. doi: 10.1093/schbul/sbaa043.
- 170) *Cowan, R., Mittal, V.A., Allen, D.N., Gold J.M., Strauss, G., (in press) Clusters of individuals with schizophrenia show distinct trait affect presentations with symptom profiles and functional outcomes. *Journal of Abnormal Psychology*
- 171) *Damme, K, Ristanovic, I, Vargas, T., Mittal, V.A. (2020). Timing of Menarche and Abnormal Hippocampal Connectivity in Youth at Clinical-High Risk for Psychosis. *Psychoneuroendocrinology*. <https://doi.org/10.1016/j.psyneuen.2020.104672>
- 172) *Azis, M., Rouhakthar, P.R., Schiffman, J.E., Eelman, L.M., Strauss, G., Mittal, V.A., (2020) The structure of positive psychotic symptoms in individuals at clinical high risk for psychosis. *Early Intervention in Psychiatry*.1-8 <https://doi.org/10.1111/eip.12969>

- 173) Kafadar, E., Mittal, V.A., Strauss, G., Chapman, H., Ellman, L., Bansal, S., Gold, J., Alderson-Day, B., Evans, S., Woods, S., Corlett, P.R., Powers, A (in press). Behavioral markers of hallucinations predict clinical high risk for psychosis. *Schizophrenia Research*.
<https://doi.org/10.1016/j.schres.2020.04.017>
- 174) *Strauss G.P., Pelletier-Baldelli, A., Frost-Visser, K., Walker, E. Mittal, V.A. A review of negative symptom assessment strategies in youth at clinical high-risk for psychosis. (in press) *Schizophrenia Research*.
- 175) Woods S., Bearden C.E., Sabb, F.W., Stone, W.S., Keshavan, M., Torous, J., Cornblatt BA^c, Diana O. Perkins Cadenhead K.S., Addington, J., Powers, A.R., Mathalon, D.H., Calkins, M.E., Wolf, D.H., Corcoran C.M., Horton, L.E., Mittal, V.A., Schiffman, J.E., Ellman, L.M., Strauss, G.P., Mamah, D., Choi, J., Pearlson, G.D., Shah, J., Fusar-Poli, P., Arango, C., Perez, J., Koutsouleris, N., Wang, J., Kwon, J.S., Walsh, B.C., McGlashan, T.H., Gur, R.E., Cannon, T.D., Kane, J.M., Anticevic, A., (in press). Early Intervention for Psychosis Risk Syndromes: Minimizing Risk. *Schizophrenia Research*
- 176) *Osborne, J.K., Walker, S., Shankman, S., Mittal, V.A. (in press). Psychomotor slowing in schizophrenia: implications for endophenotypes and biomarker development. *Biomarkers in Neuropsychiatry*. 2020 2 100016.
- 177) *Gupta, T. Haase, C., Struass, G.P, Cohen, A.S., Ricard, J., Mittal, V.A. (in press). Alterations in Facial Expressions of Emotion: Determining the Promise of Ultra-Thin Slicing Approaches and Comparing Human and Automated Coding Methods in Psychosis Risk. *Emotion*.
- 178) *Corcoran, C., Mittal, V.A., Bearden, C.E., Hitczenko, K., Bilgrami, Z, Savic, A., Cecchi, G., Wolf, P. (in press). Language as a Biomarker for Psychosis: A Natural Language Processing Approach *Schizophrenia Research*. *Schizophrenia Research*,
<https://doi.org/10.1016/j.schres.2020.04.032>
- 179) *Azis, M, Ristanovic, I, Mittal, VA. Hypnagogic and hypnopompic hallucinations: considerations for clinical high-risk assessment and targets for future research. *Schizophrenia Res*.
<https://doi.org/10.1016/j.schres.2020.05.025>
- 180) *Cowan, R., Mittal, V.A., (2020). Three types of psychotic-like experiences in youth at clinical high risk for psychosis. *European Archives of Psychiatry and Clinical Neuroscience*.
<https://doi.org/10.1007/s00406-020-01143-w>
- 181) *Dean, D., Bernard, J., Damme, K, O'Reilly, R., Orr, J., Mittal, V.A., (2020) Longitudinal assessment and functional neuroimaging of movement variability reveals novel insights into motor dysfunction in clinical high-risk for psychosis. *Schizophrenia Bulletin*
<https://doi.org/10.1093/schbul/sbaa072>
- 182) Orr, J.M., Lopez, J., Imburgio, M., Pelletier-Baldelli, A., Bernard, J., Mittal, VA. 2020 Adolescents at clinical high risk for psychosis show qualitatively altered patterns of activation during rule learning. *Neuroimage Clinical*. 27 102286

- 183) *Gupta, T., Mittal, V.A. (2020) Transcranial direct current stimulation and emotion processing deficits in psychosis and depression: A state of the art review. *European Archives of Psychiatry and Clinical Neuroscience*, <https://doi.org/10.1007/s00406-020-01146-7>.
- 184) *Vargas, T., Damme, K., Ellman, L., Ered, A., Capizzi, R., Mittal, V.A. Neuroimaging markers of resiliency in Clinical High Risk (CHR) for psychosis youth: a qualitative review. *Biological Psychiatry CNI*, 27 2020 <https://doi.org/10.1016/j.bpsc.2020.06.002>
- 185) *Gupta, T, Cowan, H, Strauss, G., Walker, E.F., Mittal, V.A. Deconstructing negative symptoms in individuals at clinical high-risk for psychosis: Evidence for volitional and diminished emotionality subgroups that predict clinical presentation and functional outcome. *Schizophrenia Bulletin*. 2020, doi.org/10.1093/schbul/sbaa084
- 186) Gold, J., Corlette, P.R., Strauss, G., Schiffman, J., Ellman, L.M., Walker, E.F., Powers, A.R., Woods, S.W., Waltz, J., Silverstein, S.M., Mittal, V.A. (in press) Enhancing psychosis risk prediction through computational cognitive neuroscience. *Schizophrenia Bulletin*.
- 187) *Vargas, T., Damme, K., Mittal, V.A. Neighborhood deprivation, prefrontal morphology and neurocognition in late childhood to early adolescence. *Neuroimage* 2020 117086
- 188) DeVylder, J., Mittal, V., Schiffman, J. (in press). The Legalization of Cannabis: Balancing the Public Health Costs of Psychosis versus Mass Incarceration. *JAMA Psychiatry*.
- 189) *Vargas, T., Schiffman, J., Kim, A. Mittal, V.A., Using search engine data to gauge public interest in mental health, politics and violence in the context of mass shootings. *Plos One*. 15(8): e0236157.
- 190) Kaiser, A.J.E., Funkhouser, C.J., Mittal, V.A., Walther, S., Shankman, S.A. (2020). Test-retest reliability and familial concordance of individual symptoms of Major Depressive Disorder. *Psychiatry Research* 113313
- 191) Mittal, V.A., Firth J., Kimhy, D., (2020) Combating the dangers of sedentary activity on child and adolescent mental health during the time of COVID-19. *JAACAP* <https://doi.org/10.1016/j.jaac.2020.08.003>
- 192) Gratton C., Mittal, V.A. (in press) Embracing the complexity of heterogeneity in schizophrenia: A new perspective from latent clinical-anatomical dimensions. *Schizophrenia Bulletin*.
- 193) Ellman, L, Schiffman, J., Mittal, V.A. Community psychosis risk screening: An instrumental development investigation. (in press) *JPBS* 2020,5e200019, <https://doi.org/10.20900/jpbs.20200019>
- 194) *Damme, K., Schiffman, J., Ellman, L.E., Mittal, V.A. (in press), Sensorimotor and Activity Psychosis-Risk (SMAP-R) Scale. *Schizophrenia Bulletin*.
- 195) Walther, S, Mittal, V. Stegmayer, K., Bohlhatler, S., (in press) Gesture deficits and apraxia in schizophrenia, *Cortex*. 133, 65-75 <https://doi.org/10.1016/j.cortex.2020.09.017>

- 196) *Hitzenko, K., Mittal, V.A., Goldrick. (in press) Understanding language abnormalities and associated clinical markers in psychosis: The promise of computational methods. *Schizophrenia Bulletin*.
- 197) Mittal, V.A, Bernard, J., Walther, S. (in press). Cerebellar-thalamic circuits play a critical role in psychomotor function. *Molecular Psychiatry*
- 198) *Damme, K., Norton, E., Briggs-Gowen, M.J. Wakshlag, L., Mittal, V.A., Developmental patterning of irritability enhances prediction of psychopathology in pre-adolescence: Improving RDoC with developmental science. *Journal of Abnormal Psychology*.
- 199) Mittal, V.A, Addington, J. (2020). Embracing heterogeneity creates new opportunities for understanding and treating those at clinical high-risk for psychosis. *Schizophrenia Research*.
- 200) Yee, C. I., Vargas, T. Mittal, V.A., & Haase, C. M. (in press). Adaptability and cohesion in youth at clinical high-risk for psychosis: A multi-informant approach. *Schizophrenia Research*.
- 201) Cowan, R., Mittal, VA Transdiagnostic dimensions of psychiatric comorbidity in individuals at clinical high risk for psychosis: a preliminary study informed by HiTOP. *Frontiers in Psychiatry*.
- 202) Pulkkinen, U., Schiffman, J, Mittal, V.A., Therman, S., Measurement invariance psychotic-like symptoms as measured with the PQ-B in adolescent and adult populations samples. *Frontiers in Psychiatry*.
- 203) Pelletier-Baldelli, A., Struass, G., P., Kuhney, F.S., Chun, C., Gupta, T., Ellman, LM, Schiffman, J. Mittal, V.A. Perceived stress influences anhedonia and social functioning in a community sample enriched for psychosis risk. *Journal of Psychiatric Research*.
- 204) Carol, E., Spencer, R., Mittal, V.A. Acute physiological and psychological stress response in youth at clinical high-risk for psychosis Acute stress response in psychosis risk. *Frontiers in Psychiatry, Schizophrenia*.
- 205) Osborne, J.K., Mittal, V.A., Postural sway and neurocognition in individuals meeting criteria for a clinical high-risk syndrome. *European Archives of Clinical Psychiatry and Neuroscience*.
- 206) Corcoran, C., Mittal, V.A., Woods, S. APS should be in the DSM5 TR. *JAMA-Psychiatry*.
- 207) Silverstein, S., Thompson, J., Gold, J., Schiffman, J., Waltz, J., Williams, T., Zinbarg, R., Mittal, V., Ellman, L, Struass, G, Walker, E, Woods, S, Levin, J, Kafadar, E, Kenney, J, Powers, A. Corlette, P, Smith, D., Increased Face Detection Responses on the Mooney Faces Test in People at Clinical High Risk for Psychosis. *NPJ Schizophrenia*.
- 208) Gupta T, Osborne J, Mittal VA. Abnormal gesture perception and clinical high-risk for psychosis. *Schizophrenia Bulletin* (in press).
- 209) Mittal VA, Bernard J, Strauss G, Walther S. (in press). New insights in to sedentary behavior highlight the need to revisit the way we see motor symptoms in psychosis. *Schizophrenia Bulletin*. doi:10.1093/schbul/sbab057

- 210) Vargas, T., Mittal, VA 2021. Differentiating kinds of systemic stressors with relation to psychotic-like experiences in late childhood and early adolescence: the stimulation, discrepancy, and deprivation model of psychosis. *Clinical Psych Science*
- 211) Karpouzian-Rogers T., Cobia D., Petersen, J Wang, L Mittal, V. Csernansky, J, Smith, M Cognitive empathy is associated with preserved right temporoparietal junction thickness in individuals with schizophrenia. *Frontiers in Psychiatry*
- 212) Ristanovic, I, Damme, K, DyVylder J, Schiffman J, Mittal VA. Cannabis use, self-perceived risk, perceived peer approval, and parental attitudes among youth at clinical high-risk for psychosis. *Early Intervention in Psychiatry*. 2021
- 213) Damme, KS, Sloan PR, Bartels MN, Ozsan A, Ospina L, Kimhy D, Mittal, VA. Psychosis risk individuals show poor fitness and discrepancies with objective and subjective measures. *Scientific Reports* (2021)11:9851. <https://doi.org/10.1038/s41598-021-89301-5>
- 214) Patton, H, Cowan R, Mittal VA. Changes in Core Beliefs Over Time Predict Symptoms and Functioning in Clinical High Risk for Psychosis, *Early Intervention in Psychiatry* (in press).
- 215) Osborne, K.J., Kraus, B., Curran, T., Earls, H., Mittal, V.A (accepted). An event-related potential investigation of early visual processing deficits in youth at clinical high-risk for psychosis. *Schizophrenia Bulletin*.
- 216) Stephens, J. E., Rompilla, D. B., Jr., Hittner, E. F., Mittal, V.A., & Haase, C. M. (In Press). Executive Functioning & Non-Target Emotions in Late Life. *Emotion*.
- 217) Gupta T, Strauss G, Cowan HR, Pelletier-Baldelli A, Ellman L, Schiffman J, Mittal VA. Secondary sources of negative symptoms in those meeting criteria for a clinical high-risk syndrome. *Biological Psychiatry Global Open Science*
- 218)Pavlidou, A, Viher, PV, Bachofner H, Weiss F, Shankman S, Mittal VA, Walther S. Hand gesture performance is impaired in major depressive disorder: a matter of working memory performance? *Journal of Affective Disorders*.
- 219) Vargas, T, Mittal, V.A. Perceived discrimination and implicit emotion regulation modulate depressive symptoms and psychotic-like experiences in late childhood to early adolescence: an RDoC perspective. *Development and Psychopathology*
- 220) MacNeill, L. A., Allen, N. B., Poleon, R. B., Vargas, T., Osborne, K. J., Damme, K. S. F., Barch, D. M., Krogh-Jespersen, S., Nielsen, A. N., Norton, E. S., Smyser, C. D., Rogers, C. E., Luby, J. L., Mittal, V. A., & Wakschlag, L. S. (in press). Translating RDoC to real world impact in developmental psychopathology: A neurodevelopmental framework for application of mental health risk calculators. *Development & Psychopathology*.
- 221) Kuhney, FS, Damme KF, Pelletier-Baldelli A, Chun C, Ellman L, Schiffman J, Mittal VA (in press). Prevalence and functional consequences of social anxiety in individuals at clinical high-risk for psychosis: perspective from a community sample comparison. *Schizophrenia Bulletin Open*

222) Mittal VA, Walker EF, Struass, G. The COVID-19 pandemic introduces diagnostic and treatment planning complexity for individuals at clinical high-risk for psychosis. *Schizophrenia Bulletin*

223) Mittal VA, Ellman LM, Strauss GP, Walker EF, Corlett PR, Schiffman J, et al. Computerized Assessment of Psychosis Risk. *J Psychiatry Brain Sci.* 2021;6:e210009. <https://doi.org/10.20900/jpbs.20210009>

224) Damme, K.S.F., Park, J.S., Walther, S., Vargas, T., Shankman, S.A., & Mittal, V.A. (in press). Motor abnormalities, depression risk, and clinical course in adolescence. *Biological Psychiatry Global Science Open.*

225) Cowan R, Mittal VA, McAdams D, (2021) Narrative identity in the psychosis spectrum: A systematic review and developmental model, *Clinical Psychiatry Review.*

226) Avery-Lunsford J, Pelletier-Baldelli A, Korenic S, Jackson L, Schiffman J, Ellman L, Mittal VA. Eveningness Chronotype Preference among Individuals at Clinical High Risk for Psychosis. *Schizophrenia Research*

B. Conference Proceeding

1) Hitczenko, K., Cowan, H., Mittal, V., & Goldrick, M. (2021). Automated coherence measures fail to index thought disorder in individuals at risk for psychosis. In N. Goharian, P. Resnik, A. Yates, M. Ireland, K. Niederhoffer, & R. Resnik (Eds.) *Proceedings of the Seventh Workshop on Computational Linguistics and Clinical Psychology (CLPsych): Improving Access*, pp. 129-150.

C. 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.
- 12) Mittal, V.A. Overview, Schizophrenia. In Wenzel, A., (Ed) *Sage Encyclopedia of Abnormal and Clinical Psychology*. Sage, Thousand Oaks CA, 2958-2966.
- 13) *Robustelli, B, Mittal, V.A., *Thought Insertion*. Definitions in *Sage Encyclopedia of Abnormal and Clinical Psychology*. Wenzel, A Ed). Sage, Thousand Oaks CA: 3523-3524.
- 14) *Dean, J., Mittal, V.A., *Akathisia* Definitions in *Sage Encyclopedia of Abnormal and Clinical Psychology*. Wenzel, A (Ed). Sage, Thousand Oaks CA: 3476-3477.
- 15) *Carol, E.D., Mittal, V.A., *Schizophrenia Spectrum and Other Psychotic Disorders: Incidence and Prevalence* Definitions in *Sage Encyclopedia of Abnormal and Clinical Psychology*. Wenzel, A (Ed). Sage, Thousand Oaks CA: 2950-2952.
- 16) *Gupta, T., Mittal, V.A., *Thought Broadcasting* Definitions in *Sage Encyclopedia of Abnormal and Clinical Psychology*. Wenzel, A (Ed). Sage, Thousand Oaks CA: 3522.
- 17) Ryan, Arthur, Trottman, H., Mittal, V. A., Tessner, K. D., & Walker, E. F., (2017).

Schizophrenia and the Psychotic spectrum. In Craighead, EW, Miklowitz, DJ, & Craighead, LW (Eds.), *Psychopathology: History, Diagnosis, and empirical foundations* (3rd Edition). John Wiley & Sons, p. 403-445.

18) Haut, K. Mittal, V, Shankman, S, Hooker, C, (2017) Cognitive training in schizophrenia. (Eds Hoffman, Asmundson), *The Science of Cognitive Behavioral Therapy*, Elsevier.483-520.

19) *Azis, M, Ristanovic I, Pelletier, A.L., Kestler, L. Bollini, Hochman, K., Walker, EF. Mittal VA (2019). Schizophrenia. In J.E. Maddox & B.A. Winstead (Eds.) *Psychopathology: Foundations for a contemporary understanding* (5th edition) Routledge: New York.

20) Gupta, T., Damme, KSF., Osborne, KJ., Vargas, TG., Ristanovic, I., Frosch, IR., Zarubin, VC., Hitczenko, K., Williams, TF., Cowan, HR., Mittal, VAM. Psychotic disorders and risk-states in adolescence: Etiology, developmental considerations, and treatment. In *comprehensive clinical psychology 2nd edition, Volume 5: Case conceptualization and treatment: Children and adolescents*. Elsevier, 2021.

A. Conference and Academic Symposia

Symposium: Social interaction deficits in psychosis- neural correlates and potential treatments. Gesture perception and the psychosis risk period
European Scientific Association on Schizophrenia and other Psychoses (ESAS)
Speakers: Benjamin Straube, Tina Gupta, Michelle Friedman-Yakooblan,
Chairs: Walther, Mittal

Symposium: Translating the biomarkers of schizophrenia to clinical settings: a precision psychiatry approach
Translational applications of biomarker research for clinical high-risk youth
SIRS, Virtual 2021
Speaker: Mittal, Waltz, Lewandowski and Carpenter (Discussant)
Chair: Chan

Symposium: Alterations of RDoC's Sensorimotor Domain in Major Depression: Behavior, Circuits and Clinical Correlates
Biological Psychiatry, San Diego 2021
Chairs: Mittal Shankman

RDoC Workshop: 10 Years of RDoC
Adolescent Development, the sensorimotor domain and translational clinical psych science.
Speakers: Mittal, Kujawa, McNamarra, Cuthbert, Morris
Host: APS & NIMH

Grand Rounds: Psychosis risk and motor symptoms
Ohio State Psychiatry, July 2021
Host: N. Breitborde

Symposium: Stress and developmental risk for psychopathology: From epigenetics to brain circuits
Biological Psychiatry, Chicago 2019

Chairs: Mittal, Belger

Symposium: Psychomotor dysfunction in major depression: a multi-method symposium on this understudied aspect of major depression.

Biological Psychiatry, Chicago 2019

Speakers: Mittal, Bernard, Walther, Leow

Chairs: Shankman

Invited: Multifinality, Biotypes, and Precision Medicine in Psychosis Risk Youth

Association for Psychological Science (APS)

Washington DC, 2019

Symposium: Motor dysfunction as a research domain in mental disorders: advances, challenges, and the future

Motor dysfunction and the psychosis prodrome

World Congress of Biological Psychiatry, Vancouver 2019

Chairs: Vijay Mittal, Sebastian Walther

Speakers: Vijay Mittal, Sebastian Walther, Jeff Dasdalakis, Christoph Mulert

Symposium: Motor dysfunction as a research domain in mental disorders: advances, challenges, and the future

Motor dysfunction and the psychosis prodrome

World Congress of Biological Psychiatry, Vancouver 2019

Speakers: Vijay Mittal, Dusan, Hirjak, Katharina Kubera, Christian Wolf

Symposium: Quantification of Behavior for Mental Health Using Digital Technology

Society for Research in Psychopathology, 2018

Indianapolis, IN

Presenters: Laura Germaine, Laura Tully

Discussant: Vijay Mittal

Symposium: Identification of Risk Factors for Psychosis From In-Utero Through Young Adulthood, Patterns Abnormal Motor Behavior in Clinical High-Risk Individuals Indicate Distinct Etiological Pathways for Psychosis

Society for Research in Psychopathology, 2018

Indianapolis, IN

Co-Presenters: Lauren Ellman, Nicole Karcher, Vijay Mittal

Discussant: Deanna Barch

Symposium: Novel developments in psychosis screening and early intervention

Society for International Research in Schizophrenia, 2019

Florence, Italy

Co-Presenters: Cheryl Corcoran, Jim Waltz, Pat McGorry, Vijay Mittal

Invited Grand Rounds: Psychosis Risk: Biomarkers and Treatment Development

University of Illinois Chicago, Psychiatry, May 19 2018

Host: Ed Cook

Invited Talk: Psychosis Risk and Policy: Basic Science to Public Health
Institute for Policy Research, Northwestern University, Fall 2017
Vijay Mittal

Invited Talk: Lake Forest College,
Current Advances in Psychology Colloquium, Winter 2018
Lecture on psychosis research for neuroscience and psychology undergraduate majors.
Host: Matt Kelley

Symposium: Aerobic exercise across the phases of schizophrenia: Neural, cognitive, symptomatic and functional impact
Society for Research in Psychopathology, Denver 2017
Chair: Keith Nuechterlein, Speakers: Mittal, Joseph Ventura, David Kimhy

Symposium: Motor dysfunction in schizophrenia disorders and beyond: advances, challenges, and future directions
World Congress of Psychiatry, 2017
Berlin
Co-Presenters: Dusan Hirjak, Vijay Mittal (*Tina Gupta), Robert Christian Wolf, Sebastian Walther

Symposium: Social interaction challenges: the nonverbal communication deficits in psychosis
World Congress of Psychiatry, 2017
Berlin
Co-Presenters: Sebastian Walther, Vijay Mittal (*Tina Gupta), Mary Lavelle, Wiepke Cahn, Rose McCabe

Invited Departmental Colloquium: Translational approaches to clinical science for high-risk adolescents
Purdue University
Host: Daniel Foti

Invited Symposium:
Early Detection and Targeted Intervention for Youth at Risk for Serious Psychopathology:
Translating Basic Research to Practical Implementation
Brookstone Conference: Northwestern University
Meeting the Challenges of Emerging Mental Illness, 2016
Speakers: Mittal, Reinecke, Goulding, Smoth, Cicchetti, Klodnick, Fagan, Cronenwett, McGorry

Invited Address: Markers of Basal Ganglia and Cerebellar Dysfunction in Early Psychosis
Johns Hopkins University, 2017
Baltimore

Invited Address: Early Career Award Address: Why motor behaviors are important for understanding, detecting, and treating psychotic disorders
Society for Research in Psychopathology 2016
Baltimore

Symposium: Gesture Behavior in Psychotic Illness

Society for International Biological Psychiatry, 2017

Copenhagen

Co-Presenters: Sohee Park, Sebastian Walther, Ben Straube, Vijay Mittal (*Derek Dean)

Symposium: Cerebellar Abnormalities Across Psychiatric Illness

Society of Biological Psychiatry (SOBP), 2016

Atlanta, GA

Co-Presenters: Deanna Barch, William Hetrick, Jessica Bernard

Symposium: Back to the Hippocampus: Investigating Hippocampal Abnormalities in Early Psychosis

Society for International Research in Schizophrenia, 2016

Florence, Italy

Co-Presenters: Mary Cannon, Anthony David, Ana Calvo

Symposium: Movement Disorders: A Non-Mental Core Symptom of Psychotic Disorders and the Importance of Instrumental Screening

Society for International Research in Schizophrenia, 2016

Florence, Italy

Co-Presenters: Sebastian Walther, Peter Van Harten, Jim Van Os

Grand Rounds: Novel treatments in the psychosis Risk Period

Northwestern Psychiatry, 2015

Northwestern University

Invited Presentation: Hippocampal shape changes in the psychosis prodrome; normative and pathological developmental influences.

Department of Psychology, 2015

University of Illinois, Chicago

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: Gesture Mismatch and lexical retrieval gestures in the psychosis prodrome

European Congress of Schizophrenia Research

Berne, Germany

2015

Speakers: Mittal (*Derek Dean), 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

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

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.

B. Community Lectures

TEDx NU

Can Exercise combat emerging mental illness?

Spring 21

Writers Theatre

Nature vs. Nurture Presentation

Spring 2019

Compass, Northbrook

Translating Science to Practice in the Psychosis Risk State

August 2017

Compass, Chicago

Translating Science to Practice in the Psychosis Risk State

July 2017

North shore Community Hospital Grand Rounds

Early Detection and targeted intervention for individuals at high-risk for schizophrenia

March 2017

Host: Fred Miller MD

Department of Child and Family Service (DCFS)

Department of Recruitment & Resources

ADAPT Program

November 2016

Thresholds

Psychosis Risk Syndromes

March 2017

Transition Action Network

Recognizing signs and symptoms/helping foster transition from high-school

Co-Presenters: Marc Fagan

December 2016

Loyola University Clinic

Psychosis Risk Syndromes

University Clinic Rounds

Host: Daniel-De Boer

October 2016

Northwestern University Active Minds

Stigma Panel

Evanston

Co-Presenters: Robin Nusslock, Katie Sanford, Bria Royal

Spring 2016

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

C. Other

Staff Research Talk- The ADAPT lab Research Program
University of Colorado Boulder
January 2013

Conference Participation

2018	Society for Research in Psychopathology
2018	Society for Biological Psychiatry, Manhattan
2018	Society for International Schizophrenia Research, Florence
2017	World Congress of Psychiatry, Berlin Germany
2017	World Conference of Biological Psychiatry, Copenhagen
2017	International Congress for Schizophrenia Research, San Diego, California
2016	Society for Biological Psychiatry, Atlanta
2016	Society for Research in Psychopathology, Baltimore
2016	Society for International Schizophrenia Research, Florence
2015	European Congress of Schizophrenia Research, Berlin Germany
2015	International Congress for Schizophrenia Research, Colorado Springs
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:

*Gupta, T., Haase, C.M., Strauss, G.P., Cohen, A.S., Ricard, J.R., Mittal, V.A. (2020, April). Altered emotion expression in psychosis risk: Determining the promise of ultra-thin slicing and comparing human and automated coding methods. Poster presented at the Society for Affective Science, San Francisco, CA.

Stephens, J.E., Yee, C. I., Mittal, V.A., & Haase, C.M. (2020, April). Emotions in conflict: A behavioral analysis of adolescent-parent conflict conversations. Poster presented at the Annual Convention for the Society for Affective Science, San Francisco, CA.

Anaya, I. C., Stephens, J. E., Mittal, V. A., Haase, C. M. (2020, April). Adolescent's Emotional Experiences During Adolescent-Parent Interactions and Links with Dispositional Affect. Poster presented at the Society for Affective Science conference, San Francisco, CA.

Rodosky, S. E., Stephens, J. E., Gupta, T., Mittal, V. A., & Haase, C. M. (2020, April). Not Expressing Emotions and Links with Anxiety and Depression: A Laboratory-Based Study of Adolescent-Caregiver Conversations. Poster presented at the Society for Affective Science conference, San Francisco, CA.

Rompilla, D. B., Jr., Stephens, J. E., Hittner, E. F., Mittal, V. A., & Haase, C. M. (2020, April). Becoming Happy while Sad: Executive Functioning and Emotion Regulation in Older Adults. Poster presented at the Society for Affective Science conference, Boston, MA. (2019, April) Becoming Happy while Sad: Executive Functioning and Emotion Regulation in Older Adults. Poster presented at the Society for Affective Science conference, San Francisco, CA.

- *Ricard, J.R., Gupta, T., Hittner, E.F., Haase, C.M., Mittal, V.A. (2020, April). *Trauma history and facial expressions of emotions in individuals at clinical high risk for psychosis*. Poster presented at Society for Affective Science Conference. San Francisco, CA.
- *Damme, K.S.F., Ristanovic, I., & Mittal, V.A. (2019) The Impact of Cannabis Use on Resting-State Networks in the Psychosis Risk Period: Cross-Sectional and Longitudinal Implications of Use. Society of Research for Psychopathology Annual Meeting, Buffalo, New York.
- *Damme, K. S. F. & Mittal, V. A. (2019). Distinct and opposite Profiles of Connectivity during Self-Reference Task and Rest in Youth at Clinical High-Risk for Psychosis. Society for Biological Psychiatry, Chicago, Illinois.
- *Damme, K.S.F. & Mittal, V.A. (2019). Clinical High Risk for Psychosis Show Stable Global Functional and Nodal Structural Disconnectivity, *Organization on Human Brain Mapping, Rome, Italy*.
- *Damme, K.S.F., Ristanovic, I., & Mittal, V.A. (2019). The Impact of Cannabis Use on Resting-State Networks in the Psychosis Risk Period: Cross-Sectional and Longitudinal Implications of Use. *Society of Research for Psychopathology Annual Meeting, Buffalo, New York*.
- *Gupta, T., Damme, K.S.F., Haase, C.M., Mittal, V.A. (2019) Genuine and nongenuine smiles in adolescents and young adults at clinical high-risk for psychosis. *Society of Biological Psychiatry Annual Meeting, Chicago, Illinois*.
- *Gupta, T., Dean, D.J., Kelley, N.J., Bernard, J.A., Ristanovic, I., Mittal, V.A. (2019). Cerebellar tDCS improves procedural learning in non-clinical psychosis. *Organization for Human Brain Mapping Annual Meeting, Rome, Italy*.
- *Gupta, T., Haase, C.M., Strauss, G.P., Cohen, A.S., Ricard, J.R., Mittal, V.A. (2019). Altered emotion expression in psychosis risk: Determining the promise of thin slicing and comparing human and automated coding methods. *Poster to be presented at Society for Research in Psychopathology Annual Meeting, Buffalo, New York*.
- *Osborne, K.J., Dean, D.J., Gupta, T., Ristanovic, I., Vargas, T., Walther, S., Mittal, V.A (June 2019). Motor behavior subtypes and risk profiles in clinical high-risk individuals. *Talk to be given at the 14th World Congress of Biological Psychiatry, Vancouver, BC*.
- *Osborne, K.J., Gupta, T., Mittal, V.A (June 2019). Brain stimulation and motor learning in a psychosis continuum population. *Talk to be given at the 14th World Congress of Biological Psychiatry, Vancouver, BC*.
- *Osborne, K.J., Damme, D.S.F., Gupta, T., Dean, D.J., Bernard, J.A., Mittal, V.A (May 2019). Timing dysfunction and cerebellar network abnormalities in youth at clinical high-risk for psychosis. *Poster presented at the 74th annual meeting of the Society of Biological Psychiatry, Chicago, IL*.
- *Osborne, K.J., Vargas, T., Mittal, V.A, (2019). Early childhood social communication deficits in youth at clinical high-risk for psychosis: Associations with functioning and risk. *Poster to be presented at the annual meeting of the Society for Research in Psychopathology, Buffalo, NY*.

- *Ricard, J.R., Gupta, T., Mittal, V.A., Haase, C.M. (2019, March). Signs of psychosis risk: Thin slices of altered emotional behavior in youth at clinical high risk for psychosis. *Poster presentation given at Society for Affective Science, Boston, MA.*
- *Ricard, J.R., Gupta, T., Haase, C.M., Mittal, V.A. (2019, September). Facial expressions of emotions and life stress in adolescents at clinical high risk for psychosis. *Poster to be presented at 33rd Annual Meeting of the Society for Research in Psychopathology Annual Meeting, Buffalo, New York.*
- *Rowghani, K., Gupta, T., Mittal, V.A. (2019, May). Facial Expressivity in Non-Clinical Psychosis. *Department of Psychology Undergraduate Poster Session, Evanston, IL.*
- *Vargas, T., Damme, K.S. F., Hooker, C.I., Gupta, T., Cowan, H.R., Mittal, V.A. (2019). Differentiating Implicit and Explicit Theory of Mind and Associated Neural Networks in Youth at Clinical High Risk (CHR) for Psychosis. *Organization for Human Brain Mapping Annual Meeting, Rome, Italy.*
- *Zou, D. S., Conley, R., Mittal, V. A. (2019) Correlates of facial emotion recognition task performance in healthy youth. *Poster presented at Anxiety and Depression Association of America, Chicago, IL.*
- *Lång, U., Mittal, V., Schiffman, J., & Therman, S. (2019). F66 Measurement invariance of psychoticlike experiences as measured with the PQ-B in adolescent and adult population samples. *Schizophrenia Bulletin*, 45(Supplement_2), S280-S280.
- *Zou, D. S., Conley, R., Mittal, V. A. (2019) Social responsiveness and psychosis-risk: a multi-perspective approach. *Poster to be presented at Society for Research in Psychopathology Annual Meeting, Buffalo, NY.*
- *Cowan, H. R., & Mittal, V. A. (2018). Self-concept and psychotic-like experiences. *Poster presented at Society for Research in Psychopathology, Indianapolis, IN.*
- *Dean, D.J., Bernard, J.A., Mittal, V. A. (2018). Motor Learning during an isometric force grip task in youth at clinical high risk for psychosis: An FMRI study. *Poster presented at Society for Research in Psychopathology, Indianapolis, IN.*
- *Damme, K.S.F., Gupta, T., Vargas, T., Mittal, V. A. (2018). Stable Structural Connectivity Networks Differences in the Clinical High Risk for Psychosis during the Psychosis Risk Period., *Society of Research for Psychopathology Annual Meeting, Indianapolis, Indiana.*
- *Gupta, T., Rowghani, K.K., Ricard, J.R., Haase, C.M., Mittal, V.A (2018). Alterations in facial expressivity in youth at clinical high-risk for psychosis. *Society for Research in Psychopathology Annual Meeting, Indianapolis, Indiana.*
- *Ristanovic, I., Zou, D. S., Conley, R., Mittal, V. A. (2018). Gonadocorticoids as Neuroprotective Factors in Population at Clinical High Risk for Psychosis. *Poster presented at Society for Research in Psychopathology, Indianapolis, IN.*

- *Severaid, K. B., Osborne, J. O., Mittal, V. A. (2018). Implications of religious and spiritual practices in youth at clinical high risk for psychosis. *Poster presented at Society for Research in Psychopathology, Indianapolis, IN.*
- *Vargas, T., Damme, K.S., Mittal, V. A. (2018). Bullying Victimization in Typically Developing and Clinical High Risk (CHR) Adolescents: A Multimodal Imaging Study. *Society of Research for Psychopathology Annual Meeting, Indianapolis, Indiana.*
- *Dean, D. Bernard, Mittal, VA (2018). Motor learning during an isometric force grip task in youth at clinical high-risk for psychosis: a functional imaging study. Poster presented at Society for Research in Psychopathology, Indianapolis, IN
- *Zhang, W., Osborn, J., Mittal, VA., Kappenman, E., (2018). Behavioral and neural measures of visual working memory in youth at clinical high-risk for psychosis. Poster presented at Society for Research in Psychopathology, Indianapolis, IN
- *Azis, M., Mittal. (2018) Factor analysis of negative symptoms in individuals at clinical high-risk for psychosis. Poster presented at Society for Research in Psychopathology, Indianapolis, IN
- Mittal, V., Gupta, T., Dean, D., Bernard, J., Kelley, N., Ristanovic, I., ... & Vargas, T. (2018). S206. Cerebellar Transcranial Direct Current Stimulation (tDCS) Improves Procedural Learning in Non-Clinical Psychosis. *Biological Psychiatry, 83(9)*, S427-S428.
- *Carol, E.E., Link, A., Mittal, V.A. (2017). Obstetric complications and HPA axis functioning in adolescents at ultra high-risk for psychotic disorders. Poster presented at Society for Research in Psychopathology, Denver, CO.
- *Dean, D. J., Walther, S., & Mittal, V. A. (September 2017). Vulnerability subtypes in motor performance in youth at risk for psychosis. Poster presented at Society for Research in Psychopathology. Denver, CO.
- *Gupta, T., Garcia, G., Hespos, S.J, Horton, W.S., Yang, J., Mittal, V.A. Automated analysis of written narratives reveals abnormalities in referential cohesion in youth at ultra-high risk for psychosis. 2017. Presented at Society for research in psychopathology. Denver, Colorado.
- *Lieberman, A., Larson, C., Mittal, V.A. (2017). Voice-pitch perturbation in non-clinical psychosis population. Poster presented at Society for Research in Psychopathology, Denver, CO.
- *Newberry, R.E., Dean, D.J., Mittal, V.A. (2017). Multi-site study of exercise behavior in adolescents at clinical high-risk for developing psychotic disorders. Poster presented at Society for Research in Psychopathology. Denver, CO.
- *Osborne, K. J., Kent, J., Shashoua, N., Mittal, V.A. (2017). Perceptual timing deficits in individuals at ultra-high risk for psychosis. Poster presented at the annual meeting of the Society for Research in Psychopathology, Denver, CO.

- *Ozturk, S., Vargas, T., & Mittal, V. (September, 2017). Abnormal white matter connectivity in non-clinical psychosis. Poster presented at the 31st Annual Meeting of the Society of Research in Psychopathology, Denver, CO.
- *Pelletier-Baldelli, A., Bernard, J., Orr, J., Gupta, T., Mittal, V. (2017). Do youth at risk for psychosis like being liked? A functional magnetic resonance imaging investigation into social reward processing. Poster presented at Society for Research in Psychopathology, Denver, CO.
- *Ristanovic, I., Mittal, V. A. (2017). The Role of Legalization of Cannabis Use on Cannabis Use Attitudes and Behaviors in Youth at Risk for Psychosis. Poster presented at Society for Research in Psychopathology, Denver, CO.
- Nunez, M., Kelley, N.J., Mittal, V.A., & Zinbarg, R. (2017). Anodal tDCS over the right dorsolateral prefrontal cortex undermines exposure therapy via elevated avoidance motivation. *Psychophysiology*, 54, S164.
- Cohen, R, McAdams, D., Mittal, V (2017). Core beliefs in healthy youth and youth at ultra high-risk for psychosis. APS, Boston.
- *Cibelli, E., Cole, J., Mittal, V., & Goldrick, M. (2017). Prosodic cues to psychosis risk. *Acoustical Society of America, Boston*.
- *Clark, S, Ahmadi, A.,Turner, J., Mittal, VA (2017) Insight and cerebello-cortical connectivity in adolescents at ultra high risk for schizophrenia. ICOSR SD, Schizophrenia Bull, 43(S1) S42
- Mittal, V.A., *Dean, D., *Gupta, T., Bryan, A., (2017) Aerobic exercise intervention for clinical high-risk youth improves cognitive and hippocampal abnormalities. ICOSR SD, 43(S1) S168
- *Carol, E.E., *Newberry, R.E., Mittal, V.A. (2016) *Cannabis and basal cortisol levels in adolescents at ultra high-risk for psychotic disorders*. Poster presented in Society for Research in Psychopathology, Baltimore, MD.
- *Dean, D.J., *Gupta, T., *Newberry, R.E, *Pelletier-Baldelli, A., *Carol, E.E., Mittal, V.A. (2016) *Initial findings from an open label exercise intervention in youth at risk for psychosis*. Poster presented at Society for Research in Psychopathology. Baltimore, MD.
- *Kramer, K.R, *Samson A.T., *Dean D.J., Mittal, V.A. (2016). Video Motion Assessment of Movement Abnormalities During Clinical Interview in Youth at Risk for Psychosis. Poster presented at Society for Research in Psychopathology. Baltimore, MD.
- *Russell, C.E., *Newberry, R.E., Mittal, V.A., & *Bernard, J.A. (2016, September). Patients with Schizophrenia Show Aberrant Patterns of Basal Ganglia Activation: Evidence from ALE Meta-Analysis. Poster session presented at the Thirtieth Annual Meeting of the Society for Research in Psychopathology, Baltimore, MD.
- *Gupta, T., *Kelley N.J., *Dean, D.J., *Ristanovic, I., *Maloney, J.F., Mittal, V.A. (2016). Cerebellar tDCS and procedural learning in non-clinical psychosis. *Poster presented at Society for*

Research in Psychopathology, Baltimore, MD.

- *Pelletier-Baldelli, A., *Andrews-Hanna, J.A., Mittal, V.A. (2016). Salience and Symptoms in Youth at High Risk for Psychosis: A Longitudinal Dynamic Functional Connectivity Study. *Poster presented at Society for Research in Psychopathology, Baltimore, MD.* Robustelli,
- *Newberry, R., *Whisman, M.A., & Vijay Mittal, V.A. *Social relationships in adolescents at ultra high risk for psychosis.* (2016, October). Presented at the 50th annual meeting of the Association for Behavioral and Cognitive Therapies, New York, NY.
- *Clark, S, *Ahmadi, A, *Bernard, J, Turner, J, Mittal V. (2016) Insight and cerebello-cortical connectivity in adolescents at ultra high-risk for schizophrenia. ICOSR
- Orr, J., Lopez, J., Mittal, (2016). Disrupted prefrontal dynamics underlying rapid instructed task learning in adolescents at ultra high risk for psychosis, HBM, Geneva.
- Bernard, J, Orr, J, *Dean, D, Mittal (2016). Abnormal Cerebellar Activation in Psychosis Risk during Learning. Human Brain Mapping, Geneva
- *Pelletier-Baldelli, A., Mittal, V (2016) Resting-state Functional Connectivity of the Temporo-parietal Junction and psychosis risk, Human Brain Mapping, Geneva
- Orr J., & Mittal, V.A. Disrupted Prefrontal Dynamics Underlying Task Learning in the Psychosis Prodrome (2016), *Human Brain Mapping*, Geneva
- *Clark, S., Mittal, V.A., Turner, J.A. (2016) *Biological Psychiatry*, Atlanta
- *Bernard, J.A., Orr, J.M., & Mittal, V.A. (2015). Cerebello-thalamo-motor networks and positive symptom course in individuals at ultra-high risk for psychosis: evidence from functional & structural connectivity. Poster to be presented at Society for Research in Psychopathology, New Orleans, LA.
- *Carol, E.E., *Ives, L., Mittal, V.A. (2015). Resting cortisol level, self-concept, and putative familial environment in adolescents at ultra high-risk for psychotic disorders. Poster to be presented at Society for Research and Psychopathology, New Orleans, LA.
- *Dean, D., *Tullos, M., *Orr, J.M., Mittal, V.A. (2015). Decreased Right-Handedness and Cerebral Asymmetry in Youth at Ultrahigh Risk for Psychosis. Poster to be presented at Society for Research in Psychopathology, New Orleans, LA.
- *Gupta, T., Scott, T., Silverstein, S.M., Papathomas, T.V., Mittal, V. A. (2015). Perceptual Impairments and Disrupted Neural Connectivity in Youth at Ultra High Risk for Psychosis: Evidence from a Hollow Mask Illusion Task. Poster to be presented at Society for Research in Psychopathology, New Orleans, LA.
- *Newberry, R.E., *Orr, J.M., *Bernard, J.A., Mittal, V.A. (2015). Disrupted Verbal Selection is Associated with Negative Symptoms in Adolescents at Ultra-High Risk for Psychosis. Poster to be presented at Society for Research in Psychopathology, New Orleans, LA.

- *Pelletier-Baldelli, A., *Bernard, J.A., Mittal, V.A. (2015). Affective and expressive negative symptoms: A longitudinal functional resting state connectivity study in youth at ultra high-risk for psychosis. Poster to be presented at Society for Research in Psychopathology, New Orleans, LA.
- *Russak, O., *Ives, L., *Dean, D. A., Mittal, V.A. (2015). Dermatoglyphic Asymmetries and Symptoms in Adolescents at Ultrahigh-risk for Psychotic Disorders. Poster to be presented at Society for Research in Psychopathology, New Orleans, LA.
- Mittal, V.A., *Millman, *Bernard, *Dean (2015) Verbal and nonverbal communication deficits in schizophrenia, Gesture-speech mismatch and lexical retrieval gestures in the psychosis prodrome. European Conference on Schizophrenia Research
- *Dean, D.J., Mittal, V.A. Hippocampal Shape Abnormalities in Neuroleptic-Free Youth at Ultrahigh Risk for Psychosis HBM, Oahu, (winner of student travel award)
- Mittal V.A., & *Dean, D. (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., Papatomas, 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, A.L., 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. & Trotman, 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*.

Experience as a Research Mentor

Mittal Laboratory Graduate Students Masters and Dissertation Projects:

- 2021- Dissertation Proposal- Juston Osborne- LRP and motor signs in psychosis risk
- 2021- Dissertation Proposal- Teresa Vargas- Stressors across development, and risk for psychosis.
- 2020- Dissertation Proposal- Katia Zalkind- Semantic Priming and Psychosis Risk
- 2020- Dissertation Proposal- Tina Gupta- Emotional blunting and youth at risk for psychosis
- 2020- Dissertation Proposal- Raffles Cowan- Self identity, narrative, and risk for psychotic disorders
- 2019- Masters Advisor Ivanka Ristanovic, Life-event stress and risk for psychosis across adolescence.
- 2018 - Masters Advisor, Juston Osborn, Temporal bisection, cerebellar dysfunction and psychosis risk.
- 2018- Masters Advisor, Vargas, Hippocampal subfields across psychosis risk and schizophrenia stages.
- 2018- Dissertation Advisor, Emily Carol, Longitudinal evaluations of stress systems in youth at risk for developing psychotic disorders
- 2018- Dissertation Advisor, Derek Dean, Movement Abnormalities, Frontal-subcortical Structure and Function, and Youth at Risk for Psychosis
- 2017- Masters Advisor, Tina Gupta, Brain stimulation and motor learning in psychosis risk individuals.
- 2017- Dissertation Advisor, Andrea Pelletier, Do youth at risk for psychosis like being liked? An fMRI investigation of social reward processing
- 2015- Masters Advisor for Emily Carol (Mentor: Vijay Mittal): Cortisol, self-concept and expressed emotion in high-risk youth.
- 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
- 2012/2013- 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 for Mittal Students that have Graduated:

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): Assistant Professor, Duke University, Department of Psychiatry

Derek Dean (Graduate Student in my lab 2012-present): Postdoctoral Student, Vanderbilt

Emily Carol (Graduate Student in my lab 2013-present): Postdoctoral Student, McLean/Harvard

Andrea Pelletier-Baldelli (Graduate Student in my lab 2011-present): Postdoctoral student UNC Chapel Hill

Awards for Postdoctoral Students:

SIRS travel award Kate Damme, 2020

Northwestern University NICS Data Science Initiative Award, Emily Cibelli, 2016

Brain and Behavior Research Foundation, NARSAD Young Investigator Award, Jessica Bernard, 2014

ICOSR Young Investigator: Jessica Bernard, 2015

NIMH National Research Service Award: Jessica Bernard, 2013-2015

Awards for Graduate Students:

NSF- honorable mention, Franchesca Khuney, 2021

SIRS Early Career Award, Franchesca Khuney, 2021

T32 Fellowship, Training Program in Neuroscience of Human Cognition, Juston Osborne, 2019-2020

NRSA Tina Gupta 2019-2022

NRSA Teresa Vargas 2019-2022

SNAP talk at SRP, Teresa Vargas, 2019

ERP Camp, Juston Osborne, 2019

Ford Fellowship, National Academy of Science, Teresa Vargas, 2019

DevSci Pilot Funds Award, Jaqueline Stephens, 2018

DevSci Pilot Funds Award, Teresa Vargas, 2018

Dosier/Muenzinger Award for Translational Research, Emily Carol, 2018

University of Michigan, Neuroimaging training fellowship, Tina Gupta, 2018

T32 Fellowship, Training Program in Neuroscience of Human Cognition, Tina Gupta, 2017-2019

Beverly Sears Graduate D, Emily Carol, 2017

Human Brain Mapping Abstract Merit Award: Andrea Pelletier, 2016

Society, Biology, and Health Cluster Fellowship, Northwestern University: Tina Gupta 2016

Peter G. Ossorio Award, CU Boulder: Emily Carol, 2016

Human Brain Mapping Abstract Merit Award: Derek Dean, 2015

NIMH National Research Service Award: Andrea Pelletier, 2013-2016

Awards for Mittal Lab Undergraduate Students:

Carson Knoer, URG AY 19/20, Summer 2020

Paia Amelio URAP Summer 2020

Jordyn Ricard, Summer URG 19/20

Jordyn Ricard, Top Social Science Presentation at NU Undergraduate Research Exposition, 2020

Amy Lieberman, Accepted to NIMH IRTA 2018-present (Dickenson)

Defne Cezayirli, Accepted to NIMH IRTA 2019-present (Fedorova)

Carson Knoer, URPA Summer 2019

Jordyn Ricard, Poster Spotlight Award- Society for Affective Sciences (SAS), Winter 19

URG, Alaran Ozsan, 2019, Summer 2019

URG, Defne, Cezayirli, 2019, Summer 2019

Honors in Neuroscience, Defne Cezayirli, 2019

Honors in Psychology, Kim Rowgani, 2019

Honors in Psychology, Alara Ozsan, 2019

Honors in Psychology, J. Maloney, 2018

Honors in Psychology, Amy Lieberman, 2018

Amy Lieberman, Undergraduate research and arts exposition, presentation invitee, Spring 2018

Alara Ozsan, Undergraduate Research Award (URG), 2018/2019

Defne Cezayirli, Undergraduate Research Award (URG), 2018/2019

Kimberly Rowghani, Weinberg College Summer Research Grant, 2017

Amy Lieberman, Undergraduate Research and Arts Exposition Poster, 2017

Grishma Reddy, Undergraduate Research Award (URG), Summer 2017/2018

Amy Lieberman, Undergraduate Research Award (URG), 2017/2018

Isha Bhutada, Undergraduate Research Assistant Program (URAP), 2016/2017

Vicotria Steigerwald, Undergraduate Research Assistant Program (URAP), 2016/2017

Grishma Reddy, Undergraduate Research Assistant Program (URAP), Summer 2016

Jaqueline Maloney, Undergraduate Research Award (URG), Summer 2016; *Fletcher Prize Finalist*

Courtney Russell, 2015, Undergraduate Research Opportunity Program (UROP)

Rae Newberry, 2014, Undergraduate Research Opportunity Program (UROP)

Olivia Russak, 2014, Undergraduate Research Opportunity Program (UROP)

Elise Hague, 2012, Independent Study Award

Kim Kramer, 2011, Undergraduate Research Opportunity Program (UROP)

Northwestern Undergraduate Honors

2020- Jordyn Ricard (Mentor Mittal, Haase)

2020- Sophia Rodesky (Mentor Haase)

2019- Defne Cezayirli (Mentor Mittal)

2019- Kim Rowgani (Mentor Mittal)

2019- Alara Ozsan (Mentor Mittal)

2018- Jacqueline Maloney (Mentor Mittal)

2018- Amy Lieberman (Mentor Mittal)

CU Boulder Honors

2015- Olivia Russak (Mentor: Mittal)

Professional Service

Editorial Service

2019- Present *Journal of Abnormal Psychology*, Associate Editor

2014-2019 *Journal of Abnormal Psychology*, Consulting Editor

2020-Present *Schizophrenia Bulletin*, Managing Editor

2017-2020 *Schizophrenia Bulletin*, Assigned Editor

Professional Societies

2019-Present Executive Board, Society for Research in Psychopathology (SRP)

2018-Present Program Committee, International Early Psychosis Association (IEPA)

2018-Present Program Committee, Society for International Research in Schizophrenia (SIRS)

2016-Present Affiliation Committee Chair, Society for International Research in Schizophrenia (SIRS)

2016-Present Publication Committee, Society for International Research in Schizophrenia (SIRS)

2014-Present Diversity Committee (currently chair; 2019-Present), Society for Research in Psychopathology (SRP)

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

2015 International Congress of Schizophrenia Research (ICOSR) Young Investigator mentor

2014 Smadar Levin Award Committee, Society for Research in Psychopathology (SRP)

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

National Organizations

2018-Present Building roads to inclusion and diversity in graduate education (Bridge Network), Northwestern Site Director

2014-2015 National Alliance for the Mentally Ill (NAMI) on Campus Faculty Advisor for CU Boulder

Northwestern University

2020- Department of Psychology, Committee on Engagement

2020- Department of Psychology, Awards committee chair

2020- Present DevSci Diversity Committee

2018-Present Student Well-being task force

2018-Present Office for Research Limited Submissions Advisory Committee

2017 Faculty Search Committee, Neuroscience, Department of Psychology

2017 Searle Teaching Mentor, Tawny Spinelli

2017-present Training Program in Neuroscience of Human Cognition (T32), Preceptor

2017-Present Institute for Innovations in Developmental Sciences (DevSci) Training Core Co-Director (with Molly Losh, Ph.D. and Craig Garfield M.D.)

2016-Present DevSci, Steering Committee

2016-Present Undergraduate Psychological Association (UPA) Faculty Advisor

2015-Present Diversity Committee, Department of Psychology
- Sneak Peek Director
- Provost grants for Faculty Innovation in Diversity and Equity

Northwestern Invited Graduate Student and Postdoctoral Student Training Lectures:

2017 Society Biology & Health Cluster, interdisciplinary research and job search advice

2016 Graduate Student (PGSC): Career Development Lecture

2016 Postdoctoral Student Consortium: Early Career Advice Lecture

University of Colorado Boulder

2014 Search Committee, Clinical Administrative Staff

2014 Search Committee, Cognitive Neuroscience Faculty

2013-2014 Strategic Planning Committee

2013-2014 Space Committee

2012-2014 Undergraduate Honors Program Committee

2012 Search Committee, Clinical Faculty

2012 Graduate education workgroup.

2012 Undergraduate education workgroup
-Subgroup for Research Methods and Statistics

2011 Faculty Meeting Secretary

Student Research Committees (Note: Mittal lab students noted in separate section above)

Undergraduate Honor's Projects

Northwestern University

2020- Sophia Rodesky (Mentor Haase)

2020- Klaudia Konieczny (Mentor Haase)

2018- Olivia shay (Haase)

2018- Emily Friaser (Zinbarg)

2018- Victoria Steigerwald (Zinbarg)

University of Colorado Boulder

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- Roxanne L. Ross (Mentor: McGraw): 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- Emmie Matsuno (Mentor: Van Boven): 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 Defense

- 2019- Jeremy Jabbour, Sexual arousal patterns of mostly heterosexual men (Baily)
2019- Ann Carol, Risk for Bipolar Spectrum Disorders Associated with Positive Urgency and Orbitofrontal Cortical Grey Matter Volume (Nusslock)
2019- Ariela Kaiser (Shankman)
2016- Natasha Hansen (Hutchinson) Neural correlates of risky sex and response inhibition in adolescents
2015- Katherine Damme (Nusslock) Nucleus Accumbens Connectivity Relates to Trait Risk for Hypomania: A Structural and Functional Analyses of Hypomanic Risk Factors
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

- 2020- Brian Kraus (Gratton)
2017- James Glazer (Mentor Nusslock), Chair: Mittal
2016- Katherine Damme (Mentor: Nusslock)
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)

Dissertation Projects

- 2021- Miranda Munoz (Chair Mittal).
2019- Zach Millman (Mentor: Schiffman, UC Irvine), Facial affect identification errors and risk for schizophrenia spectrum illnesses
2018- Tatiana Karpouzian (Mentor: Reiley) Reduced task-evolved response on an executive control task among individuals across the psychosis spectrum
2018- Avante Smack (Mentor: Jennifer Tackett): Racial/Ethnic Differences in Values, Personality, and Psychopathology in Youth
2018- Katherine Damme (Nusslock)
2017 Chris Hawkey (Mentor: Miklowitz): Risk factors for suicide in pediatric bipolar disorder.

2016- Kevin Hsu (Bailey)
2016- Mia Nunez (Mentor: Zinbarg); Chairs: Zinbarg, Mittal
2016- Christina Young (Mentor: Nusslock)
2015- Sarah Wu (Mentor: Erick Willcutt): Measurement and Classification Issues in Mathematics and Reading Disorders
2015 Ryan Newsom (Mentor Campeau): Endogenous cannabinoid regulation of the HPA axis and of neuroendocrine reactivity to acute and repeated stress
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.
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

Leaves of Absence

I had a family leave for the Fall 2019 for the birth and care of my son Elliott. This involved a teaching and departmental service reduction, but I continued to run my research enterprise at full capacity and to participate in mentorship and national service. I have not had a research leave.

Consultancies

Takeda Pharmaceuticals (2016-2017), Meeting with drug development team to discuss research-surrounding assessment of treatment outcome measures.

Community Work

N.A.

Teaching Experience

Curriculum Development

2015-2017 ***Northwestern:*** *Advanced Graduate Psychopathology 421/497; Research Methods in Schizophrenia 357/497; Psychopathology 303:* Please see section below for course detail.

2010-2015 ***University of Colorado Boulder:*** *Adult Psychopathology 5433; Abnormal Psychology 4303; Psychopathology 3313:* Please see section below for course details.

Courses

- 2016-Present *Northwestern University, Department of Psychology, Advanced Graduate Psychopathology 421/497 (graduate)*. I have taught this course six times: Spring 15/16, Winter 16/17, Winter 17/18, Fall 18/19, Winter 19/20, Fall 20/21. A graduate course designed to provide in-depth coverage into the pathogenesis, treatment and clinical presentation of serious mental illness. This course is a joint graduate class, including students from both the Feinberg and Weinberg clinical graduate programs. Students work closely with me 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.
- 2016-Present *Northwestern University, Department of Psychology, Research Methods in Schizophrenia 357/497 (undergraduate/graduate)*. I have taught this course 3 times: Fall 15/16, Fall 16/17, Spring 18/19). An in-depth experiential learning environment. Students rotate between learning about methods such as neuroimaging, psychophysiology, eye-tracking, and tDCS, visiting labs on campus that are currently employing these methods (including observation and active learning experiences), understanding how these methods improve understanding of schizophrenia, and working in teams to design multi-modal research projects. The class culminates in a research proposal and presentation.
- 2016-Present *Northwestern University, Department of Psychology, Psychopathology 303 (undergraduate)*. I have taught this course four times: Spring 15/16, Spring 17/18, Winter 18/19, and Spring 19/2020. I am scheduled to teach it twice more this academic year. A large undergraduate course (100 students) designed to cover a variety of the major psychiatric disorders, causes, and empirically supported treatments.
- 2013-2014 *University of Colorado Boulder, Department of Psychology and Neuroscience, Abnormal Psychology 4303*. A large undergraduate course (150 students) designed to cover a variety of the major psychiatric disorders, causes, and empirically supported treatments.
- 2011-2015 *University of Colorado Boulder, Department of Psychology and Neuroscience, Adult Psychopathology 5433*. A graduate course designed to provide in-depth coverage into the pathogenesis and clinical presentation of mental illness.
- 2010-2011 *University of Colorado Boulder, Department of Psychology and Neuroscience, Psychopathology 3313*. 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: (Instructor Cannon, Supervisor Mittal)*. 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:* (Instructor Cannon, Supervisor Mittal). 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.

Select Guest Lectures

Northwestern

- 2019 *Northwestern University, Dedre Gentner, Motor Markers in psychosis, CogSci Prosem*
- 2017 *Northwestern University, Motor pathology and schizophrenia: A brain biology perspective, Neuroscience 206, Host: Segraves*
- 2016/17 *Northwestern University, Psychology Proseminar, Lectures on Schizophrenia and motor pathology*
- 2017 *Northwestern University, Department of Communications, Development, Guest Lecture, Molly Losh*
- 2016 *Northwestern University, Undergraduate Cognitive Science Guest Lecture, David Rapp*
- 2016 *Northwestern Active Minds, Stigma and Schizophrenia Spectrum Disorders*
- 2016 *Northwestern University, Graduate Pro-seminar, Psychosis*

University of Colorado Boulder

- 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, 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**
- 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.

- 2008-2010 **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.

Professional References

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