# CURRICULUM VITAE

## WILLIAM PAUL HETRICK

Indiana University Department of Psychological and Brain Sciences 1101 East Tenth Street Bloomington, IN 47405-7007 Tel: (812) 855-2620, Fax: (812) 855-4544 whetrick@indiana.edu

#### **EDUCATION**

- 1999 Doctor of Philosophy with major in clinical psychology, Department of Psychology, The Ohio State University, Columbus, OH
  - Clinical Internship: HARVARD MEDICAL SCHOOL/MCLEAN HOSPITAL, Belmont, MA.
- 1993 Master of Arts with major in experimental psychology, Department of Psychology, California State University, Fullerton, CA
- 1987 Bachelor of Arts with major in psychology and certificate in computer science, Point Loma Nazarene College, San Diego, CA

#### **POSITIONS**

- 2012-p **Chair**, Department of Psychological and Brain Sciences, Indiana University, Bloomington, IN
- 2009-p **Professor**, Department of Psychological and Brain Sciences, Indiana University, Bloomington, IN
- 2009-p **Professor**, Program in Neuroscience, Indiana Univ., Bloomington, IN
- 2009-p **Adjunct Professor of Psychology** Department of Psychiatry, Indiana Univ., School of Medicine, Indianapolis, IN
- 2005-2009 **Associate Professor**, Department of Psychological and Brain Sciences, Indiana University, Bloomington, IN
- 2005-2009 **Associate Professor**, Program in Neuroscience, Indiana Univ., Bloomington, IN
- 2006-2009 **Associate Professor of Psychology** Department of Psychiatry, Indiana Univ., School of Medicine, Indianapolis, IN
- 1999-2005 Assistant Professor, Department of Psychology, Indiana Univ., Bloomington,

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- 2001-2005 **Assistant Professor**, Program in Neural Science, Indiana Univ., Bloomington, IN
- 1998-1999 **Clinical Fellow**, Department of Psychiatry, Harvard University Medical School, Cambridge, MA
- 1997-1998 **Graduate Teaching Associate**, Department of Psychology, The Ohio State University, Columbus, OH
- 1997 **Psychologist Trainee**, Veterans Affairs Medical Center, Chillicothe, Ohio
- 1996-1997 **Graduate Course Assistant**, Department of Psychology, The Ohio State University, Columbus, OH
- 1995-96 **Graduate Research Associate**, Office for Disability Services, The Ohio State University, Columbus, OH
- 1990-95 **Staff Research Associate II**, Department of Psychiatry and Human Behavior, University of California, Irvine
- 1990-95 **Laboratory Manager**, Neurophysiology Laboratory, Fairview Developmental Center, Costa Mesa, CA
- 1989-93 **Graduate Research Assistant**, Neurophysiology Laboratory, Fairview Developmental Center & State Developmental Research Institutes, Costa Mesa, CA
- 1988-89 **Lecturer**, Department of Psychology, Point Loma Nazarene College, San Diego, CA
- 1987-89 **Graduate Teaching Assistant**, Department of Psychology, California State University, Fullerton, CA

# HONORS

- 2002 NARSAD Young Investigator Award
- 2004 NARSAD Young Investigator Award
- 2007 Trustee Teaching Award, Indiana University, Bloomington
- 2008 Alumnus of the Year, Point Loma Nazarene College, San Diego, CA
- 2012 Trustee Teaching Award, Indiana University, Bloomington
- 2015 Fellow, Association for Psychological Science
- 2017 Incoming Chair, Board of Directors, Council of Graduate Departments of Psychology (<u>COGDOP</u>)

# ADMINISTRATIVE & LEADERSHIP SERVICE

# <u>National</u>

· Member, Program Committee, 2006 Annual Meeting of the Society for

Psychophysiological Research, Vancouver, Canada.

- Chair, Program Committee, 2007 Twenty-first Annual Meeting of the Society for Research in Psychopathology, Iowa City, IA.
- Member, Program Committee, 2008 Twenty-second Annual Meeting of the Society for Research in Psychopathology, Pittsburgh, PA.
- · Co-Chair (with Brian O'Donnell), Program Committee, 2009 Fifteenth International Congress on Event-Related Potentials of the Brain, Bloomington, IN.
- Participant, <u>A.P.A. Science Leadership Conference</u> in Washington, DC, November 14-16, 2009.
- · Chair, Early Career Award Committee (2013), Society for Research in Psychopathology.
- Member, Early Career Award Committee (2014), Society for Research in Psychopathology.
- Appointed Member of Executive Board (2014-2015). Council of Graduate Departments of Psychology (COGDOP). This is the national organization of psychology department chairs.
- Invited Participant (11/15/2015), Clinical Psychological Science Summit (Chicago, Illinois). Purpose was to establish national-level strategies for promoting future excellence in training, research, and practice; influencing funding of services and research; and increasing public understanding and support of clinical psychological science. Meeting was jointly sponsored by the Association for Behavioral and Cognitive Therapies (ABCT), Academy of Psychological Clinical Science (APCS), Association for Psychological Science (APS), Association of Psychology Postdoctoral and Internship Centers (APPIC), Council of Graduate Departments of Psychology (COGDOP), Council of University Directors of Clinical Psychology (CUDCP), Psychological Clinical Science Accreditation System (PCSAS), and Society for a Science of Clinical Psychology (SSCP).
- Member, External Department Review Committee (2016, February). Department of Psychology, Georgia State University. Atlanta, GA.
- Elected Member of Executive Board (2016-2019). Council of Graduate Departments of Psychology (COGDOP). This is the national organization of psychology department chairs.
- Secretary, Executive Board (2017-2018). Council of Graduate Departments of Psychology (COGDOP). This is the national organization of psychology department chairs.
- Incoming Chair, Executive Board (2017-2018). Council of Graduate Departments of Psychology (COGDOP). This is the national organization of psychology department chairs.
- Member, Board of Directors, Psychological Clinical Science Accreditation System (<u>PCSAS</u>).

- Chair, Early Career Award Committee (2017), Society for Research in Psychopathology (<u>SRP</u>).
- Member, Convention Sites Committee (2017-p), Society for Psychophysiological Research.
- · Chair, External Department Review Committee (2017, April). Department of Psychology, Temple University. Philadelphia, PA.
- Member, External Department Review Committee (2018, February). Department of Psychology, University of Iowa. Iowa City, IA.

# <u>University</u>

- · Director, Bloomington Division, Indiana Clinical and Translational Science Institute, an NIH funded center. (July 2009-February 2013).
- Member, Operations Committee, Indiana Clinical and Translational Science Institute, an NIH funded center. (July 2009-February 2013).
- Member, Executive Committee, Indiana Clinical and Translational Science Institute, an NIH funded center. (July 2009-February 2013).
- Member, Education Committee, Indiana Clinical and Translational Science Institute, an NIH funded center. (July 2009-**present**).
- Member, Executive Committee, Program in Neuroscience, Indiana University, Bloomington. (July 2013-**present**).
- Member, Provost's College of Arts & Sciences Fiscal Sustainability Task Force.
   Appointed by IU Bloomington Provost Lauren Robel. (August 2015-January 2016).
- · Co-PI, Mutli-campus Health Equity Grand Challenge Project (October-November 2015).
- Principal Investigator, Mutli-campus Reducing Addictions Grand Challenge Project (October-November 2016).
- Member, IU Bloomington Regional Academic Healthsciences Center Program Planning Committee. Appointed by IUB Vice Provost for Health Sciences David Daleke (2016present).
- Member, IU Bloomington Health Sciences Council. Appointed by IUB Vice Provost for Health Sciences David Daleke (2016-**present**).
- Member of Research, Creative Activity and Graduate Education Strategic Planning Committee, IU College of Arts + Sciences. Appointed by Executive Dean Larry Singell (September 2016-2017).
- Member, Search Committee for Dean of the IUB School of Public Health. Appointed by IUB Provost Lauren Robel (September 2016-2017).
- Member, Steering Committee, Addictions Grand Challenge Project (August 2017present).

# **Department**

- Member, Policy and Steering Committee (elected), Department of Psychological and Brain Sciences (2003-2006)
- · Chair, Internal Gill Chair Search Committee, Department of Psychological and Brain Sciences (2009-2010).
- · Chair, Policy and Steering Committee (elected), Department of Psychological and Brain Sciences (2007-2010)
- Chair, Department of Psychological and Brain Sciences, Indiana University, Bloomington. (July 2012-**present**).

## **COMPLETED GRANTS**

**Graduate Student Alumni Research Award** (1998 - 1999). The Ohio State University Graduate School. *\$1435* competitive dissertation funding award.

**ERP gating and temporal variability in schizophrenia** (1996 - 1999). National Institute of Mental Health small grant program. *\$49,000*. Investigator. (Principal investigator: Julie Patterson).

**Research Training Grant in Clinical Science** (1999-2003). National Institute of Mental Health (T32 MH17146). *\$174,000/yr.* Core faculty member. (Principal investigator: Richard McFall).

**Gamma Synchronization in Schizophrenia Spectrum Disorders** (2001). National Institute of Mental Health (R03-MH63112-01). *\$25,000.* Investigator. (P.I.: Brian F. O'Donnell).

**Visual processing in schizophrenia and schizotypal personality disorder** (2001-2004). National Institute of Mental Health (RO1 MH62150-01). *\$125,000/yr*. Investigator. (Principal investigator: Brian F. O'Donnell).

**Evaluation of preparation free EEG/evoked potential technology** (2002-2005). This is a subcontract to a National Institutes of Health Small Business Innovative Research Grant Program, National Institute of Neurological Diseases and Stroke to Jim O'Halloran, Ph.D., NeuroComp Systems, Newport Beach, CA and University of California, Irvine, titled, "Preparation free EEG/evoked potential technology." Direct costs (Hetrick's subcontract): \$24,000.

**Examination of Neural Timing Circuits in Schizophrenia** (2002-2004). National Alliance for Research on Schizophrenia and Depression (NARSAD) Young Investigator Award. \$60,000 direct costs. Principal Investigator: Hetrick.

**Alcohol Pharmacodynamics and Familial Risk for Alcoholism** (2002-2007). National Institute of Alcohol Abuse and Alcoholism. The present project is the Human Genetics Research Component of the Indiana Alcohol Research Center (P60 AA07611-16, David Crabb P.I). (P.I.: Sean O'Connor). Direct Costs for component: \$836,837; Direct cost for entire center: \$1,447,904. Investigator.

**ERPs in schizophrenia and alcohol dependence** (2003-2004). National Institute of Mental Health (R03 MH066149-01A1). \$50,000 direct costs. Principal Investigator: Hetrick.

**Neural Integration of Visual Memory in Schizophrenia** (2003-2004). National Institute of Mental Health Pre-doctoral Research Service Award (F31-MH068933-01). \$29,078 direct costs. Awarded to my graduate student Colleen Brenner.

**Examination of temporal architecture dysfunction in schizophrenia** (2004-2006). National Alliance for Research on Schizophrenia and Depression (NARSAD). \$60,000 direct costs. Principal Investigator: Hetrick.

**Research Training Grant in Clinical Science** (2004-2009). National Institute of Mental Health (T32 MH17146). *\$297,305/yr.* Core faculty member. (Principal investigator: Richard McFall).

**Components of attentional control in schizophrenia** (2004-2006). National Institute of Mental Health Pre-doctoral Research Service Award (F31 MH070186-01). \$60,000 direct costs. Awarded to my graduate student Paul Kieffaber.

**Neurobehavioral correlates of bipolar disorder.** (2004-2007). National Institute of Mental Health (R21MH071876-01). \$125,000/year direct costs. Principal investigator: Brian F. O'Donnell. Investigator: Hetrick.

**Effects of RG1068 (Secretin) on Information Processing in Refractory Schizophrenia** (2005-2006). Repligen Corporation (a biopharmaceutical company). \$66,125/year direct costs. Principal investigator: Anantha Shekhar. Investigator: Hetrick. **Visual processing in schizophrenia and schizotypal personality disorder** (2005-2010). National Institute of Mental Health (RO1 MH62150-01). *\$175,000/yr*. Investigator. (Principal investigator: Brian F. O'Donnell).

**Sensory Processing Deficits in Cannabis Use** (2005-2007). National Institute of Drug Abuse (R03 DA019630-01). \$50,000/yr. Investigator. (Principal investigator: Patrick Skosnik, postdoc, IUB).

**Cerebellar timing dysfunction in schizophrenia** (5/5/2006-4/30/2012). National Institute of Mental Health (R01 MH074983-01). \$1,125,000 direct costs. Principal investigator: Hetrick. Co-Principal investigator: Joseph E. Steinmetz, University of Kansas.

**EEG Neuroimaging System for Clinical Neuroscience Studies of Brain Dysfunction** (2006-2007). Faculty Research Support Program, Indiana University. \$45,000 direct costs. Principal investigator: Hetrick. Co-investigator: Brian F. O'Donnell.

Data Acquisition System for Extracellular Electrophysiology and Classical Eyeblink Conditioning: A Multi-laboratory Translational Clinical Research Initiative (2007-2008). Faculty Research Support Program, Indiana University. \$40,000 direct costs. Principal investigator: Cara Wellman. Co-investigators: William P. Hetrick, Brian F. O'Donnell, Jo Anne Tracy, and Patrick Skosnik.

**Investigation of Neural Timing Circuits in Bipolar Disorder using Eyeblink Conditioning Methodology** (2007-2009). NARSAD: National Alliance for Research on Schizophrenia and Depression. \$60,000 direct costs. Principal Investigator: Amanda R. Bolbecker. Mentors: William P. Hetrick, Brian F. O'Donnell. Collaborators: Anantha Shekhar, Jo Anne Tracy.

**The Effect of Cannabis Use on Human Cerebellar Function** (2007-2009). National Institute of Drug Abuse (R21 DA023097-01). \$275,000 direct costs. Principal investigator: Patrick Skosnik. Hetrick is an investigator.

Integrative Predoctoral Training in Drug Abuse Research at Indiana University. (2008-2013). National Institute on Drug Abuse (T32 DA024628-01). \$922,898 direct costs. Program director: George Rebec. Core mentors/preceptors: Brown, Finn, **Hetrick**, Mackie, Newman, O'Donnell, Pessoa, Sari, Skosnik, Timberlake, Walker, Wellman.

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**Translational Evaluation of Secretin's Effects on Cerebellar Function** (2009-2010). Clinical Translational Research Pilot Grant funded by NIH U54 Clinical Translation Science Award to Indiana University (Anantha Shekhar, PI). Direct costs for pilot project: \$75,000. Hetrick is PI. Charles Goodlett is Co-PI. Amanda Bolbecker is investigator.

Effect of Secretin on Cerebellar Function and Cortical Synchronization in Schizophrenia (2011-2013). NARSAD: National Alliance for Research on Schizophrenia and Depression. \$60,000 direct costs. Principal Investigator: Amanda R. Bolbecker. Mentors: William P. Hetrick, Anantha Shekhar.

**Functional brain connectivity in schizophrenia: A cortico-cerebellar approach** (2011-2012). Faculty Research Support Program, Indiana University. \$67,000 direct costs. Hetrick is PI. Co-investigators: Aina Puce, Olaf Sporns, and Dae-Jim Kim.

**Effects of Chronic Cannabis Abuse on Associative Learning and Neuroplasticity in Early Adolecence and Young Adulthood** (4/1/2012-12-31-2013). Indiana University Collaborative Research Grant (IUCRG). \$66,796 direct costs. Hetrick is Co-investigator with Amanda Bolbecker and Alan Breier. Co-PIs are Ken Mackie and Charles Goodlet.

**Cerebellar Dysfunction in Autism** (2014-2016). Indiana Clinical and Translational Science Institute (ICTSI). \$10,000 direct costs. Hetrick is PI. Co-investigators are Amanda Bolbecker, Sharlene Newman, Daniel Kennedy, Brian O'Donnell and Olaf Sporns.

**Graph Theoretic Analysis of Brain Networks in Cannabis Users** (8/1/2014-7/31/2016). National Institute of Drug Abuse (R21DA035493). \$429,000 total costs. Hetrick is co-investigator. Brian O'Donnell is PI.

A Phase 2A Study to Evaluate the Kappa Opioid Receptor as a Target for the Treatment of Mood and Anxiety Spectrum Disorders by Evaluating Whether LY2456302 Engages Key Neural Circuitry Related to the Hedonic Response. (8/29/2013-6/28/2015). National Institute of Mental Health with subcontract coming to IU from Duke University (Award #: 199651/HHSN2712012000061). \$465,081 total costs. Hetrick is co-investigator on EEG component. John Nurnburger (IUSM) is PI.

**Eye-Blink Conditioning in Schizophrenia Patients** (February-July 2017). Research contract with Takeda Pharmaceuticals U.S.A., Inc., Deerfield, II. \$9,680 total costs. Hetrick is PI.

#### **ACTIVE GRANTS**

**Cerebellar dysfunction in schizophrenia** (8/29/2012-4/30/2018 in NCE). National Institute of Mental Health (2R01MH074983). \$1,250,000 direct costs (\$1,936,000 total award). Principal investigator: Hetrick. Co-investigators: Amanda Bolbecker, Brian F. O'Donnell, Olaf Sporns, Dae-Jin Kim, Sharlene Newman, Aina Puce, and Alan Breier.

**Understanding speech in noise: The roles of aging and attentional entrainment** (7/1/2014-6/30/2019). National Institute of Deafness and Other Communication Disorders (R01DC013538). \$1,900,264 total award. Hetrick is co-investigator; Gary Kidd is PI with Devin McAuley.

**Training in Clinical Translational Science: Maximizing the Public Health Impact** (7/1/2015-6/30/2020). Research Training Grant: T32MH103213. \$1,940,701 total costs. Hetrick is PI.

# TEACHING & ADVISEMENT

## Instructor:

**Clinical and Translational Science** (Elective graduate course in Department of Psychological and Brain Sciences, but a required course for NIMH T32 Research Training Grant Trainees). (2015-**present**)

· Instructor, Department of Psychological and Brain Sciences, Indiana University **Introduction to Clinical Science** (Core Graduate course in Clinical Science Prog.). (2004-2011)

· Instructor, Department of Psychological and Brain Sciences, Indiana University **Evidence-based Psychotherapy** (upper division undergrad. topics course) (2003-2012)

- · Instructor, Department of Psychological and Brain Sciences, Indiana University
- *Duties*. Full teaching responsibility, including developing syllabus, lectures, and examinations. Enrollment: ~30 per academic semester.

Abnormal Psychology (upper division undergrad. course) (1999-2011)

· Instructor, Department of Psychological and Brain Sciences, Indiana University

• Duties. Full teaching responsibility, including developing syllabus, lectures, and

examinations. Enrollment: ~90 per academic semester. Taught each semester. Intervention and Evaluation (graduate course) (2000-2003, 2009)

· Instructor, Department of Psychological and Brain Sciences, Indiana University

• *Duties*. Full teaching responsibility, including developing syllabus, lectures, and examinations. Enrollment: ~6 per academic semester. Taught once per year.

Psychopathology and Psychotherapy-I (upper division undergrad. course) (9/97 - 6/98)

Instructor, Department of Psychology, Ohio State University

• *Duties*. Full teaching responsibility, including developing syllabus, lectures, and examinations. Taught three consecutive 12 week sections. Enrollment: ~70 per academic quarter.

**Physiological Psychology** (upper division undergraduate) (9/88 - 12/88)

· Instructor, Point Loma Nazarene College, San Diego, Calif.

• *Duties.* **Full teaching responsibility**, including developing syllabus, laboratory assignments, lectures, and examinations. Taught one 12 week section. Enrollment: 13.

# Advisement:

# **Doctoral Dissertations**

• **Colleen A. Brenner (2005 PhD in Clinical Science)**. [Co-advisor with Brian O'Donnell] An EEG Investigation of Visual Spatial Working Memory and Schizophrenia. Associate Professor of Psychology, Loma Linda University, C.A.

• Paul D. Kieffaber (2006 dual PhD in Clinical Science & Cognitive Science). Components of attentional control in schizophrenia. Associate Professor of Psychology, The College of William and Mary.

• **Nicole Prause (2006 PhD in Clinical Science)**. The role of emotion and attention in variations in sexual desire. Founder, <u>Liberos</u>, LLC, Los Angeles, C.A.

• Christine A. Carroll (2006 dual PhD in Clinical Science and Cognitive Science). Temporal Processing in Schizophrenia: An Integrative Study of Behavioral Judgment, Motor Execution, and Quantitative Modeling. Previously a post-doctoral scholar at Indiana University Bloomington and a Lecturer at Butler University, Indianapolis.

• Jason K. Johannesen (2007 PhD in Clinical Psychology). [Co-advised with John McGrew at IUPUI] Temporal, spectral, and spatial relationships in event-related activity of the human electroencephalogram: Methods to define distinct enophenotypes of psychosis. Assistant Professor of Psychiatry, Yale University Medical School & Research Psychologist. New haven VAMC.

• **Chad R. Edwards (2010 dual PhD in Clinical Science and Neuroscience)**. Cerebellar-dependent associative learning in heavy cannabis users: Relationship to cannabis use and cannabinoid metabolites. Practicing pediatric neuropsychologist, South Bend, IN. Adjunct faculty, Indiana University South Bend.

• **Molly Erickson (2012 dual PhD in Clinical Science and Neuroscience)**. Temporal dynamics of resting-state brain activity in schizophrenia: An EEG study. Assistant Professor of Psychiatry, Robert Wood Johnson Medical School, Rutgers University, N.J.

• Jerillyn S. Kent (2015 PhD in Clinical Science and Neuroscience). Neural, Cognitive, and Clinical Correlates of Cerebellar-Dependent Associative Learning in Individuals with Schizophrenia. Presently a postdoctoral scientist, Minneapolis Veterans Administration medical Center, M.N.

• Sarah Forster (2015 PhD in Clinical Science). [Co-Advised with Joshua Brown] Neural Substrates Of Relapse Risk And Recovery In Substance Dependent Individuals: A Longitudinal Functional Magnetic Resonance Imaging Study. Presently a postdoctoral scientist, Pittsburgh Veterans Administration Medical Center, P.A.

• **Malene Abell (2016 PhD in Clinical Science)**. Traditional EEG measures and temporal patterns of neural network synchronization in veterans with and without mild traumatic brain injury and posttraumatic stress disorder. Presently postdoc in clinical neuropsychology.

## Invited panelist at the Inaugural Undergraduate Research Colloquium

· Department of Psychology, The Ohio State University. April 16, 1998. *Topic:* "Perspectives on the undergraduate research experience."

**Research Mentor in the Indiana University STARS Program** for science-oriented undergraduates (2000- p)

- · Sarah Brown, Biology and Psychology major (2000-2003).
- · Pritha Gupta, Biology major (2001-2002).
- · Kathleen Ames, Psychology major (2001-2004).
- · Emily Kappenman, Psychology major (2002-2005).
- · Crystal Metha, Psychology and Biology major (2002-2005.
- · Lee Russell, Psychology (2005-2007)
- · Emily Cahill, Psychology (2006-2009)
- · Ben Seitzman, Psychology & Neuroscience (2010-2014)
- · Adam Coey, Neuroscience (2011-2014)
- · Abinand Rejimon, Neuroscience (2013-present)
- · Alex F. Gimeno, Neuroscience (2017-present)

# **Mentor in the Indiana University FASE Program** for high-risk undergraduates (2000-2001)

· Peggy Moneymaker, Psychology major (2000- 2001).

**Research Mentor in the Beckman Scholars Program**, Beckman Foundation, Irvine, CA; conference for science-oriented undergraduates.

- · Sarah Brown, Biology and Psychology major (2002-2003).
- · Anna Watkin, Psychology major (2010-2011).

# **Research Mentor in the National Institute of Health IMSD Program (MEDIC-B Summer Research Program)**, Indiana University, Bloomington.

- · Krystle Bartley from Xavier University, New Orleans (2003).
- · Kirsten Cuellar from Indiana University, Bloomington (2004).

**Research Mentor in the McNair Summer Research Opportunity Program**, Indiana University, Bloomington (2003).

- · Arter Biggs from Grambling State University, Grambling, Louisiana (2003).
- · Isaiah Innis, IU (2011-2013)

# **Research Mentor in the Howard Hughes Medical Institute Integrated Freshman Learning Experience Program**, Indiana University, Bloomington

- · Tom Pottanat (2004)
- · Philip Tishbein (2005)
- · Lee Russell (2006)
- · Adeel Chaudhry (2007)
- · Jaycee Bigham (2007)

## **Research Mentor in I.U. Research Scholars Program**

· Justin Robinson (2007-2008)

## **Research Mentor in I.U. Cox Research Scholars Program**

- · Anna Watkin (2009-2011)
- · Kelsey Schrank (2010-2013)

## **STUDENT HONORS & AWARDS**

2000 Chad Robert Edwards (undergraduate). **Honors Thesis Award** (\$1000) for an Honors Thesis completed in my laboratory: *Pre-pulse inhibition and P50 gating in sensory processing sensitivity*.

Sarah Brown. **Undergraduate Research and Creative Activity Partnership Award** (\$1500) from Indiana University to complete a study of eye blink conditioning in schizophrenia in my laboratory. Joe Steinmetz, co-mentor.

Sarah Brown. **Honors College Undergraduate Grant** (\$600) from Indiana University to study eye blink conditioning in schizophrenia spectrum disorders.

2001 Lauren Lee Mary Rae. **Undergraduate Honors Thesis** completed in my laboratory: *Acoustic human startle response: The relationship between psychosis proneness and prepulse inhibition.* 

Jenna Godfrey. **Honors College Undergraduate Grant** (\$600) to study perceptual anomalies in community psychiatric patients.

Paul D. Kieffaber (Graduate student). **President's Summer Fellowship** to study the psychophysiology of attention shifting in my laboratory. The award includes a \$1500 fellowship, five \$500 awards for summer research trainees, and \$900 for lab supplies.

Paul D. Kieffaber. **Grant In Aid of Research** award (\$500) from Sigma Xi to study neuropsychological correlates of attention switching.

Paul D. Kieffaber.fMRI and NeuroinformaticsSummer WorkshopFellowship from Dartmouth College, New Hampshire.The award includes atravel stipend, boarding expenses, and 2-day workshop.The award includes a

Paul D. Kieffaber. **Graduate Research Fellowship** (\$2500) from the IU Neuroscience Clinical Research Center to study working memory and functional brain connectivity in schizophrenics with fMRI.

Christine Carroll (Graduate student). **Scottish Rite Graduate Research Fellowship** (\$15,000/year) to study alcohol dependence in schizophrenia.

Jenna Godfrey. **Undergraduate Research and Creative Activity Partnership Award** (\$1500) to study attention and perception in schizophrenia.

Colleen Brenner (Graduate student). **Grant In Aid of Research** award (\$400) from Sigma Xi to study neural integration during working memory in schizophrenia patients.

Ryan Hamilton. **Honors College Undergraduate Grant** (\$526) to study affective modulation of P50 sensory gating.

Kailie Stout. **Honors College Undergraduate Grant** (\$600) to study affective modulation of the acoustic startle response.

2002 Sarah M. Brown (Undergraduate student). **Beckman Scholar Award** (\$17,600). This prestigious fellowship covers one academic year and two summers of research on neural timing mechanisms in schizophrenia, plus money for research supplies and travel to conferences.

Christine Carroll (Graduate student). **President's Summer Fellowship** to study steady-state and intermittent dual-click methods of assessing cortical event-related potential suppression. The award included a \$1500 fellowship, five \$500 summer stipends for undergraduate research trainees, and \$934 for lab supplies.

Jenna Godfrey. **Undergraduate Honors Thesis** completed in my laboratory: *Perceptual Anomalies in Community Sample of Healthy Adults*.

Ryan Hamilton. **Undergraduate Honors Thesis** completed in my laboratory: *Do Affective States Modulate P50 Sensory Gating?* 

Christine Carroll (Graduate student). **Graduate Student Poster Award** (\$300) at the 42<sup>nd</sup> Annual Meeting of the Society for Psychophysiological Research, Washington D.C., October 2 - 6: "P50 Sensory gating in bipolar disorder."

Paul D. Kieffaber (Graduate Student). **Graduate Student Poster Award** (\$300) at the 42<sup>nd</sup> Annual Meeting of the Society for Psychophysiological Research, Washington D.C., October 2 - 6: "ERP correlates of Attention Shifting."

Colleen Brenner (Graduate Student). **Graduate and Professional Student Organization Research Award** (\$400) at Indiana University, Bloomington to study neural integration of visual memory in schizophrenia.

2003 Nicole R. Merritt (Graduate student). **Social Science Research Council Sexuality Dissertation Fellowship** (\$28,000). This 12-month fellowship supports research on information processing deficits associated with sexual dysfunction.

Nicole R. Merritt (Graduate student). **Indiana University President's Summer Undergraduate Research Initiative Award** to study information processing deficits in sexual dysfunction. The award included a \$1500 fellowship, five \$500 summer stipends for undergraduate research trainees, and \$934 for lab supplies.

Emily Kappenman (Undergraduate student). **Undergraduate Research and Creative Activity Partnership Award** (\$1500) to complete an electroencephalographic study of attention switching in my laboratory. John Kruschke, co-mentor.

Emily Kappenman (Undergraduate student). **Honors College Research Grant** (\$1750) to study highlighting, Kamin blocking, and illusory correlation in Schizotypal Personality Disorder and healthy controls. John Kruschke, co-mentor.

Sarah M. Brown. **Sigma Xi Undergraduate Research Award** from Indiana University Chapter for distinction in research.

Sarah M. Brown. **Biology Undergraduate Research Award** (\$1000) from Indiana University Department of Biology for distinction in research.

Emily Kappenman (Undergraduate student). Howard Hughes Medical Institute Capstone Independent Research Opportunities Program Award (\$3000) to complete an electroencephalographic study of attention switching. John Kruschke, co-mentor.

Colleen Brenner (Graduate Student). **Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral Fellow Award**. National Institutes of Mental Health Pre-doctoral National Research Service Award (\$29,078) to study neural integration of visual memory in schizophrenia. 2004 Kathleen M. Ames. **Undergraduate Honors Thesis** completed in my laboratory: *Differential effects of affective modulation on orbicularis and postauricular indices of the acoustic startle response*.

Paul Kieffaber. **Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral Fellow Award.** National Institute of Mental Health Pre-doctoral Research Service Award (F31 MH070186-01). Title: Components of attentional control in schizophrenia. \$60,000 direct costs.

Thomas Pottanat (Undergraduate). **Herman B. Wells Scholarship**. Indiana University.

2005 Emily Kappenman (Undergraduate student). **Cantor Undergraduate Research Award** (\$500). Department of Psychological and Brain Science, Indiana University.

Daniel I. Shapiro (Undergraduate student). **Honors College Research Award.** Indiana University.

Daniel I. Shapiro (Undergraduate student). **Undergraduate Honors Thesis** completed in my lab. *Affect modulation of the post-auricular response*. Indiana University.

Jason Johannesen (Graduate student). **Smadar Levin Award**, for most outstanding poster presentation by a graduate student. Annual Meeting of the Society for Research in Psychopathology.

Susan Roepke (Undergraduate student). **Howard Hughes Medical Institute Capstone Independent Research Opportunities Program Award** (\$800) to complete an electroencephalographic study of temporal determinants of attention.

2006 Susan Roepke. **Undergraduate Honors Thesis** completed in my laboratory: *Temporal determinants of attention: Timing effects on pitch judgment*.

Susan Roepke (Undergraduate student). **Excellence in Research Award** from the Department of Psychological and Brain Sciences.

Nicole Prause (Graduate student). Society for Sex Therapy and Research (SSTAR) Student Research Award for research project titled, "Attention and

emotional responses to sexual stimuli and their relationship to sexual desire."

Adam Steinmetz (Undergraduate student). **Howard Hughes Medical Institute Capstone Independent Research Opportunities Program Award** (\$800; Fall semester) to study the ISI shift procedure in human eye-blink conditioning.

2007 Adam Steinmetz (Undergraduate student). Howard Hughes Medical Institute Capstone Independent Research Opportunities Program Spring Semester Award (\$500) to study the ISI shift procedure in human eye-blink conditioning.

Chad Edwards (Graduate student). **The International Cannabinoid Research Society Travel Award** (\$1100) to attend the Society's annual meeting in Manoir St-Sauveur, St-Sauveur, Canada, June 26 to July 1, 2007.

Amanda Bolbecker (Postdoctoral student). **NARSAD: National Alliance for Research on Schizophrenia and Depression Young Investigator Award**. (\$60,000). Title: Investigation of Neural Timing Circuits in Bipolar Disorder using Eyeblink Conditioning Methodology.

Colleen Brenner (Graduate student). **Irving J. Saltzman Award for Outstanding Graduate Achievement**, Department of Psychological & Brain Sciences, I.U.

Adam Steinmetz (Undergraduate student). **Howard Hughes Medical Institute Capstone Independent Research Opportunities Program Summer Award** (\$3500) to study the differential effects of auditory versus visual conditioning stimuli on human eye-blink conditioning in healthy young adults.

Emily Cahill (Undergraduate student). **Indiana University Science, Technology and Research Scholars (STARS) Summer Research Stipend** (\$3500) to study temporal components of attention.

Adam Steinmetz (Undergraduate student). **Hutton Honors College Travel Grant** (\$500) to present poster at the Annual Meeting of The Pavlovian Society in Austin, TX, October, 2007. Poster is titled, "Bidirectional ISI shift in auditory delay eyeblink conditioning in healthy humans."

2008 Adam Steinmetz (Undergraduate student). **Undergraduate Honors Thesis** completed in my laboratory: *Comparison of Auditory and Visual Stimuli in Delay Eyeblink Conditioning*.

Paul D. Kieffaber (Graduate student). **Irving J. Saltzman Award for Outstanding Graduate Achievement**, Department of Psychological & Brain Sciences, I.U.

2009 Molly Erickson (Graduate student). **Graduate Research Fellowship** (3 yr award). National Science Foundation.

Jerillyn Kent (Graduate student). **Graduate Research Fellowship** (3 yr award). National Science Foundation.

Adam Steinmetz (Undergraduate student). **Cheryl Burnham Buhler Award** (\$1000) for outstanding research.

- 2010 Anna Watkin (Undergraduate student). **Beckman Scholar Award** (\$19,300). This prestigious fellowship covers one academic year and two summers of research on cerebellar contributions to motor, cognitive, and affective processing, plus money for research supplies and travel to conferences.
- 2011 Molly Erickson (Graduate student). **J.R. Kantor Graduate Award** (\$1000). In recognition of outstanding performance in psychological research by a graduate student in the Department of Psychological and Brain Sciences, IU.

Jerillyn Kent (Graduate student). Graduate and Professional Student Organization Travel Award (\$500). Indiana University Bloomington.

- 2012 Jerillyn Kent (Graduate student). **John H. Edwards Fellowship** (full academic fellowship). Indiana University Bloomington.
- 2013 Benjamin Seitzman (Undergraduate student). **Barry Goldwater Scholarship** for brain microstate research.
- 2014 Jerillyn Kent (Graduate student). **J.R. Kantor Graduate Award** (\$1000). In recognition of outstanding performance in psychological research by a graduate student in the Department of Psychological and Brain Sciences, IU.

Jerillyn Kent (Graduate student). **Smadar Levin Award**, for most outstanding poster presentation by a graduate student. Annual Meeting of the Society for Research in Psychopathology.

2016 Alexandra Moussa-Tooks (Graduate student). Clinical Translational Science Research Training Grant Fellowship. Funded by NIMH T32 Award.

John Purcell (Graduate student). **Clinical Translational Science Research Training Grant Fellowship**. Funded by NIMH T32 Award.

Nancy Lundin (Graduate student). **Graduate Research Fellowship** (3 yr. award). National Science Foundation.

Alexandra Moussa-Tooks (Graduate student). **Harlan Scholars Summer Fellowship**. Funded by Department of Psychological and Brain Sciences, IU.

Jessica Mitroi (Undergraduate). **Hutton Honors Summer Research Grant** (2016). Merit award with research and living stipend to conduct summer research. IU Bloomington Hutton Honors College.

Alexandra Moussa-Tooks (Graduate student). **President's Award** (\$1000). Society for Research in Psychopathology.

2017 Nancy Lundin (Graduate student). Clinical Translational Science Research Training Grant Fellowship. Funded by NIMH T32 Award.

Alexandra Moussa-Tooks (Graduate student). Fellowship. **Indiana Clinical and Translational Science Institute**. Funded by NIH National Center for Advancing Translational Sciences TL1 NRSA Award.

John Purcell (Graduate student). Fellowship. **Indiana Clinical and Translational Science Institute**. Funded by NIH National Center for Advancing Translational Sciences TL1 NRSA Award.

Alexandra Moussa-Tooks (Graduate student). **Provost Travel Award for Women in Science**. \$800. Indiana University.

Nancy Lundin (Graduate student). **Provost Travel Award for Women in Science**. \$750. Indiana University.

## **PUBLICATIONS**

Note: asterisks indicate advisee under my direct supervision

- 1. **Hetrick, W.P.**, Isenhart, R.C., Taylor, D.V., & Sandman, C.A. (1991). ODAP: A standalone program for observational data acquisition. *Behavior Research Methods, Instruments, & Computers, 23*, 66-71.
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- 3. Taylor, D.V., Sandman, C.A., Touchette, P., **Hetrick, W.P.**, Barron, J.L. (1993). Naltrexone improves learning and attention in self-injurious individuals with developmental disabilities. *Journal of Developmental and Physical Disabilities, 5*, 29-42.
- 4. Taylor, D.V., Rush, D., **Hetrick, W.P.**, Barron, J., & Sandman, C.A. (1993). Selfinjurious behavior within the menstrual cycle of developmentally delayed women. *American Journal on Mental Retardation, 97*, 659-664.
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- 8. Sandman, C.A. & **Hetrick, W.P**. (1995). Opiate mechanisms in self-injury. *Mental Retardation and Developmental Disabilities Research Reviews, 1*, 130-136.
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## <u>2004</u>

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# <u>2005</u>

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#### <u>2008</u>

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## <u>2012</u>

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- Kam, J.W.Y., Bolbecker, A.R., O'Donnell, B.F., Hetrick, W.P., Brenner, C.A. (2013). Resting State EEG Power and Coherence Abnormalities in Bipolar Disorder and Schizophrenia. *Journal of Psychiatric Research*, 47 (12), 1893-1901.
- Bolbecker A.R., Kent, J.S., Petersen, I.T., Klaunig, M.J., Forsyth, J.K., Howell, J.M., Westfall, D.R., O'Donnell, B.F., & **Hetrick, W.P.** (2013). Impaired Cerebellar-Dependent Eyeblink Conditioning in First-Degree Relatives of Individuals With Schizophrenia. *Schizophrenia Bulletin*.

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#### <u>2014</u>

- Micoulaud-Franchi, J.A., Hetrick, W.P., Aramaki, M., Bolbecker, A.R., Boyer, L., Ystad, S., Kronland-Martinet, R., Richieri, R., Faget, C., Faugere, M., El-Kaim, A., Cermolacce, M., Lancon, C., Vion-Dury, J. (2014). Do schizophrenia patients with low P50-suppression report more perceptual anomalies with the sensory gating inventory? <u>Schizophrenia Research</u>, 157, 157-162.
- 90. O'Bryan, R.A., Brenner, C.A., **Hetrick, W.P.**, O'Donnell, B.F. (2014). Disturbances of visual motion perception in bipolar disorder. *<u>Bipolar Disorders</u>*, 16, 354-56.
- Bolbecker, A.R., Westfall, D.R., Howell, J.M., Lackner, R.J., Carroll, C.A., O'Donnell, B.F., Hetrick, W.P. (2014). Increased Timing Variability in Schizophrenia and Bipolar Disorder. <u>PloS ONE</u>, 9(5):e97964. doi: 10.1371/journal.pone.0097964.
- Dominelli, R.M., \*Boggs, J.M., Bolbecker, A.R., O'Donnell, B.F., Hetrick, W.P., & Brenner, C.A. (2014). Affect modulated startle in schizophrenia: Subjective experience matters. <u>*Psychiatry Research*</u>, 220, 44-50.
- Skosnik, P.D., Krishnan, G., D'Souza, D., Hetrick, W.P., & O'Donnell, B.F. (2014). Disrupted Gamma-Band Neural Oscillations During Coherent Motion Perception in Heavy Cannabis Users. <u>Neuropsychopharmacology</u>, 39, 3087-3099.
- Kim, D.J., Poggi Davis, E., Sandman, C.A., Sporns, O., O'Donnell, B.F., Buss, C., & Hetrick, W.P. (2014). Longer gestation is associated with more efficient brain networks in preadolescent children. *NeuroImage*, 100, 619-627.
- 95. Cheng, H., Skosnik, P.D., Pruce, B.J., Brumbaugh, M.S., Vollmer, J.M., Fridberg, D.J., O'Donnell, B.F., **Hetrick, W.P.**, & Newman, S.D. (2014). Resting state functional magnetic resonance imaging reveals distinct brain activity in heavy cannabis users–a multi-voxel pattern analysis. *Journal of Psychopharmacology*, *28*, 1030-1040.
- Micoulaud-Franchi, J.A., Hetrick, W.P., Boyer, L., Aramaki, M., Ystad, S., Richieri, R., Alexandre, E.K., Faget, C., Faugere, M., Cermolacce, M., Kronland-Martinet, R., Lancon, C., & Vion-Dury, J. (2014). Validation of the French Sensory Gating Inventory: A confirmatory factor analysis. *Psychiatry Research*, 220, 1106-1112.
- Kim, D.J., \*Kent, J.S., Bolbecker, A.R., Sporns, O., Cheng, H., Newman, S.D., Puce, A., O'Donnell, B.F., **Hetrick, W.P**. (2014). Disrupted Modular Architecture of Cerebellum in Schizophrenia: A Graph Theoretic Analysis. <u>Schizophrenia Bulletin</u>, 40(6):1216-26. IF=8.45; 5-yr IF=8.686.

# <u>2015</u>

 Cheng, H., Newman, S., Goñi, J., Kent, J.S., Howell, J., Bolbecker, A., Puce, A., O'Donnell, B.F., **Hetrick, W.P.** (2015). Nodal centrality of functional network in the differentiation of schizophrenia. <u>Schizophrenia Research</u>, 168, 345-352.

- Cheng, H., Newman, S.D., Kent, J.S., Bolbecker, A., Klaunig, M.J., O'Donnell, B.F., Puce, A., *Hetrick, W.P.* (2015). White matter abnormalities of microstructure and physiological noise in schizophrenia. *Brain Imagining and Behavior*, 9(4), 868-877.
- Kim, D.J., Poggi Davis, E., Sandman, C.A., Sporns, S., O'Donnell, B.F., Buss, C., & Hetrick, W.P. (2015). Children's intellectual ability is associated with structural network integrity. *NeuroImage*, *124*, 550-556. 5-yr IF=6.797.
- \*Kent, J.S., Bolbecker, A.R., O'Donnell, B.F., & Hetrick, W.P. (2015). Eyeblink conditioning in schizophrenia: A critical review. *Frontiers in Psychiatry*, *6*, Article 146.

#### <u>2016</u>

- Bolbecker, A.R., Kent, J.S., Petersen, I.T., Howell, J.M., O'Donnell, B.F., & Hetrick,
   W.P. (2016). New insights into the nature of cerebellar-dependent eyeblink conditioning deficits in schizophrenia: A hierarchical linear modeling approach.
   <u>Frontiers in Psychiatry</u>, 7, Article 4. IF=4.58.
- 103. Vohs, J.L., Leonhardt, B.L., Francis, M.H., Westfall, D., Howell, J., Bolbecker, A.R., O'Donnell, B.F., **Hetrick, W.P.,** & Lysaker, P.H. (2016). A Preliminary Study of the Association Among Metacognition and Resting State EEG in Schizophrenia. <u>Journal</u> <u>of Psychophysiology</u>, 30, 47-54. IF=1.17.
- 104. Kim, D.J., Poggi Davis, E., Sandman, C.A., Sporns, S., O'Donnell, B.F., Buss, C., & **Hetrick, W.P**. (2016). Prenatal maternal cortisol has sex specific associations with child brain network properties. *Cerebral Cortex*, 1-12. IF=8.28.

## <u>2017</u>

- \*Seitzman, BA, \*Abell, M, \*Bartley, SC, Erickson, MA, Bolbecker, AR, & Hetrick,
   WP (2017). Cognitive manipulation of brain electric microstates. <u>NeuroImage</u>, 146, 533-543. 5-yr. IF=6.797.
- 106. D'Onofrio, BM, Viken, RJ, & Hetrick, WP (in press). Science in Clinical Psychology. In M.C. Makely & J. Plucker (Eds.) <u>Toward a More Perfect Psychology:</u> <u>Improving Trust, Accuracy, and Transparency in Research</u>. American Psychological Association.
- 107. \*Lundin, NB, \*Bartolomeo, LA, O'Donnell, BF, & Hetrick WP. (In press). Reduced electroencephalogram responses to standard and target auditory stimuli in bipolar disorder and the impact of psychotic features: Analysis of event-related potentials, spectral power, and inter-trial coherence. <u>Bipolar Disorders</u>.
- 108. Schnakenberg Martin, AM, Bartolomeo, L, Howell, J, Hetrick, WP, Bolbecker, AR, Breier, A, Kidd, G, & O'Donnell, BF (in press). Auditory feature perception and auditory hallucinatory experiences in schizophrenia spectrum disorder. <u>European</u> <u>Archives of Psychiatry and Clinical Neuroscience</u>, 1-9.
- 109. \*Forster, SE, Zirnheld, P, Shekhar, A., Steinhauer, SR, O'Donnell, BF, & Hetrick, WP (2017). Event-related potentials reflect impaired temporal interval learning following haloperidol administration. <u>*Psychopharmacology*</u>, 234, 2545-2562.

\* - Denotes advisee under my direct supervision.

# **INVITED ADDRESSES, ORAL PRESENTATIONS, & SYMPOSIA**

- 1. **Hetrick, W.P.** *Is there an auditory gating deficit in autism?* (January 19, 1993). Academic Lecture Series, Department of Psychiatry and Human Behavior, University of California, Irvine.
- Hetrick, W.P. Opiate Mechanisms in self-injurious behavior. (November 19, 1994). Alumni Lectures, Department of Psychology, Point Loma Nazarene College, San Diego, CA.
- Hetrick, W.P., Sandman, C.A., & McCubbin, J.A. *Opiate Blockers: Pharmacological actions*. (June 16, 1995). International Consensus Conference on Psychopharmacology, The Ohio State University, Columbus, OH.
- Hetrick, W.P. Assessment of the Putative Phenomenological Correlates of Sensory Gating in Schizophrenia. (April 19, 1997) 11<sup>th</sup> Annual Graduate Research Forum, Council of Graduate Students, The Ohio State University, Columbus, OH.
- 5-11. Hetrick, W.P. The Sensory Gating Hypothesis in Schizophrenia: There's more and less than meets the eye.
  - · December 14, 1998. Michigan State University, Department of Psychology
  - · January 11, 1999. Florida State University, Department of psychology
  - · January 20, 1999. University of Pennsylvania, Department of Psychology
  - · January 26, 1999. SUNY-Buffalo, Department of Psychology
  - · February 11, 1999. Indiana University, Department of Psychology
  - · February 15, 1999. Rutgers University, Department of Psychology
  - · February 17, 1999. University of Maryland, Baltimore County, Dept. of Psychology
- 12. Hetrick, W.P. *The sensory gating hypothesis in schizophrenia: Hypokrisia, Dialipsis, & Occlusion.* (February 4, 2000). Grand Rounds, Department of Psychiatry, Indiana University School of Medicine, Indianapolis.
- Hetrick, W.P. Psychophysiological studies of schizophrenia: Accumulating evidence for a "fragmented phrene." (June 24, 2001). Intensive Weekend Workshop, Indiana Consortium for Mental Health Services Research, Indianapolis, IN.
- \*Zirnheld, P.J., Hetrick, W.P., Carroll, C.A., O'Donnell, B.F., & Shekhar, A. *Impact of haloperidol on measures of attention and learning in healthy normals.* (May 2002). A paper presented at the Annual Meeting of the Society of Biological Psychiatry, Philadelphia, PA.
- 15. **Hetrick, W.P.** *Sensory gating from phenomenology to psychophysiology.* (September, 2002). Presentation at the symposium, "Sensory gating: Empirical,

theoretical, and methodological advances," chaired by W.P. Hetrick. Other speakers were Brett A. Clementz and Patricia White. Annual Meeting of EEG and Clinical Neuroscience Society in Baltimore, MA.

- Hetrick, W.P. (April, 2003). *Dysfunction of temporal architecture in schizophrenia*. Clinical Science Colloquium Series, Department of Psychology, Indiana University, Bloomington.
- 17. **Hetrick, W.P.** *Dysfunction of temporal architecture in schizophrenia*. (June 19, 2003). In-service for high school social science teachers from the State of Indiana who participate in the Advanced College Preparation Program. Indiana University, Bloomington.
- Hetrick, W.P. Dysfunction of temporal architecture in schizophrenia: A mechanism for the fragmented phrene? (June 19, 2003). Presentation to undergraduate Medic-B Scholars participating in an intensity summer research program. Indiana University, Bloomington.
- Hetrick, W.P., Brown, S.M., Kieffaber, P.D., Vohs, J.L., Carroll, C.A., O'Donnell, B.F., Shekhar, A., & Steinmetz, J.E. (September 26, 2003). *Eyeblink Conditioning Deficits Indicate Timing Abnormalities in Schizophrenia*. Presentation at the symposium, "Classical Conditioning in Experimental Psychopathology," chaired by W.P. Hetrick. Other speakers were Richard McFall, Teresa Treat, and Lonnie Sears. Annual Meeting of the Pavlovian Society, Bloomington, IN.
- 20. Hetrick, W.P., Brown, S.M., Carroll, C.A., O'Donnell, B.F., Shekhar, A., & Steinmetz, J.E. (October 18, 2003). *Eye-blink conditioning deficits indicate timing abnormalities in schizophrenia.* Presentation at the symposium, "Temporal architecture dysfunction in schizophrenia," chaired by W.P. Hetrick. Other speakers were Stuart Steinhauer, Martin Paulus, and Michael Green (discussant). Annual Meeting of the Society for Research in Psychopathology, Toronto, Canada.
- 21. Hetrick, W.P. (October 24, 2003). *A Temporal Processing Account of Cognitive Disorganization in Schizophrenia*. Brain and Cognitive Science Colloquium Series, Department of Psychology, University of Southern Illinois, Carbondale.
- Hetrick, W.P., O'Donnell, B.F., Shekhar, A., Steinmetz, J.E. (May 28, 2004). *A Temporal Processing Account of Cognitive Disorganization in Schizophrenia.* "Hot Topics Talk" selected for presentation at the Annual Meeting of the American Psychological Society, Chicago, IL.
- 23. Hetrick, W.P. Differential effects of emotional modulation on post-auricular and orbicularis indices of the acoustic startle response. (October 22, 2004). Presentation at the symposium, "Emotional modulation of the post-auricular reflex," chaired by Stephen Benning. Other speakers were Julian G. Simmons, Edward M. Bernat, and Christopher Patrick (discussant). Annual meeting of the Society for Psychophysiological Research, Santa Fe, New Mexico.

- 24. Hetrick, W.P. Intra-subject Temporal Response Processing Dysfunction in Schizophrenia (May 27, 2005). Presentation at the symposium, "One man's noise is another man's signal: The utility of within-subject variability," chaired by W. P. Hetrick. Other speakers were David G. Thomas, David A. Walsh, and Martin P. Paulus (discussant). Annual Meeting of the American Psychological Society, Los Angeles, CA.
- 25. Hetrick, W.P. *Electrophysiological endophenotypes in the comorbidity of schizophrenia and alcohol dependence* (March 2, 2006). Invited address at the inaugural meeting of the National Conference on Dual Diagnosis, Indianapolis, Indiana.
- Hetrick, W.P. Effects of RG1068 (Secretin) on Information Processing in Schizophrenia. (August 8, 2006). Presentation at Repligen Corporation, Waltham, MA.
- 27. **Hetrick, W.P.** *Information processing in schizophrenia: Timing is everything* (September 15, 2006). Grand Rounds Presentation, Department of Psychiatry, Indiana University Medical School, Indianapolis.
- 28. Hetrick, W.P. Information processing in schizophrenia: From sensory processing to higher cognition. (November 10, 2006). Annual Fall Meeting of the Indiana Psychological Association, Indianapolis, Indiana.
- 29. Hetrick, W.P. Temporal processing and the "lesser brain" in schizophrenia. (November 9, 2007). Clinical Area Colloquium Series, The Ohio State University, Columbus, Ohio.
- 30. **Hetrick, W.P. Studies of temporal architecture dysfunction in schizophrenia** (March 12-14, 2008). Merrill Conference Series: Neurobehavioral Approaches to the Study of Clinical Disorders (J. E. Steinmetz, organizer). Tempe, AZ.
- 31. **Hetrick, W.P.** The Neuroscience Clinical Research Center at Larue Carter Memorial Hospital. (April 30, 2008). Larue D. Carter Memorial Hospital Consumer Education Series, Indianapolis, IN.
- 32. Hetrick, W.P. Clinical translational studies of schizophrenia. (May 16, 2008). Afternoon keynote address at the Annual Indiana Mental Health Symposium. Indianapolis, Indiana.
- 33. Prause, N.R. & Hetrick, W.P. (2008, October). Higher Sexual Arousability is Related to Lower Attention to Sex Stimuli. Presentation during symposium titled "Modulation of Attention in Sexual Cue Processing," chaired by N.R. Prause. Annual Meeting of the Society for Research in Psychophysiology, Austin, TX.
- 34. Hetrick, W.P. Human Eye-blink Conditioning: Development & Testing of a fMRI-compatible infrared blink detection system. (October 20, 2008). Indiana University Neuroimaging Group, IU Bloomington, IN.
- 35. Hetrick, W.P. (November 20, 2008). Clinical Cognitive Neuroscience:

**Experimental psychopathology, Clinical science, & Translational Research.** Point Loma Nazarene University, San Diego, CA.

- Hetrick, W.P. (November 18, 2009). The lesser brain?: Evidence of cerebellar and temporal processing deficits in schizophrenia. Program in Neuroscience Lecture Series, Bloomington, Indiana.
- Ahn, W.Y., Rass, O., Fridberg, D.J., Bishara, A.J., Forsyth, J.K., Breier, A., Busemeyer, J.R., Hetrick, W.P., & O'Donnell, B.F. (2010, May 22). Temporal Discounting of Rewards in Patients with Bipolar Disorder and Schizophrenia. Oral presentation at the Annual Meeting of the Society for Biological Research, New Orleans, LA.
- Hetrick, W.P. (May 13, 2011). Impaired Function in the Schizophrenia Spectrum Across a Battery of Cerebellar-dependent Tasks. Presentation at the symposium, "Cerebellar Pathophysiology in Psychiatric Disorders," co-chaired by W. P. Hetrick and Eve Valera. Other speakers: Peter L. Strick and John E. Desmond.. Annual Meeting of the Society for Biological Psychiatry, San Francisco, CA.
- 39. Hetrick, W.P. (Nov. 2, 2011). Schizophrenia and the lesser brain: Promising new treatment target. Indiana CTSI Disease and Therapeutic Response Modeling Symposium, Indiana University School of Medicine, Indianapolis, IN.
- 40. \*Innis, I.J., \*Kent, J.S., Bolbecker, A.R., & **Hetrick, W.P.** (2012, November). Comparability of MRI compatible Infrared and Electromyogram Measures of Eyeblink Conditioning. Oral presentation given at the McNair National Research Conference, Madison, WI.
- Hetrick, W.P. (February 16, 2012). Schizophrenia and the Lesser Brain: Time and Motion. Invited talk at symposium titled "Schizophrenia and Human Flourishing," Lee Edward Travis Research Institute, Fuller School of Psychology, Fuller Theological Seminary, Pasadena, CA.
- 42. Hetrick, W.P. (March 28, 2012). Temporal architecture dysfunction in the Schizophrenia Spectrum. Invited talk at TIMELY Workshop on Temporal Processing in Clinical Populations. Part of a European Union-funded project titled "Time In Mental Activity: theoretical, behavioral, bioimaging and clinical perspectives (TIMELY)." Thessaloniki, Greece.
- 43. Hetrick, W.P. Schizophrenia and the "lesser" brain: The cerebellum reconsidered (October 12, 2012). Grand Rounds Presentation, Department of Psychiatry, Indiana University Medical School, Indianapolis.
- 44. Hetrick, W.P. Schizophrenia and the lesser brain: A promising new treatment target? (January 25, 2012). Eli Lilly, Indianapolis.
- 45. Abell, M., Sponheim S.R., Kang S., O'Donnell B.F., **Hetrick W.P.** (November, 2013) *Temporal patterns of neural network synchronization in veterans with and without mild TBI and PTSD*. Oral presentation at the Annual Meeting of the American Neuropsychiatric Association, Orlando, FL.

- Hetrick, W.P. Schizophrenia & the "lesser brain": The cerebellum reconsidered. (March 7, 2014). Clinical Area Colloquium Series, Department of Psychology, University of Illinois, Urbana-Champagne, IL.
- 47. **Hetrick, W.P.** Depression: Etiology and treatment. (July 13, 2015). College of Health Sciences, Southern Africa Nazarene University, Manzini, Swaziland.
- 48. **Hetrick, W.P.** *Depression: Etiology and treatment*. (July 23, 2015). National Psychiatric Hospital, Manzini, Swaziland.
- 49. Hetrick, W.P. Cerebellar Dysfunction in Schizophrenia: Behavioral, Neural, & Clinical Correlates. (April 1, 2016). Grand Rounds Presentation, Department of Psychiatry, Indiana University Medical School, Indianapolis.
- 50. Hetrick, W.P. (May 2, 2016). *Health Equity in Indiana and Beyond: Eliminating Disparities Associated with Addiction*. <u>Invited IU Grand Challenges Finalist</u> <u>Presentations</u>. Project co-PI. President's Hall, Indiana University, Bloomington, IN.
- 51. Hetrick, WP, \*Kent, JS, Kim, D., Bolbecker, AR, Newman, SD, & O'Donnell, BF. (2016, May). Neural, Cognitive, and Clinical Correlates of Cerebellar Function in Schizophrenia. Presentation at symposium titled "Role of Cerebellum in Schizophrenia Spectrum Disorders," chaired by WP Hetrick. Other speakers: Vijay Mittal, Adam Culbreth & Deanna Barch, and Jessica Bernard. Annual Meeting of the Society for Biological Psychiatry, Atlanta, GA.
- 52. Hetrick, WP., Kent, JS., Kim, DJ., Bolbecker, AR., Newman, SD. & O'Donnell, BF. (2016, September). *Cerebellar function in schizophrenia: neural, cognitive, and clinical correlates*. Presentation at symposium titled "Laboratory to life: Linking brain responses to problems of real world functioning in schizophrenia" chaired by Scott Sponheim. Other speakers: Dean F. Salisbury, Holly Hamilton, & Jessica Lake. Annual Meeting of the Society for Psychophysiological Research, Minneapolis, MN.
- 53. Hetrick, WP. (2016, October). The psychology department of the future. Presentation at symposium titled "Elevating psychopathology research: Flash talks for the game and its players" and chaired by Alex Cohen. Other speakers: Ann Kring; Lee Anna Clark; Stewart Shankman; David Smith; Renee Thompson; & James Gold. Annual Meeting of the Society for Research in Psychopathology, Baltimore, MD.
- 54. Hetrick, WP. (2016, October). Advancing understanding and treatment of schizophrenia through basic psychological science. Invited U.S. Congressional Briefing organized by the American Psychological Association in cooperation with the Congressional Mental Health Caucus. Session title: "Future Directions in Mental Health Research: The View from Psychological Science." Session chair, Howard Kurtzman, APA Science Director. Other speakers: Mary Jane Rotheram-Borus and Patricia Areán. Capital Hill, Washington, DC.
- 55. \*Moussa-Tooks, A., Kim, D., Bolbecker, A., \*Bartolomeo, L., \*Purcell, J., \*Lundin, N., Newman, S., O'Donnell, B., & **Hetrick, W.P.** (2017, March). *Effective Connectivity*

*Deficits in Schizophrenia during Cerebellar-Mediated Sensorimotor Synchronization*. Oral presentation at the biannual meeting of the International Congress on Schizophrenia Research, San Diego, CA.

- 56. Hetrick, WP, Lundin, NB, Moussa-Tooks, AB, Mitroi, J., Bartolomeo, LA, Breier, A., Bolbecker, AR, & O'Donnell, BF (2017, Sept). *Leveraging Pavlovian eye-blink conditioning to gain new insights into cerebellar-dependent neuroplasticity in schizophrenia.* Presentation at symposium titled "Neuroplasticity in Schizophrenia: Concepts and Measurement" and chaired by Jonathan Wynn (UCLA). Other speakers: Michael Green (UCLA), Daniel Mathalon (UC San Francisco), & Amanda McCleery (UCLA). Annual meeting of the Society for Research In Psychopathology, Denver, CO.
- 57. Hetrick, WP. Schizophrenia & the "lesser brain": The cerebellum reconsidered in psychopathology. (2017, April). Clinical Area Colloquium Series, The Ohio State University, Columbus, Ohio.

# **POSTER PRESENTATIONS AT SCIENTIFIC MEETINGS**

Note: asterisks indicate advisees under my direct supervision

- Hetrick, W.P., Taylor, D.V., Tournay, A., Kelley, M.J., Chicz-DeMet, A., & Sandman, C.A. (1990, February). Plasma B-endorphin concentration in neuro-developmentally delayed patients after an episode of self-injurious behavior. 11<sup>th</sup> Annual Winter Neuropeptide Conference, Breckenridge, CO.
- Taylor, D.V., Hetrick, W.P., Touchette, P., Barron, J.L., & Sandman, C.A. (1990, February). Treatment of self-injurious behavior using opiate blockers: A case study. 11<sup>th</sup> Annual Winter Neuropeptide Conference, Breckenridge, Colorado.
- Hetrick, W.P., Taylor, D.V., Touchette, P., Barron, J.L., Sandman, C.A. (1991, February). Treatment of self-injurious behavior with Naltrexone. 12<sup>th</sup> Annual Winter Neuropeptide Conference, Breckenridge, CO.
- Hetrick, W.P., Taylor, D.V., Touchette, P., Lott, I., Barron, J., & Sandman, C.A. (1991, May). Treatment of self-injurious behavior with Naltrexone: Effects on SIB, learning, & neurological function. Gatlinburg Conference on Research & Theory in Mental Retardation and Developmental Disabilities, Key Biscayne, FL.
- Taylor, D.V., Rush, D., Hetrick, W.P., & Sandman, C.A. (1991, May). Self injurious behavior within the menstrual cycle of developmentally delayed women. Gatlinburg Conference on Research & Theory in Mental Retardation and Developmental Disabilities, Key Biscayne, FL.

- Hetrick, W.P., Martin, D.K., Krutzik, M., Taylor, D.V., Arpaia, J., & Sandman, C.A. (1992, February). Effects of naltrexone on serum concentrations of liver enzymes in a developmentally delayed and self-injurious client. 13<sup>th</sup> Annual Winter Neuropeptide Conference, Breckenridge, CO.
- 7. Chicz-DeMet, A., **Hetrick, W.P.**, Taylor, D.V., DeMet, E.M., & Sandman, C.A. (1993, February). Neuroendocrine response after self-injurious behavior in developmentally delayed patients. 14<sup>th</sup> Annual Winter Neuropeptide Conference, Breckenridge, CO.
- 8. **Hetrick, W.P.**, Taylor, D.V., Chicz-DeMet, A., Barron, J.L., & Sandman, C.A. (1995, January). Variability of plasma opioid levels and behavioral response to naltrexone treatment in self-injurious patients. 16<sup>th</sup> Annual Winter Neuropeptide Conference, Breckenridge, CO.
- Hetrick, W.P., \*Ozgur, B.M., \*Youssef, M.M., Jin, Y., Potkin, S., Sandman, C.A., and Bunney Jr., W.E. (1995, April). Reliability of P50 gating in normal subjects. <u>Schizophrenia Research</u>, <u>15</u>(1-2), 178. International Congress on Schizophrenia Research, Warm Springs, VA.
- Hetrick, W.P., \*Ozgur, B.M., Jin, Y., Potkin, S., Bunney Jr., W.E., and Sandman, C.A. (1995, April). Auditory gating and components of the EEG power spectrum in normal subjects. <u>Schizophrenia Research</u>, <u>15</u>(1-2), 178. International Congress on Schizophrenia Research, Warm Springs, VA.
- Hetrick, W.P., \*Youssef, M.M., Jin, Y., Potkin, S., Bunney, B., Sandman, C.A., and Bunney Jr., W.E. (1995, April). A structured clinical assessment of external sensory gating deficits in schizophrenia. <u>Schizophrenia Research</u>, <u>15</u>(1-2), 177-178. International Congress on Schizophrenia Research, Warm Springs, VA.
- Jin, Y., Sandman, C.A., Potkin, S.G., Wu, J.C., Hetrick, W.P., Patterson, J., & Bunney Jr., W.E. (1995, April). Reevaluation of sensory gating in normal and schizophrenic subjects. <u>Schizophrenia Research</u>, <u>15</u>(1-2), 177-178. International Congress on Schizophrenia Research, Warm Springs, VA.
- 13. Turoff, B.K., **Hetrick, W.P.**, & Smith, D.A. (1995, December). Event-related potentials in schizophrenia: P50 and formal thought disorder. The Ohio State University Annual Research Exposition for the Health Sciences, Columbus, OH.
- 14. **Hetrick, W.P.**, Smith, D.A., Turoff, B.K., & Spruiell, E. (1996, September). Putative phenomenological correlates of sensory gating: Factor analyses and a self-report rating scale. 11<sup>th</sup> Annual Meeting of the Society for Research in Psychopathology, Atlanta, GA.
- 15. Turoff, B.K., Smith, D.A., & **Hetrick, W.P.** (1996, September). Failure to Replicate Normal P50 Suppression. 11<sup>th</sup> Annual Meeting of the Society for Research in Psychopathology, Atlanta, GA.

- Hetrick, W.P., Spruiell, E., & Smith, D.A. (1997, October). The putative phenomenological correlates of sensory gating: Development and validation of a self-report rating scale. 12<sup>th</sup> Annual Meeting of the Society for Research in Psychopathology, Palm Springs, CA.
- 17. **Hetrick, W.P.** (2000, October). Within and Between Session Reliability of P50 Gating. Annual Meeting of the Society for Psychophysiological Research in San Diego, CA.
- 18. \*Edwards, C.R. & **Hetrick, W.P.** as faculty sponsor (2000, October). P50 gating and pre-pulse inhibition in introversion and sensory processing sensitivity. Indiana University Undergraduate Research Conference, Indiana University, Kokomo, IN.
- Hetrick, W.P. (2000, November 30-December 3). A critical analysis of the sensory gating construct across levels of analysis. 15<sup>th</sup> Annual Meeting of the Society for Research in Psychopathology in Boulder, CO.
- 20. \*Kieffaber, P.D. & **Hetrick, W.P.** (2001, June 16). Behavioral and psychophysiological correlates of shifting attention focus. Annual Meeting of the American Psychological Society in Toronto, Canada.
- 21. \*Carroll, C.A., **Hetrick, W.P.**, O'Donnell, B.F., & Shekhar, A. (2001, October). Effects of olanzapine on sensory gating. Annual Meeting of the Society for Psychophysiological Research, Montreal, Canada.
- Hetrick, W.P., Patterson, J.V., & Smith, D.A. (2001, November). Segmental set, hypokrisia, dialipsis, & occlusion: Within-subject response variability in schizophrenia. 16<sup>th</sup> Annual Meeting of the Society for Research in Psychopathology, Madison, WI.
- 23. \*Carroll, C.A., \*Kieffaber, P., **Hetrick, W.P.**, O'Donnell, B.F., Vohs, J., Blevins, V., & Shekhar, K. (2002, May). P50 and acoustic startle inhibition in bipolar disorder. Annual Meeting of the Society for Biological Psychiatry, Philadelphia, PA.
- 24. **Hetrick, W.P.**, \*Kieffaber, P.D., Barron, J.L., White, M.H., & Sandman, C.A. (2002, May). Sensory gating in autism. Annual Meeting of the Society for Biological Psychiatry, Philadelphia, PA.
- 25. Davis, R.A.O., Wilt, M.A.B., Murphy, R.R., **Hetrick, W.P.**, & O'Donnell, B.F. (May, 2002). Subjective perceptual distortions and visual system dysfunction in children with autism. Annual Meeting of the Society for Biological Psychiatry in Philadelphia, PA.
- 26. O'Donnell, B.F., **Hetrick, W.P.**, Vohs, J., Carroll, C.A., Blevins, V., & Shekhar, A. (2002, May). Auditory EEG synchronization deficits in unmedicated bipolar disorder patients. Annual Meeting of the Society for Biological Psychiatry, Philadelphia, PA.
- O'Donnell, B.F., Hetrick, W.P., Vohs, J., Carroll, C., Blevins, V., & Shekhar, A. (2002, May). Auditory ERP abnormalities in unmedicated bipolar disorder patients. Annual Meeting of the Society for Biological Psychiatry, Philadelphia, PA.

- Vohs, J.L., King, A.R., Hetrick, W.P., Shekhar, A., & O'Donnell, B.F. (2002, October).
   EEG synchronization to periodic visual and auditory stimulation. 42<sup>nd</sup> Annual Meeting of the Society for Psychophysiological Research, Washington, D.C.
- 29. \*Carroll, C.A., \*Kieffaber, P.D., **Hetrick, W.P.**, O'Donnell, B.F., Vohs, J.L., Blevins, V., & Shekhar, A. (2002, October). P50 sensory gating in bipolar disorder. 42<sup>nd</sup> Annual Meeting of the Society for Psychophysiological Research, Washington, D.C.
- \*Brenner, C.A., \*Edwards, C.R., \*Kieffaber, P.D., \*Carroll, C.A., & Hetrick, W.P. (2002, October). Concurrent assessment of P50 and acoustic startle gating. 42<sup>nd</sup> Annual Meeting of the Society for Psychophysiological Research, Washington, D.C.
- \*Hamilton, R.A., \*Carroll, C.A., & Hetrick, W.P. (2002, October). Affect modulation of the P50 ERP component. 42<sup>nd</sup> Annual Meeting of the Society for Psychophysiological Research, Washington, D.C.
- 32. \*Zirnheld, P.J., Hetrick, W.P., \*Carroll, C.A., \*Kieffaber, P.D., O'Donnell, B.F., & Shekhar, A. (2002, October). Impact of haloperidol on the error-related negativity and measures of learning. 42<sup>nd</sup> Annual Meeting of the Society for Psychophysiological Research, Washington, D.C.
- \*Kieffaber, P.D. & Hetrick, W.P. (2002, October). ERP correlates of attention shifting. 42<sup>nd</sup> Annual Meeting of the Society for Psychophysiological Research, Washington, D.C.
- \*Brown, S.M., \*Kieffaber, P.D., Tracy, J., \*Vohs, J.L., Shekhar, A., Steinmetz, J.E., & Hetrick, W.P. (2002, October). Eye-blink conditioning in schizophrenia. 42<sup>nd</sup> Annual Meeting of the Society for Psychophysiological Research, Washington, D.C.
- \*Brenner, C.A., \*Godfrey, J.L., Sandman, C.A., O'Halloran, J.P. & Hetrick, W.P. (2003, February). Comparability of Traditional and Computerized Administrations of 12 Common Neurocognitive Assessment Instruments. International Neuropsychological Society Conference, Honolulu, Hawaii.
- 36. \*Carroll, C.A., \*Kieffaber, P.D., O'Donnell, B.F., Vohs, J.L., Blevins, V., Shekhar, A. & Hetrick, W.P. (2003, May). P50 sensory gating in bipolar disorder. 58<sup>th</sup> Annual Meeting of the Society of Biological Psychiatry, San Francisco, CA.
- 37. Vohs, J.L., King, A.R., **Hetrick, W.P.**, Shekhar, A., & O'Donnell, B.F. (2003, May). EEG synchronization to periodic visual and auditory stimulation. 58<sup>th</sup> Annual Meeting of the Society of Biological Psychiatry, San Francisco, CA.
- \*Brown, S.M., \*Kieffaber, P.D., \*Vohs, J.L., Shekhar, A., Steinmetz, J.E., & Hetrick, W.P. (2003, April). Eye-blink conditioning deficits indicate timing and cerebellar deficits in schizophrenia. Annual Meeting of the Indiana University Science, Technology, and Research Scholars Program, Bloomington, IN.

- \*Brown, S.M., \*Kieffaber, P.D., \*Vohs, J.L., Shekhar, A., Steinmetz, J.E., & Hetrick, W.P. (2003, May). Examination of neural timing circuits in schizophrenia with eyeblink conditioning methodology. 58<sup>th</sup> Annual Meeting of the Society of Biological Psychiatry in San Francisco, CA.
- O'Donnell, B.F., Vohs, J.L., Hetrick, W.P., King, A.R., Blevins, V., & Shekhar, A. (2003, May). EEG synchronization to photic stimulation in schizophrenia. 58<sup>th</sup> Annual Meeting of the Society of Biological Psychiatry in San Francisco, CA.
- \*Brown, S.M., \*Kieffaber, P.D., \*Vohs, J.L., Shekhar, A., Steinmetz, J.E., & Hetrick,
  W.P. (2003, July). Eye-blink conditioning deficits indicate timing and cerebellar deficits in schizophrenia. Annual Meeting of the Beckman Foundation Scholars in Irvine, CA.
- 42. \*Prause, N., Janssen, E., & **Hetrick, W. P.** (2003). The role of attention and affective response to sexual cues in the experience of sexual desire and sexual arousal. Annual Meeting of the International Academy of Sex Research, Bloomington, IN.
- \*Kappenman, E.S., Kruschke, J., & Hetrick, W.P. (2003). Inverse Base-Rates and Illusory Correlations in Schizotypal Personality Disorder. 18th Annual Meeting of the Society for Research in Psychopathology, Toronto, Canada.
- 44. \*Ames, K.A., \*Merritt, N.P., \*Stout, K., & Hetrick, W.P. (2003). Differential effects of affective modulation on orbicularis and post-auricular indices of startle. Presented at the 43<sup>nd</sup> Annual Meeting of the Society for Psychophysiological Research in Chicago, I.L.
- 45. \*Carroll, C.A., \*Hamilton, R.A., & Hetrick, W.P. (2003). Affect modulation of the auditory P50 evoked response.
   43<sup>nd</sup> Annual Meeting of the Society for Psychophysiological Research in Chicago, I.L.
- 46. Krishnan, G.P., Vohs, J.L., Hetrick, W.P., Shekhar, A., & O'Donnell, B.F. (2003).
  Visual steady state potentials in schizophrenia. 43<sup>nd</sup> Annual Meeting of the Society for Psychophysiological Research in Chicago, I.L.
- O'Donnell, B.F., Hetrick, W.P., Vohs, J.L., Carroll, C.A., Krishnan, G.P., & Shekhar, A. (2003). Auditory steady state ERP deficits in bipolar disorder. 43<sup>nd</sup> Annual Meeting of the Society for Psychophysiological Research in Chicago, I.L.
- \*Prause, N., Janssen, E., & Hetrick, W.P. (2003). The role of attention and affective response to sexual cues in the experience of sexual desire and arousal. 43<sup>nd</sup>
   Annual Meeting of the Society for Psychophysiological Research in Chicago, I.L.
- 49. Vohs, J.L., O'Donnell, B.F., Hetrick, W.P., Carroll, C.A., Blevins, V.L., & Shekhar, A. (2003). P300 abnormalities in bipolar disorder and schizophrenia.
  43<sup>nd</sup> Annual Meeting of the Society for Psychophysiological Research in Chicago, I.L.

- Hetrick, W.P., \*Brown, S.M., \*Mehta, C., O'Donnell, B.F., Shekhar, A. & Steinmetz, J.E. (2004). Examination of neural timing circuits with eye-blink conditioning methodology in medicated and unmedicated patients with schizophrenia. 59<sup>th</sup> Annual Meeting of the Society of Biological Psychiatry in New York, NY.
- Hetrick, W.P., \*Mehta, C., \*Brown, S.M., \*Carroll, C.A., O'Donnell, B.F., Shekhar, A., Steinmetz, J.E. (2004). Eye-blink conditioning deficits indicate functional cerebellar deficits in bipolar disorder. 59<sup>th</sup> Annual Meeting of the Society of Biological Psychiatry in New York, NY.
- \*Brenner, C.A., B.F. O'Donnell, & Hetrick, W.P. (2004). Memory induced gamma band activation. 59<sup>th</sup> Annual Meeting of the Society of Biological Psychiatry in New York, NY.
- 53. Hetrick, W.P., \*Brown, S.M., Tracy, J., \*Mehta, C., O'Donnell, B.F., Shekhar, A., Steinmetz, J.E. (2004). Examination of neural timing circuits in schizophrenia with eye-blink conditioning methodology. 44<sup>th</sup> Annual Meeting of the Society for Psychophysiological Research in Santa Fe, New Mexico.
- 54. \*Vohs, J.L., \*Bodkins, M., \*Bismark, A., O'Donnell, B.F., Shekhar, A., & Hetrick,W.P. (2004). Auditory and visual p300 in schizophrenia. 44<sup>th</sup> Annual Meeting of the Society for Psychophysiological Research in Santa Fe, New Mexico.
- \*Kieffaber, P.D. & Hetrick, W.P. (2004). ERP correlates of set switching and switch costs. 44<sup>th</sup> Annual Meeting of the Society for Psychophysiological Research in Santa Fe, New Mexico.
- 56. \*Johannesen, J.K., \*Kieffaber, P.D., \*Vohs, J.L., Evans, J.D., & **Hetrick, W.P.** (2004). Sensory gating as a function of schizophrenia subtype. 19th Annual Meeting of the Society for Research in Psychopathology, St. Louis, MO.
- 57. \*Vohs, J.L., Bodkins, M., Bismark, A., O'Donnell, B.F., Shekhar, A., Hetrick, W.P. (2004). An electrophysiological examination of the comorbidity of schizophrenia and alcohol dependence. 19th Annual Meeting of the Society for Research in Psychopathology, St. Louis, MO.
- 58. Bismark, A.W., O'Donnell, B.F., Bodkins, M.D., Hetrick, W.P., Johannesen, J.K., Shekhar, A. (2005). 40 Hertz Auditory EEG entrainment in patients with schizophrenia, schizotypal personality disorder, and healthy controls. 60<sup>th</sup> Annual Meeting of the Society of Biological Psychiatry in Atlanta, GA.
- 59. \*Edwards, C.R., Newman, S., \*Bismark, A.W., \*Pottanat, T., O'Donnell, B.F., Shekhar, A., Steinmetz, J.E., **Hetrick, W.P.** (2005). Cerebellum Volume and Eyeblink Conditioning Deficits in Schizophrenia. 60<sup>th</sup> Annual Meeting of the Society of Biological Psychiatry in Atlanta, GA.

- \*Bodkins, M.D., Hetrick, W.P., \*Bismark, A.W., \*Johannesen, J.K., \*Vohs, J.L., O'Donnell,B.F., & Shekhar, A. (2005). Neuropsychological correlates of P50 among unmedicated schizophrenic patients. 60<sup>th</sup> Annual Meeting of the Society of Biological Psychiatry in Atlanta, GA.
- \*Johannesen, J.K., \*Bismark, A.W., \*Bodkins, M.D., Shekhar, A., O'Donnell, B.F., Hetrick, W.P. (2005). Phenomenological and Psychophysiological Indices of Sensory Processing Deficits in Schizophrenia. 60<sup>th</sup> Annual Meeting of the Society of Biological Psychiatry in Atlanta, GA.
- Bodkins, M.D., O'Donnell, B.F., Hetrick, W.P., Bismark, A.W., Vohs, J.L., Shekhar, A. (2005). Schizotypal Personality Characteristics and Neuropsychological Performance.
   60<sup>th</sup> Annual Meeting of the Society of Biological Psychiatry in Atlanta, GA.

#### <u>2006</u>

- \*Edwards, C.R., Newman, S., \*Bismark, A., O'Donnell, B.F., Shekhar, A., Steinmetz, J.E., Hetrick, W.P. (2006). Cerebellum volume and eyeblink conditioning in schizophrenia. Society of Biological Psychiatry in Toronto, Ontario, Canada.
- 64. O'Donnell, B.F., Bodkins, M., Vohs, J.L., Bismark, A., **Hetrick, W.P.**, Skosnik, P.D., Shekhar, A. (2006). Auditory event-related potentials and EEG entrainment in bipolar disorder. Society of Biological Psychiatry in Toronto, Ontario, Canada.
- \*Bolbecker, A.R., \*Mehta, C., \*Bodkins, M., \*Edwards, C.R., O'Donnell, B.F., Shekhar, A., Hetrick, W.P. (2006). Impaired eyeblink conditioning in mixed episode bipolar subjects. Society of Biological Psychiatry in Toronto, Ontario, Canada.
- 66. \*Brenner, C.A., \*Johannesen, J., \*Bodkins, M., \*Boggs, J., Shekhar, A., O'Donnell, B.F., **Hetrick, W.P.** (2006). Society of Biological Psychiatry in Toronto, Ontario, Canada.
- 67. \*Prause, N., Janssen, E., & **Hetrick, W.P.** (2006, July). Attention and emotional responses to sexual stimuli and their relationship to sexual desire. International Academy of Sex Research, Amsterdam, Netherlands.
- \*Mehta, C., \*Bolbecker, A., Shekhar, A., O'Donnell, B.F., Hetrick, W.P. (2006, October). Eyeblink conditioning deficits indicate cerebellar timing abnormalities in schizophrenia. Society for Research in Psychopathology, San Diego, CA.
- 69. \*Boggs, J., \*Brenner, C., \*Johannesen, J., Shekhar, A., O'Donnell, B.F., **Hetrick, W.P.** (2006, October). Affect modulated startle in schizophrenia. Society for Research in Psychopathology, San Diego, CA.
- \*Bolbecker, A., \*Mehta, C., O'Donnell, B.F., Shekhar, A., & Hetrick, W.P. (2006, October). Bipolar mood state influences acquisition and timing of cerebellardependent eye-blink conditioning. Society for Research in Psychopathology, San Diego, CA.

- \*Bolbecker, A., \*Mehta, C., \*Edwards, C.R., \*Johannesen, J.K., \*Bodkins, M.D., Shekhar, A., O'Donnell, B.F., **Hetrick, W.P.** (2006, October). Eyeblink conditioning deficits indicate cerebellar timing abnormalities in bipolar disorder. Society for Psychophysiological Research, Vancouver, British Columbia, Canada.
- \*Brenner, C.A., O'Donnell, B.F., Hetrick, W.P., (2006, October). Deficits in the memory phase of a visual spatial delayed match-to-sample task in schizophrenia. Society for Psychophysiological Research, Vancouver, British Columbia, Canada.
- Bodkins, M.D., Johannesen, J.K., Hetrick, W.P., Brenner, C.A., Shekhar, A., O'Donnell, B.F. (2006, October). Auditory P300 abnormalities in bipolar disorder: Effect of clinical phase. Society for Psychophysiological Research, Vancouver, British Columbia, Canada.
- 74. \*Edwards, C.A., Skosnik, P.D., Steffen, A., O'Donnell, B.F., & Hetrick, W.P. (2006, October). Chronic cannabis use impairs acquisition and timing of the conditioned eyeblink response. Society for Psychophysiological Research, Vancouver, British Columbia, Canada.
- 75. \*Steinmetz, A.B., \*Edwards, C.R., Steinmetz, J.E., & **Hetrick, W.P.** (2006, October). ISI shift in auditory delay eye blink conditioning in healthy humans. Society for Psychophysiological Research, Vancouver, British Columbia, Canada.

#### <u>2007</u>

- 76. \*Johannesen, J.K., O'Donnell, B.F., Shekhar, A., & Hetrick, W.P. (2007, March). P300 ERP Generation is Affected by Distinct Psychophysiological Processes in Schizophrenia and Bipolar Disorder. International Congress on Schizophrenia Research, Colorado Springs, Colorado.
- 77. \*Brenner, C.A., Gholston, M., **Hetrick, W.P.**, Shekhar, A., Nurnberger, J., Boggs, J., & O'Donnell, B.F. (2007, May 17). Predictors of mood episodes in euthymic patients with bipolar disorder. Society of Biological Psychiatry, San Diego, CA.
- 78. \*Brenner, C.A., Krishnan, G.P., \*Boggs, J., Nurnberger, J., Shekhar, A., **Hetrick, W.P.** & O'Donnell, B.F. (2007, May 17). Frequency composition of resting EEG in schizophrenia and bipolar disorder. Society of Biological Psychiatry, San Diego, CA.
- 79. **Hetrick, W.P.**, Bolbecker, A., Johannesen, J.K., Brenner, C.A., Bodkins, M., Frazer, A., O'Donnell, B.F., & Shekhar, A. (2007, May 17). Sectretin improves cerebellardependent motor learning in schizophrenia. Society of Biological Psychiatry, San Diego, CA.
- Krishnan, G.P., Paul, B., Vohs, J.L., Hetrick, W.P., Shekhar, A., Bodkins, M., Hetrick, W.P. & O'Donnell, B.F. (2007, May 17). Abnormal event-related oscillations in schizophrenia. Society of Biological Psychiatry, San Diego, CA.
- 81. \*Kieffaber, PD., O'Donnell, B.F., Shekhar, A., & **Hetrick, W.P.** (2007, October 4). Attentional and intentional switching: Determining the nature of context processing deficits in schizophrenia. Society for Research in Psychopathology, Iowa City, IA.

- \*Cahill, E.E., \*Edwards, C.R., O'Donnell, B.F., & Hetrick, W.P. (2007, October 4). Sensorimotor Gating in Schizophrenia and Bipolar Disorder. Society for Research in Psychopathology, Iowa City, IA.
- \*Johannesen, J.K., O'Donnell, B.F., Shekhar, A., & Hetrick, W.P. (2007, October 4).
   P300 ERP Generation is Affected by Distinct Neuronal Processes in Schizophrenia and Bipolar Disorder. Society for Research in Psychopathology, Iowa City, IA.
- \*Steinmetz, A.B., Skosnik, P.D., \*Edwards, C. R., Steinmetz, J.E., & Hetrick, W.P. (2007, October). Bidirectional ISI Shift in Auditory Delay Eyeblink Conditioning in Healthy Humans. Annual Meeting of the Pavlovian Society, Austin, TX.
- 85. \*Tracy, J., Skosnik, P.D., **Hetrick, W.P.** & Wellman, C.L., (2007, October). Effect of Cannabinoids on Cerebellar Mediated Learning and Memory. Pavlovian Society, Austin, Texas.
- 86. \*Skosnik, P.D., \*Edwards, C.R., \*Steinmetz, A.B., \*Vollmer, J.M., \*Campbell, C.D., O'Donnell, B.F., Steinmetz, J.E., and **Hetrick, W.P.** (2007, October). Differential Impairment in Delay Versus Trace Eyeblink Conditioning in Cannabis Users: Evidence For Cannabinoid Modulation of Cerebellar-Dependent Learning. Pavlovian Society, Austin, TX, U.S.A.

#### <u>2008</u>

- 87. \*Edwards, C.R., \*Skosnik, P.D., \*Steinmetz, A.B., O'Donnell, B.F., and **Hetrick, W.P.** (2008, May). Sensory gating impairments in heavy cannabis users are associated with low frequency ERP abnormalities. Society of Biological Psychiatry, Washington, DC, U.S.A.
- \*Bolbecker, A., \*Mehta, C., \*Edwards, C.R., Boggs, J., Shekhar, A., O'Donnell, B.F., Hetrick, W.P. (2008, May). Eyeblink conditioning deficits temporal processing abnormalities in schizophrenia. Society of Biological Psychiatry, Washington, DC, U.S.A.
- 89. \*Johannesen, J.K., Shekhar, A., O'Donnell, B.F., & **Hetrick, W.P.** (2008, May). Diagnostic specificity of auditory ERPs as endophenotypes for schizophrenia: Are we picking the right peaks? Society of Biological Psychiatry, Washington, DC, U.S.A.
- 90. \*Steinmetz, A.B., Steinmetz, J.E., **Hetrick, W.P.** (2008, September). Comparison of auditory and visual stimuli in delay eyeblink coditioning. Pavlovian Society, Weehawken, NJ.
- 91. \*Erickson, M. & **Hetrick, W.P.** (2008, October). Contributions of Dynamic Attentional Processes to Mechanisms of Temporal Representation: A Mismatch Negativity Study. Annual Meeting of the Society for Psychophysiological Research, Austin, TX.
- Rass, O., Krishnan, G.P., Brenner, C.A., Hetrick, W.P., Shekhar, A., O'Donnell, B.F. (2008, October). Auditory Steady State Response in Bipolar Disorder: Relation to Clinical State, Medication Status, and Substance Disorders. Society for Psychophysiological Research, Austin, TX.

- \*Edwards, C.R., Skosnik, P., \*Steinmetz, A., O'Donnell, B.F., & Hetrick, W.P. (2008, October). Altered High Frequency Cortical Oscillations in Cannabis Users during a dual-click Task: Relevance to Translational Research. Society for Research in Psychopathology, Pittsburgh, PA.
- 94. \*Erickson, M. & **Hetrick, W.P.** (2008, October). Different latent factors moderate perceptual anomalies in schizophrenia compared to healthy controls. Society for Research in Psychopathology, Pittsburgh, PA.

## <u>2009</u>

- 95. \*Johannesen, J.K., O'Donnell, B.F., Shekhar, A., & Hetrick, W.P. (April, 2009). Cognitive-perceptual and interpersonal Features of Schizotypy Align with Distinct Auditory ERP Abnormalities. 12<sup>th</sup> International Congress on Schizophrenia Research, San Diego, CA.
- 96. \*Erickson, M.A. & Hetrick, W.P. (2009, April 22). Examination of the Relationship Between Electrophysiological Indices of Sensory Gating and Phenomenological Self-Reports in Schizophrenia Patients and Non-Psychiatric Age-Matched Controls. 15<sup>th</sup> International Congress on Event-related Potentials of the Brain (EPIC), Bloomington, Indiana.
- 97. Skosnik, P.D., Krishnan, G.P., Steinmetz, A.B., Edwards, C.R., Vollmer, J.M., Hetrick, W.P., & O'Donnell, B.F. (2009, April 22). The Effect of Chronic Cannabinoids on the Broadband Auditory Steady-State Response in Humans. 15<sup>th</sup> International Congress on Event-related Potentials of the Brain (EPIC), Bloomington, Indiana.
- Ahn, W.Y., Krishnan, G.P., Brenner, C.A., Kaiser, S.T., Hetrick, W.P., Shekhar, A., & O'Donnell, B.F. (2009, April 25). Visual EEG Entrainment Deficits in Schizophrenia. 15<sup>th</sup> International Congress on Event-related Potentials of the Brain (EPIC), Bloomington, Indiana.
- Rass, O., Krishnan, G.P., Brenner, C.A., O'Donnell, B.F., Hetrick, W.P., Shekhar, A. (2009, April 25). Auditory steady state response in bipolar disorder: Relation to clinical state, cognitive performance, medication status, and substance disorders. 15<sup>th</sup> International Congress on Event-related Potentials of the Brain (EPIC), Bloomington, Indiana.
- 100. Fridberg, D.J., Hetrick, W.P., Brenner, C.A., Shekhar, A., Steffen, A.N., & O'Donnell, B.F. (2009, April 25). Auditory Event-Related Potentials in Bipolar Disorder: Relationship to Mood State, Medication, and Comorbid Psychiatric Illness. 15<sup>th</sup> International Congress on Event-related Potentials of the Brain (EPIC), Bloomington, Indiana.
- 101. \*Erickson, M. & Hetrick, W.P. (2009, April 25). Dynamic Entrainment of Auditory Attention Facilitates Encoding of Temporal Cues: Evidence from Mismatch Negativity. 15<sup>th</sup> International Congress on Event-related Potentials of the Brain (EPIC), Bloomington, Indiana.

- 102. Shin, Y.W., Krishnan, G.P., Hetrick, W.P., Brenner, C.A., Shekhar, A. Merrill, C.A., Steffens, A., & O'Donnell, B.F. (2009, April 25). Time-frequency Analysis of the Auditory ERP in Schizophrenia and Schizotypal Personality Disorder. 15<sup>th</sup> International Congress on Event-related Potentials of the Brain (EPIC), Bloomington, Indiana.
- 103. Krishnan, G.P., Kuznetsov, A.S., Hetrick, W.P., Brenner, C.A., Shekhar, A., Steffens, A.N., & O'Donnell, B.F. (2009, April 25). Steady State Auditory Gamma Deficits in Schizophrenia: Response Characteristics and Computational Modeling. 15<sup>th</sup> International Congress on Event-related Potentials of the Brain (EPIC), Bloomington, Indiana.
- 104. \*Forsyth, J.K., \*Mehta, C.S., \*Bolbecker, A.R., \*Merrill, C.C., O'Donnell, B.F., & Hetrick,
   W.P. (2009, September 13). Eye-blink conditioning in schizophrenia and schizophrenia spectrum disorders: Evidence for dysfunction in cerebellar timing processes. Society for Research in Psychopathology, Minneapolis, MN.
- 105. \*Kent, J., Hong, S.L., \*Forsyth, J.K., \*Bolbecker, A.R., O'Donnell, B.F., & Hetrick, W.P. (2009, September 13). Neuropsychological Correlates of Postural Sway in Schizophrenia. Society for Research in Psychopathology, Minneapolis, MN.
- 106. \*Erickson, M., **Hetrick, W.P.**, \*Merrill, C., & O'Donnell, B.F. (2009, September 13). Spectral frequency analysis may provide a more proximal correlate to abnormal sensory gating than averaged peak amplitude differences in schizophrenia. Society for Research in Psychopathology, Minneapolis, MN.
- 107. \*Erickson, M. & Hetrick, W.P. (2009, October 24). P50, N100, and P200 Sensory Gating Difference Scores Map onto Specific Facets of the Phenomenology of Sensory Gating as Indicated by Self-Report Questionnaire. Society for Psychophysiological Research, Berlin, Germany.
- 108. \*Kent, J.S, Hong, S.L., \*Forsyth, J.K., O'Donnell, B.F., & Hetrick, W.P. (2009, October 19). Postural control in schizophrenia: The role of visual feedback. Society for Neuroscience, Chicago, IL.

#### <u>2010</u>

- 109. \*Kent, J.S., Pruce, B., Bailey, D.M., Newman, S., \*Vollmer, J., & Hetrick, W.P. (2010, April). A Magnetic Resonance Imaging-Safe Technique for the Measurement of Human Eyeblink Conditioning. Cognitive Neuroscience Society, Montreal, Quebec, Canada.
- 110. \*Bolbecker, A.R., \*Kent, J.J., Hong, S.L., \*Forsyth, J.K., \*Klaunig, M.J., \*Merrill, C.C., Shekhar, A.S., Breier, A., O'Donnell, B.F., & Hetrick, W.P. (2010, May 20). Abnormal Temporal Synchronization in Bipolar Disorder as Measured by a Paced Finger Tapping Task. Society of Biological Psychiatry, New Orleans, LA.

- 111. \*Kent, J.S., Hong, S.L., \*Forsyth, J.K., \*Klaunig, M.J., \*Bolbecker, A.R., \*Merrill, C.C., Breier, A., Shekhar, A.S., O'Donnell, B.F., & **Hetrick, W.P.** (2010, May 22). Abnormalities in Postural Sway Area and Complexity in Schizophrenia Spectrum Participants. Society of Biological Psychiatry, New Orleans, LA.
- 112. \*Forsyth, J.K., Bolbecker, A.R., Mehta, C.S., Klaunig, M.J., Merrill, C.C., Shekhar, A.S., Breier, A., O'Donnell1, B.F., & **Hetrick, W.P.**, (2010, May 20). Society of Biological Psychiatry, New Orleans, LA.
- 113. \*Shin, Y.W., Krishnan, G., Hetrick, W.P., Brenner, C.A., Shekhar, A., Merrill, C.C., Steffens, A., Malloy. F.W., & O'Donnell, B.F. (2010, May 22). Increased Temporal Variability of Auditory Event Related Potentials in Schizotypal Personality Disorder. Society of Biological Psychiatry, New Orleans, LA.
- 114. \*Erickson, M.A., Motz, B.A., & **Hetrick, W.P.** (2010, September 30). Rhythm of Perception and Attention: An OEP Study of Temporal Attention. Society for Psychophysiological Research, Portland, OR.
- 115. Burns, B., **Hetrick, W.P.**, O'Donnell, B.F. & Brenner, C.A. (2010, October 1). Steady State Auditory Entrainment in Schizophrenia and Bipolar Disorder. Society for Psychophysiological Research, Portland, OR.
- 116. Ahn, W.Y., Rass, O., Fridberg, D., Bishara, A., Forsyth. J., Breier, A., Busemeyer., J., Hetrick, W.P., & O'Donnell, B.F. (2010, October 7). Temporal Discounting of Rewards in Patients with Bipolar Disorder and Schizophrenia. Society for Research in Psychopathology, Seattle, WA.
- 117. Rass, O., Forsyth, J., Merrill, C., Hetrick, W., Bolbecker, A., Lysaker, P., Breier, A., Shekhar, A., & O'Donnell, B.F. (2010, October 7). Functional, Cognitive, and Neural Response to Cognitive Training Intervention in Schizophrenia Patients. Annual Meeting of the Society for Research in Psychopathology, Seattle, WA.
- 118. Brenner, C., Kam, J., Bolbecker, A., **Hetrick, W**., & O'Donnell, B. (2010, October 7). Prospective Predictors of Mood Episodes in Bipolar Disorder. Society for Research in Psychopathology, Seattle, WA.
- 119. \*Forster, F., \*Zirnheld, P., Shekhar, A., O'Donnell, B., & Hetrick, W. (2010, October 7). Haloperidol impairs temporal interval learning in humans: Electrophysiological correlates of temporal estimation and outcome evaluation. Society for Research in Psychopathology, Seattle, WA.
- 120. \*Klaunig, M.J., \*Bolbecker, A.R., \*Forsyth, J.K., \*Merrill, C.C., Brenner, C.A., O'Donnell, B.F., & Hetrick, W.P. (2010, October 7). Exploration of Prepulse Inhibition and Prepulse Facilitation in Schizophrenia. Society for Research in Psychopathology, Seattle, WA.
- 121. \*Kent, J., Rass, O., \*Klaunig, M., \*Bolbecker, A., O'Donnell, B., & **Hetrick, W.P.** (2010, October 7). Possible Cerebellar Contributions to Eyeblink Conditioning and Steady State Response. Society for Research in Psychopathology, Seattle, WA.

- 122. Bolbecker, A., Hong, L., \*Kent, J., \*Klaunig, M., \*Forsyth, J., \*Merrill, C., Shekhar, A., O'Donnell, B., & **Hetrick, W.P.** (2010, October 10). Society for Research in Psychopathology, Seattle, WA.
- 123. \*Kent, J.S., Hong, S.L., \*Forsyth, J.K., Bolbecker, A.R., O'Donnell, B.F., & Hetrick, W.P. (2010, November). Abnormalities in Postural Sway Area and Complexity in Schizophrenia: Clinical and Neuropsychological Correlates. Society for Neuroscience, San Diego, CA.

#### <u>2011</u>

- 124. Johannesen, J.K., \*Erickson, M.A., O'Donnell, B.F., & **Hetrick, W.P.** (2011, April). Evaluation of a Normal-Predicted Change Index for Assessment of P50 Suppression in Schizophrenia. International Congress on Schizophrenia Research, Colorado Springs, CO.
- 125. \*Kent, J.S., Matthews, S.C., Bolbecker, A.R., Rass, O., \*Klaunig, M.J., Jones, M.N., O'Donnell, B.F., & Hetrick, W.P. (2011, September). Possible Cerebellar Contributions to Semantic Fluency. 17<sup>th</sup> meeting of the European Society for Cognitive Psychology, San Sebastián, Spain.
- 126. \*Erickson, M.A., \*Gerber, R., \*Klaunig, M. & **Hetrick, W.P.** (2011, Sept 16). High Power and Poor Inter-trial Coherence in Low Frequency Bands, but Not Traditional Measures of Dual-click ERP Suppression, Are Associated with Self-reports of Perceptual Disturbances in Schizophrenia Patients and Non-psychiatric Controls. ociety for Psychophysiological Research, Boston, MA.
- 127. \*Kent, J., Hong, S.L., Bolbecker, A., \*Klaunig, M., O'Donnell, B., & Hetrick, W.P. (2011, Sept. 22). Postural Sway Abnormalities across the Schizophrenia Spectrum. Society for Research in Psychopathology, Boston, MA.
- 128. \*Erickson, M., Betzel, R., O'Donnell, B., Sporns, O., & **Hetrick, W.** (2011, Sept. 22). Functional network organization of schizophrenia patients and healthy control participants in resting state EEG. Society for Research in Psychopathology, Boston, MA.
- 129. \*Forster, S., \*Zirnheld, P., Shekhar, A., O'Donnell, B., & Hetrick, W. (2011, Nov. 14). Electrophysiological indices of dopamine-dependent signaling in temporal estimation and interval learning. Society for Neuroscience Annual Meeting, Washington, DC.
- 130. \*Kent, J.S., Hong, S.L., Bolbecker, A.R., \*Klaunig, M.J., O'Donnell, B.F., & Hetrick,
   W.P. (2011, November). Past Alcohol Dependence Does Not Exacerbate
   Cerebellar Deficits in Schizophrenia. Annual meeting of the Society for
   Neuroscience, Washington DC.

#### <u>2012</u>

131. \*Kent, J.S., Matthews, S.C., Jones, M.N., Bolbecker, A.R., Rass, O., \*Klaunig, M.J., O'Donnell, B.F., & **Hetrick**, W.P. (2012, April). Possible Cerebellar Contributions to

Semantic Fluency. Cognitive Neuroscience Society, Chicago, IL.

- 132. Ahn, W.-Y., \*Kent, J. S., Busemeyer, J. R., **Hetrick**, W. P., & O'Donnell, B. F. (2012, April) Overreliance of habitual over goal-directed actions in patients with bipolar disorder. Cognitive Neuroscience Society meeting, Chicago, Illinois.
- 133. D.J. Kim, W.P. Hetrick, O. Sporns, J. Howell, O. Rass, A.R. Bolbecker, A. Breier, B.F. O'Donnell (2012, May). Disorganization of EEG Network Properties in Bipolar Disorder. Society of Biological Psychiatry, Philadelphia, PA.
- 134. D.J. Kim, P.D. Skosnik, H. Cheng, B.J. Pruce, M.S. Brumbaugh, J.M. Vollmer, W.P. Hetrick, B.F. O'Donnell, O. Sporns, A. Puce, S.D. Newman (2012, May). Graph Theoretical Analysis of Structural Network Alterations in Cannabis Users. Society of Biological Psychiatry, Philadelphia, PA.
- 135. D.J. Kim, H. Cheng, J. Kent, W.P. **Hetrick**, Olaf Sporns, A. Puce, S.D. Newman, A.R. Bolbecker, A. Breier, M. Klaunig, B.F. O'Donnell (2012, May). Structural and Functional Network Abnormalities in Schizophrenia Assessed Using DTI and resting-state fMRI. Society of Biological Psychiatry, Philadelphia, PA.
- 136. Cheng, H., \*Kent, J., Klaunig, M., Kim, D., O'Donnell, B., Hetrick, W., & Puce, A. (2012, May). Abnormality of Variance of Resting State fMRI Signal in White Matter for Schizophrenia. Electronic poster. International Society for Magnetic Resonance Medicine, Melbourne, Australia.
- 137. \*Innis, I.J., \*Kent, J.S., Bolbecker, A.R., & **Hetrick**, W.P. (2012, September). Comparability of MRI-compatible Infrared and Electromyogram Measures of Eyeblink Conditioning. Annual meeting of the Pavlovian Society, Weehawken, NJ.
- 138. Sang, K., Todd, P.M., Rass, O., Howell, J., **Hetrick**, W.P., O'Donnell, B.F. (2012, October). Cognitive search behavior in schizophrenia and bipolar disorder. Society for Research in Psychopathology, Ann Arbor, MI.
- 139. \*Kent, J.S., Matthews, S.C., Jones, M.N., Bolbecker, A.R., Rass, O., \*Klaunig, M.J., O'Donnell, B.F., & **Hetrick**, W.P. (2012, October). Cerebellar Correlates of Semantic Fluency. Society for Research in Psychopathology, Ann Arbor, MI.
- 140. Bolbecker, A.R., \*Kent, J.S., \*Howell, J.S., \*Klaunig, M.J., \*Forsyth, J.K., \*Westfall, D., Breier, A., O'Donnell, B.F., & **Hetrick**, W.P. (2012, October). Cerebellar-Dependent Eyeblink Conditioning Deficits in First-Degree Relatives of Individuals with Schizophrenia. Annual meeting of the Society for Research in Psychopathology, Ann Arbor, MI.

- 141. \*Forster, S., \*Lackner, R., Hetrick, W.P. (2013, February). Identification of temporal processing domains relevant to assessment of psychotic illness: Development of the Integrity of Temporal Processing (ITP) Battery. Poster presentation at TIMELY Training School: Timing and Time Perception - Procedures, Measures, & Applications, Corfu, Greece.
- 142. \*Newman, M., \*Kent, J.S., \*Innis, I., \*Rejimon, A., & Hetrick, W.P. (2013, July).
  Validation of an Infrared System for Eyeblink Conditioning Response Recording.
  2013 Summer Research Poster Session for the Indianapolis Project SEED (an educational outreach program of the American Chemical Society), Indianapolis, IN.
- 143. \*Kent, J.S., Matthews, S.C., \*Kim, D.J., \*Howell, J., Bolbecker, A.R., Jones, M.N., O'Donnell, B.F., & **Hetrick, W.P.** (2013, September). Volumetric MRI Cerebellar Correlates of Semantic Fluency. Society for Research in Psychopathology, Oakland, CA.
- 144. Bolbecker, A.R., \*Westfall, D.R., \*Lackner, R.J., \*Howell, J.M., \*Kent, J.S., Breier, A., O'Donnell, B.F., & **Hetrick, W.P.** (2013, September). Performance Patterns on Temporal Processing Tasks Differentiate Schizophrenia, Bipolar Disorder, and Healthy Controls. Society for Research in Psychopathology, Oakland, CA.
- 145. \*Kim, D.J., \*Kent, J.S., \*Howell, J., Bolbecker, A.R., Cheng, H., Newman, S.D., O'Donnell, B.F., & **Hetrick, W.P.** (2013, September). Disruption of Cerebellar Networks in Schizophrenia: A Graph Theoretic Analysis. Society for Research in Psychopathology, Oakland, CA.
- 146. \*Seitzman, B.A., Abell, M., and **Hetrick, W.P.** (2013, October). Cognitive manipulation of brain electric microstates. Society for Psychophysiological Research, Florence, Italy.
- 147. Cheng, H., Newman, S., \*Kent, J.S., \*Howell, J., Bolbecker, A.R., Puce, A., O'Donnell, B.F., & Hetrick, W.P. (2013, October). Nodal centrality of resting state functional network in the differentiation of schizophrenia using support vector machine. Indiana Neuroimaging Symposium, Bloomington, IN.
- 148. \*Kim, D.J., \*Kent, J.S., \*Howell, J., Bolbecker, A.R., Cheng, H., Newman, S.D., O'Donnell, B.F., & **Hetrick, W.P.** (2013, October). Disruption of Cerebellar Networks in Schizophrenia: A Graph Theoretic Analysis. Indiana Neuroimaging Symposium, Bloomington, IN.
- 149. \*Kent, J.S., Matthews, S.C., Kim, D.J., \*Howell, J., Bolbecker, A.R., Jones, M.N., O'Donnell, B.F., & **Hetrick, W.P.** (2013, October). Volumetric MRI Cerebellar Correlates of Semantic Fluency. Indiana Neuroimaging Symposium, Bloomington, IN.
- 150. Cheng, H., Newman, S., \*Kent, J.S., \*Howell, J., Bolbecker, A.R., Puce, A., O'Donnell, B.F., & **Hetrick, W.P.** (2013, November). Nodal centrality of resting state functional

network in the differentiation of schizophrenia using support vector machine. Cell Symposia: The Networked Brain (satellite meeting of the Society for Neuroscience), San Diego, CA.

## <u>2014</u>

- 151. Kim, D.J, \*Kent, J.S., \*Bolbecker, A.R., O'Donnell, B.F., **Hetrick, W.P.** (2014, September) Alterations of Resting-state Functional Networks In Cerebellum Of Schizophrenia. Society for Research in Psychopathology, Evanston, IL.
- 152. Bolbecker, A.R., Port, N., Redick, B., Howell, J., Westfall, D., O'Donnell, B.F., Hetrick, W.P. (2014, September). Confirmation Of The Cerebellar Model Of Schizophrenia By Saccadic Adaptation And Smooth Pursuit Eye Movement Experiments. Society for Research in Psychopathology, Evanston, IL.
- 153. \*Kent, J.S., Kim, D.J., \*Howell, J., \*Krempely, P., Newman, S., Cheng, H., Bolbecker, A.R., O'Donnell, B.F., **Hetrick, W.P.** (2014, September). Decreased Cerebellar Activation In Individuals With Schizophrenia During Impaired Associative Learning. Society for Research in Psychopathology, Evanston, IL.
- 154. Westfall, D., West, J., McDonald, B., Bolbecker, A.R., O'Donnell, B.F., Francis, M., Mehdiyoun, N., Hetrick, W.P., Saykin, S., Breier, A. (2014, September). Neuroanatomical Correlates of EEG and Cognitive Deficits in First-episode Psychosis. Society for Research in Psychopathology, Evanston, IL.
- 155. \*Rejimon, A., \*Kent, J.S., \*Howell, J., \*Westfall, D., Hong, S.L., Bolbecker, A.R., O'Donnell, B.F., **Hetrick, W.P.** (2014, September). Neuropsychological Correlates of Cerebellar Function In Non-psychiatric Controls And Individuals With Schizophrenia. Society for Research in Psychopathology, Evanston, IL.
- 156. Olson, M., Bolbecker, A., Westfall, D., Howell, J., Hetrick, W.P., O'Donnell, B.F. (2014, September). Relationship of Schizotypal Personality Questionnaire Dimensions to Clinician Ratings and Cognitive Performance in Schizotypal Personality Disorder. Society for Research in Psychopathology, Evanston, IL.
- 157. \*Fischer, S., \*Mitroi, J., Shin, Y.W., **Hetrick, W.P.** (2014, September). Prism Adaptation and Personality. Society for Research in Psychopathology, Evanston, IL.
- 158. \*Krempely, P., \*Forster, S., **Hetrick, W.P.** (2014, September). Evaluating Domains Of Timing Ability In Relation To Psychosis Proneness: Preliminary Findings From The Integrity Of Temporal Processing Battery. Society for Research in Psychopathology, Evanston, IL.
- 159. Schnakenberg, A., Andrews, C., Howell, J., Westfall, D., **Hetrick, W.P.**, Breier, A., O'Donnell, B.F. (2014, September). Impaired Auditory Perception In Schizophrenia Spectrum Disorders. Society for Research in Psychopathology, Evanston, IL.
- 160. Kenney, J., **Hetrick, W.P.**, Bell, M., Johannesen, J. (2014, September). Modality Specificity Of Sensory-based Cognitive Remediation Training In Schizophrenia: Effects On Neurocognition And Perceptual Experience. Society for Research in

Psychopathology, Evanston, IL.

161. Kim, D.J., Davis, E.P., Sandman, C.A., Sporns, O., O'Donnell, B.F., Buss, C., Hetrick,
 W.P. (2014, November). Relationship between structural brain network pattern and gestational age of preadolescent children. Society for Neuroscience, Washington, D.C.

### <u>2015</u>

- 162. \*Krempely, P., Forster, S., \*Rejimon, A., \*Fischer, S., O'Donnell, B.F., & Hetrick, W.P. (2015, October). Do Discrete Domains Of Temporal Processing Ability Reflect Psychosis Proneness? Evidence From The Integrity Of Temporal Processing. Society for Research in Psychopathology, New Orleans, LA.
- 163. Kim, D., Kent, J., Bolbecker, A.R., Cheng, H., Sporns, O., O'Donnell, B.F., & Hetrick, W.P. (2015, October). Different Pattern Of Cerebro-cerebellar Functional Connectivity In Schizophrenia. Society for Research in Psychopathology, New Orleans, LA.
- 164. Schnakenberg, A., Moravec, L., Howell, J., Hetrick, W.P., Bolbecker, A., Breier, A., & O'Donnell, B.F. (2015, October). Are Auditory Hallucinations Associated With Deficits In Auditory Perception Or Event-related Potentials? Annual meeting of the Society for Research in Psychopathology, New Orleans, LA.
- 165. Hetrick, W.P., \*Kent, J., Kim, D., \*Howell, J., Krempely, P., Newman, S., Cheng, H., Bolbecker, A., & O'Donnell, B.F. (2015, October). Cognitive And Cerebellar Neural Correlates Of Eyeblink Conditioning Deficits In Schizophrenia. Society for Research in Psychopathology, New Orleans, LA.

#### <u>2016</u>

- 166. Schnakenberg Martin, A.M, Moravec, L., Sliva, P., Mullins, A., Calkins, E., Newman, S.D., Ahn, W-Y., **Hetrick, W.P.**, O'Donnell, B.F. (2016, March). Personality characteristics and delayed discounting rates in young adult cannabis users. The Addicted Brain and New Treatment Frontiers: Sixth Annual Aspen Brain Forum hosted by the New York Academy of Sciences. New York, New York.
- 167. Kim, D-J., Schnakenberg, A.M., Calkins, E., Moravec, L., Hetrick, W.P., Newman, S.D., Cheng, H., O'Donnell, B.F. (2016, March). Altered resting-state functional connectivity in the current cannabis users. National Institutes of Health, Marijuana and Cannabinoids: A Neuroscience Research Summit. Bethesda, Maryland.
- 168. Newman, S.D., Cheng, H., Schnakenberg, A.M., Calkins, E., Moravec, L., Hetrick, W.P., O'Donnell, B.F. (2016, March). Neurochemical changes in the current cannabis users. National Institutes of Health, Marijuana and Cannabinoids: A Neuroscience Research Summit. Bethesda, Maryland.
- 169. Moussa-Tooks, A., Krempely, P., Bartolomeo, L., Bolbecker, A., O'Donnell, B., & Hetrick, W.P. (2016, May). "Predictive Power of Self-report and Cognitive Measures in Determining SCID-I and SCID-II Diagnosis." Society of Biological Psychiatry,

Atlanta, GA.

- 170. Lundin NB, Innis IJ, Mitroi J, Krishnan GP, Bartolomeo LA, Krempely PD, **Hetrick WP**, O'Donnell BF (2016, May). Phase-locking and spectral power deficits in bipolar disorder in the auditory oddball paradigm. Society of Biological Psychiatry, Atlanta, GA.
- 171. Kim, D-J., Schnakenberg, A.M., Calkins, E., Moravec, L., **Hetrick, W.P.**, Newman, S.D., Cheng, H., O'Donnell, B.F. (2016, May). Altered resting-state functional connectivity in cannabis users. Society of Biological Psychiatry, Atlanta, Georgia.
- 172. Lundin NB, Bartolomeo LA, Mitroi J, **Hetrick WP**, & O'Donnell BF. (2016, September). Early sensory processing and late context updating in bipolar disorder: An ERP and time-frequency approach. Society for Psychophysiological Research Annual Meeting, Minneapolis, MN.
- 173. Novak, K., Bolbecker, A., \*Bartolomeo, LA., O'Donnell, BF., **Hetrick, WP**., & Foti, D. (2016, September). Error monitoring across the schizophrenia spectrum: the impact of diagnosis and mood symptoms. Society for Psychophysiological Research Annual Meeting, Minneapolis, MN.
- 174. \*Purcell, J., Kim, D. J., Moussa-Tooks, A., Lundin, N., Krempley, P., O'Donnell, B., & **Hetrick W.P.** (2016, October). A graph theory investigation of neural connectivity properties in schizophrenia-spectrum disorders. Society for Research in Psychopathology, Baltimore, MD.
- 175. \*Lundin NB, Kim DJ, Kent JS, Newman SD, Shum DV, Bolbecker AR, Sparks PD, Bartolomeo LA, O'Donnell BF, **Hetrick WP** (September 2016). Cerebellar contributions to eyeblink conditioning in schizophrenia-spectrum disorders. Society for Research in Psychopathology, Baltimore, MD.
- 176. \*Moussa-Tooks, A., Kim, D., Bolbecker, A., Krempely, P., Bartolomeo, L., O'Donnell, B., & Hetrick, W.P. (2016, October). Temporal Processing in Schizophrenia: A Task-Based fMRI Study of Cerebellar-Mediated Sensorimotor Synchronization. Society for Research in Psychopathology, Baltimore, MD.
- 177. \*Moussa-Tooks, A., Kim, D., Bolbecker, A., Krempely, P., Bartolomeo, L., O'Donnell, B., Newman, S., & Hetrick, W.P. (2016, November). Temporal Processing in Schizophrenia: A Task-Based fMRI Study of Cerebellar-Mediated Sensorimotor Synchronization. Indiana Neuroimaging Symposium, Bloomington, IN.
- 178. Schnakenberg Martin, A.M., O'Donnell, B.F, Newman, S.D, Moravec, L., Calkins, E., **Hetrick, W.P.**, Kim, D-J. (2016, November). Altered resting state cerebellar functional connectivity in young adult cannabis users. The Indiana Neuroimaging Symposium. Bloomington, Indiana.
- 179. Kim, D-J., Schnakenberg Martin, A.M., Moravec, L., Cheng, H., Newman, S.D., Sporns, O., Calkins, E., **Hetrick, W.P.**, O'Donnell, B.F. (2016, November). Disrupted Structural-Functional Coupling in The Cannabis Users. The Indiana Neuroimaging Symposium.

Bloomington, Indiana.

- 180. \*Lundin NB, Kim DJ, Kent JS, Newman SD, \*Moussa-Tooks AB, \*Purcell J, Bolbecker AR, Bartolomeo LA, O'Donnell BF, **Hetrick WP** (2017, March). Differential cerebellar activation in schizophrenia during eyeblink conditioning. International Congress on Schizophrenia Research, San Diego, CA.
- 181. \*Purcell, J., Kim, D. J., Moussa-Tooks, A., Lundin, N., Sporns, O., Newman, S. D., O'Donnell, B., Breier, A., Hetrick W. P. (2017, April). A Graph Theoretic Investigation of Cortical and Subcortical Network Properties in Schizophrenia-Spectrum Disorders. International Congress on Schizophrenia Research (ICOSR), San Diego, CA.
- 182. \*Rejimon, A. and Hetrick, W.P. (2017, April). Effects of Cerebellar Stimulation on Postural Sway. 31<sup>st</sup> Annual National Conference on Undergraduate Research, Council on Undergraduate Research, Memphis, TN.
- 183. \*Purcell, J., Brown, J. W., Ramirez, A., Patel, S., O'Donnell, B., **Hetrick W.P.** (2017, April) Optimal decision-making within gain and loss contingencies. Society for Affective Sciences (SAS), Boston, MA.
- 184. \*Mitroi, J, \*Lundin, N., Bolbecker, A, \*Burroughs, L, \*Bartolomeo, L, \*Moussa-Tooks, A, \*Rejimon, A, \*Purcell, J, O'Donnell, B, & Hetrick, WP (2017, October). Neurostimulation of human cerebellum during associative learning. Society for Psychophysiological Research Annual Meeting, Vienna, Austria.
- 185. \*Moussa-Tooks, A, Kim, DJ, Bolbecker, A, Bartolomeo, L, \*Lundin, N, \*Purcell, J, Newman, S, O'Donnell, B, & Hetrick, WP (2017, October). Aberrations to cerebellarcortical effective connectivity in schizophrenia during sensorimotor synchronization. Society for Psychophysiological Research Annual Meeting, Vienna, Austria.
- 186. \*Lundin, N, Culbreth, A, Erickson, M, Bartolomeo, L, O'Donnell, B & Hetrick, WP (2017, October). The influence of pre-stimulus phase angle on post-stimulus waveforms in the auditory oddball paradigm in individuals with bipolar disorder and non-psychiatric controls. Society for Psychophysiological Research Annual Meeting, Vienna, Austria.
- 187. \*Rejimon, A, \*Moussa-Tooks, A, \*Lundin, N, \*Mitroi, J, \*Burroughs, L, \*Saberi, S, Bolbecker, A, O'Donnell, B & Hetrick, WP. (2017, October). Effects of transcranial direct current stimulation on postural sway in young adults. Society for Psychophysiological Research Annual Meeting, Vienna, Austria.
- \* Denotes advisee under my supervision.

## AD HOC EDITORIAL WORK

Aging, Neuropsychology, and Cognition (2006-2007) American Journal of Psychiatry (2004-p) Archives of General Psychiatry (2002-p) Behavioral Neuroscience (2007-p) Behavior Research Methods, Instruments & Computers (1996-p) *Biological Psychiatry* (2001-p) *Bipolar Disorders* (2008-p) Brain Research (2012-p) Cerebral Cortex (2005-p) Clinical Neurophysiology (2001-p) Clinical Psychological Science (2013-p) Cognitive, Affective, and Behavioral Neuroscience (2008-p) *Cortex* (2007) *European Journal of Neuroscience* (2003-p) International Journal of Psychophysiology (2007) Journal of Abnormal Psychology (2002-p) Neuroimage (2010-p) *Neuropsychopharmacology* (2001- p) *Psychophysiology* (2002-p) Schizophrenia Bulletin (2009-p) Schizophrenia Research (2004-p)

#### **GRANT REVIEW PANELS**

#### **National**

- Member, Psychology Panel, National Science Foundation Graduate Fellowships, Washington, DC. (2000, 2001, 2002, 2007).
- Chairman, Psychology Panel, National Science Foundation Graduate Fellowships, Washington, DC. (2003, 2004, 2008, 2009).
- Ad hoc member, NIMH Special Emphasis Panel. ZMH1 ERB-L 01 S: Mental Health Centers for Intervention Development and Applied Research (CIDAR). Bethesda, MD (October 2006).
- Ad hoc member, NIMH Special Emphasis Panel. ZMH1-ERB-S-04: Interdisciplinary Developmental Science Centers for Mental Health (IDSC): Centers (P50 & P20). Teleconference (July 2007).

- Ad hoc member, NIMH Special Emphasis Panel. ZMH1 ERB C-01: Mental Health Centers for Intervention Development and Applied Research (CIDAR). Bethesda, MD (October 2007).
- · Ad hoc member, NIMH Psychopathology, Developmental Disabilities, Stress & Aging Fellowship Study Section (F12B). Washington, D.C. (March, 2008).
- · Ad hoc member, NIMH Special Emphasis Panel. ZMH1 ERB Z-04: Cognition and Schizophrenia Panel. Crystal City, VA (June 11, 2008).
- · Ad hoc member, NIMH Special Emphasis Panel. ZMH1 ERB Z-05: Neurocognition and Emotion in Schizophrenia. Crystal City, VA (June 11, 2008).
- · Ad hoc member, Spinal Cord and Brain Injury Fund (ISCBIRF) Grant Program, State of Indiana. Indianapolis, IN (October 8, 2008).
- · Ad hoc member, NIMH Psychopathology, Developmental Disabilities, Stress & Aging Fellowship Study Section (F12B). Washington, D.C. (November, 2008).
- · Ad hoc member, NIMH Special Emphasis Panel. ZMH1 ERB Z-01-S: Cognition and Schizophrenia Panel. Washington, D.C. March 5, 2009.
- · Ad hoc member, NIMH Special Emphasis Panel. ZMH1 ERB Z-03-S: Social Neuroscience Panel. Washington, D.C. March 5, 2009.
- · Ad hoc member, NIMH Special Emphasis Panel. ZMH1 ERB-N (03) S: Translational Research Center in Behavioral Science (Teleconference). February 19, 2010.
- Ad hoc member, NIMH Special Emphasis Panel. ZRG1 BBBP-L 05: Adult psychopathology panel for proposals with study section conflicts (Internet review). October 27-28, 2010.
- Ad hoc member & session chair, NIMH Special Emphasis Panel. ZRG1 BBBP-L (03) M: Adult psychopathology and disorders of aging panel for proposals with study section conflicts (Internet review). January 27, 2011.
- Ad hoc member, NIMH Special Emphasis Panel. ZRG1 BBBP-R (03) M. Member Conflict: Child Psychopathology and Developmental Disabilities (Video Assisted Meeting). December 10th, 2012.
- Ad hoc member, NIMH Special Emphasis Panel. ZRG1 BBBP-X (02) M. Member Conflict: Child and Adolescent Psychopathology (Internet Assisted Meeting). July 10, 2013.
- Ad hoc member, NIMH Special Emphasis Panel. ZRG1 BBBP-V (02) M. Member Conflict: Child Psychopathology and Developmental Disabilities and Mechanisms of Emotion, Stress and Health[MESH] Study Sections (Internet Assisted Meeting). February 13, 2014.
- Chairperson & Ad hoc member, NIMH Special Emphasis Panel. ZRG1 BBBP-X (81). Child Psychopathology and Developmental Disabilities AREA Review Study Section (Telephone Meeting). November 7, 2014.
- Ad hoc member, NIMH Special Emphasis Panel. ZRG1 BBBP-Z (02). Member Conflict: Cognition and Perception (Video conference meeting). November 30, 2016.

- Ad hoc member, NIMH Adult Psychopathology and Disorders of Aging (APDA) study section. June 5-6, 2017.
- Member, NIMH Ruth L. Kirschstein National Research Service Award (NRSA) Institutional Research Training Grant (T32) study section. September 28, 2017.

## <u>University</u>

- Member, Faculty Research Support Program (FRSP) Review Committee. Indiana University. (May 5, 2008).
- Member, Indiana Clinical Translational Science Institute Predoctoral Fellowship Review Committee, Indiana University. (April 10, 2009).
- Member, Faculty Research Support Program (FRSP) Review Committee. Indiana University. (May 4, 2009).
- Member, Indiana Clinical Translational Science Institute Translational Technologies and Resources (TTR) Cores Grant Review Committee, Indiana University. (November 5, 2009).
- Member, Indiana Clinical Translational Science Institute Collaborative Translational Research (CTR) Award Review Committee, Indiana University. (April 20, 2010).
- Member, Faculty Research Support Program (FRSP) Review Committee. Indiana University. (April 15, 2010).
- Member, Indiana Clinical Translational Science Institute Predoctoral Fellowship Review Committee, Indiana University. (April, 2010 & March, 2011).
- · Ad hoc member, Faculty Research Support Program (FRSP) Grant Program, Indiana University. 2014.
- · Ad hoc member, Faculty Research Support Program (FRSP) Grant Program, Indiana University. 2016.
- · Ad hoc member, Faculty Research Support Program (FRSP) Grant Program, Indiana University. 2017.

# MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

- · Society for Research in Psychopathology (member)
  - Chair, Program Committee (2007)
  - Member, Program Committee (2008)
  - Chair, Early Career Award Committee (2017)
- · Society for Psychophysiological Research (member)
  - Member of program committee (2006)
  - Member, Convention Sites Committee (2017-p)
- · American Psychological Society (member)

· Society for Biological Psychiatry (member)