

CURRICULUM VITAE

Victoria Risbrough, Ph.D.

EDUCATION:

- 1990-1995 BA in Psychology, University of California, San Diego
Degree awarded with Honors of Distinction
- 1999-2004 Ph.D. in Neuroscience, University of California, San Diego

PROFESSIONAL TRAINING:

- 1993-1994 UCSD Honor's Student Researcher, The Scripps Research Institute
- 1994-1995 Assistant Scientist, The Scripps Research Institute
- 1995-1999 Senior Assistant Scientist, SIBIA Neurosciences, Inc.
- 1999 Senior Assistant Scientist, Arena Pharmaceuticals, Inc.
- 2005-2006 Assistant Project Scientist, Dept. of Psychiatry, University of California, San Diego,
- 2004-2005 Post Doctoral Scholar, Dept. of Psychiatry, University of California, San Diego
- 2004, 2006 Visiting Scientist Max Planck Institute for Psychiatry, Munich, Germany

PROFESSIONAL APPOINTMENTS:

- 2007 – 2012 Assistant Professor in Residence, Dept. of Psychiatry, University of California, San Diego
- 2012 – Present Associate Professor in Residence, Dept. of Psychiatry, University of California, San Diego
- 2007 – Present Chief, Psychophysiology Unit, Center of Excellence for Stress and Mental Health, Veterans Administration, La Jolla, CA

GRANTS AND FELLOWSHIPS

CURRENT

- Chief, Psychophysiology Unit of Veterans Affairs Center of Excellence for Stress and Mental Health (James Lohr, Center Director), 01/01/2007-indefinite, \$140,000/yr.
- Principal Investigator NIMH R01 MH074697 “Stress and CRF System Effects on Information Processing 07/01/2010-06/30/2015, \$1,925,00 total
- Principal Investigator VA BLR&D Role of COMTval158met in PTSD risk and treatment response. 5/1/2014-4/30/2018, 1.1 mil total
- Co-Investigator DOD Role of Sleep Deprivation in Fear Conditioning and Extinction: Implications for Treatment of PTSD (Principal Investigator: Sean Drummond) 10/1/2010-9/30/2013 in NCE until 9/30/2014, \$767,000 total

- Co-Investigator VA HSR&D Arrestin Regulation of CRF1 Signaling: Mechanisms for Stress Resilience and PTSD (Principal Investigator: Richard Hauger) 10/01/2012-9/30/2016, \$189,000/yr
- Co-investigator NIMH MH083777 “Sensitive periods of brain-redox imbalance in schizophrenia” (Principal Investigator: Susan Powell) 07/01/2010-6/30/2015, \$1,925,00 total
- Co-investigator NIDK DK094475-01A1 “Learning Theory to Improve Obesity Treatments “ (Principal Investigator: Boutelle, Kerri 4/1/2012 – 3/31/2017, \$484,348/yr
- Co-investigator R21MH098203-01 “MRI Assessment of Hippocampal Volume and Function in a Mouse Model of PTSD” (Principal Investigator: Brown, Gregory) 7/1/ 2012-6/30/2014 \$275,000 total
- Co-investigator U19DA026838 “Development of GABA-B Receptor Compounds for Nicotine Dependence” (Principal Investigator: Athina Markou) 03/01/2002-09/30/2015, \$3,958,735 total
- Co-investigator R01 MH04228-22A “Gating and Inhibition in Schizophrenia” (Principal Investigator: David Braff). 07/01/2011-06/30/2016, \$3.9 mil total (DC and IC, UCSD)

RECENT COMPLETED PROJECTS:

- Co-Director of Project 2, VA HSR&D, “Psychophysiological Predictors” in multisite collaborative project: “Prospective Study of the Psychological, Social, and Biological Markers of Risk and Resilience for PTSD in Active Duty Marines.” (Principal Investigator, Dewleen Baker) 10/01/2007-09/30/2012, \$10.5 mil total across all projects
- Principal Investigator NIMH R21/33 MH083499-01 “Sensorimotor gating in humanized COMT mice” 04/01/2008-3/31/2011, \$616,000 total
- Principal Investigator, Department of Defense Post-traumatic Stress Concept Award “Glutamate transmission enhancement for treatment of PTSD” 4/1/2008-9/30/2009, \$277,200 total
- Principal Investigator NIMH R21 MH076850 “Murine model of CRF effects on fear extinction: relevance to PTSD” 04/01/2006 - 03/31/2009, \$423,500
- Principal Investigator NARSAD Young Investigator Award “Developing behavioral and neuroimaging markers of trait anxiety” 07/01/2006 - 06/30/2008, \$60,000
- Principal Investigator, Stein Institute on Research of Aging (SIRA) Pilot grant “The Genetics of Age Associated Neurocognitive Decline Using Inbred Mouse Strains: Development of an aging sensitive behavioral test battery” 11/01/2006-10/31/2007, \$10,000
- Principal Investigator: NIMH Individual NRSA MH068133 “Influences of CRF and 5-HT1A receptors in startle plasticity” 04/01/2003 - 03/31/2005, \$83,160
- Principal Investigator ADDEX Pharmaceuticals, Service Contract 08/2006-07/2007, \$25,000
- Principal Investigator Pfizer Pharmaceuticals, Service Contract 08/2008-07/2010, \$60,000
- Principal Investigator Acadia Pharmaceuticals, Service Contract 08/2009-07/2010, \$25,000
- Co-investigator NIMH MH052885 “Developmental Models of Gating Deficits in Schizophrenia” (Principal Investigator: Mark Geyer) 04/01/2006 - 03/31/2011
- Co-investigator VA Merit Award “Stress Hypersensitivity in PTSD: Enhanced CRF1 & CRF2 Receptor Signaling” (Principal Investigator: Richard Hauger) 03/01/2007-02/30/2011

- Co-investigator Roche Pharmaceuticals Grant “Functional fMRI in Drug Discovery (Principal Investigator: Greg Brown) 02/01/07-07/1/2010
- Co-investigator NIMH MH074697 “Stress and CRF System Effects on Information Processing” (Principal Investigator: Mark Geyer) 04/01/2006 - 03/31/2009
- Principal Investigator UCSD Clinical and Translational Research Institute (CTRI) Translational Pilot Award 04/01/2011-03/31/2012, \$20,000 total.

HONORS AND AWARDS

- Anxiety Disorders Association of America/American College of Neuropsychopharmacology Career Development Travel Award, 2005
- International Behavioral Neuroscience Society Student Travel Awards 2002, 2003, and 2004
- UCSD Academic Honors Program, Psychology 1993-1994

TEACHING EXPERIENCE

- Thesis Committee Member, Psychology Department, Cara Buck, 2012-2014
- Thesis Committee Member, Carla Hitchcock, Clinical Psychology, Alliant University, 2012-present
- Organize and conduct accelerated laboratory course “Introduction to Behavioral Neuroscience” for Neurosciences graduate program “Boot-Camp”, Fall 2004, 2005, 2006, 2007, 2008, 2009, 2011, 2012, 2013, 2014
- Co-organizer and lecturer for Neuroscience Graduate course “Neuropsychopharmacology” (Neu 277, Spring 2010, Spring 2012, Spring 2014)
- Co-Instructor, Physiological Psychology, Cuyamaca Community College, Fall 2013
- Minor Proposition Committee Member, Neurosciences Dept, Jessica Lichter, 2013
- Minor Proposition Committee Member, Neurosciences Dept, Maggie Chow, 2009
- Co-organizer and lecturer for Neuroscience Graduate course “Neuropsychopharmacology” (Neu 277, Spring 2008)
- Guest Lecture for International Center for Genetics and Biotechnology “Mouse Phenotyping” Course, Nov 10-13th, 2008, International Center for Theoretical Physics, Trieste, Italy.
- Guest Lecture for T32 Psychiatry Training Grant Fellows, Spring 2007, Fall 2010
- Co-investigator, Survival Skills and Ethics start-up grant to fund: (1) Science and Society Outreach for University of Puerto Rico High school students and (2) Professional Ethics and Conduct workshops for Graduate and Post-Doctoral students, April 2003, Puerto Rico
- Teaching Assistant for Cognitive Science and Psychology department undergraduate courses: “Introduction to Neurobiology” (CogSci 17, Fall 2001), “Drugs, Addiction and Mental Disorders” (Psych 179, Summer, 1993), “Introduction to Statistics” (Psych 60, Winter, 1992)

– Research advisor for the following trainees:

- Jessica Deslauris, Post Doctoral Fellow, UCSD, 1/2015-
- Mate Toth, Post Doctoral Scholar, UCSD, 7/21/2011-6/1/2014
- Elizabeth Flandreau, Post Doctoral Scholar, UCSD, 7/1/2012-present
- Dean Acheson, Post Doctoral Fellow, MIRECC, San Diego VA, 7/2009-7/2012; Assistant Clinical Professor, 7/1/2012-present
- Annie Reader, Ph.D. Thesis Committee for Clinical Psychology Graduate Student, Alliant, 2011-2012
- Jessica Lichter, Minor Proposition Committee for Neuroscience Graduate Student, UCSD, 2013
- Bryce Phillips, Undergraduate, UCSD, Winter Quarter, 2012
- Javier Perez, Post Doctoral Fellow in Psychiatry, UCSD, 5/2009-8/2010 – Currently Senior Scientist, Roche Pharmaceuticals
- Jodi Gresack, Post Doctoral Scholar in Psychiatry, UCSD, 4/2007-4/2010 – Currently Director of Behavioral Core, Greengard Group, The Rockefeller University
- Jared Young, Post Doctoral Fellow, Stein Institute for Research on Aging, UCSD, 7/2007-7/2009 – Currently Assistant Professor, University of California San Diego
- Christiaan Vinkers, visiting Graduate Student in Pharmacy, University of Utrecht, The Netherlands, 8/2004-1/2005 – Currently Resident, University of Utrecht, The Netherlands
- Philip Reekers, visiting Graduate Student in Pharmacy, University of Utrecht, The Netherlands, 1/2005-6/2005
- Sietse Jonkman, a visiting Graduate Student in Neuroscience, Cambridge University, Great Britain, 2/2005-2/2006
- Betsy Baumburger, Undergraduate, UC Berkeley, Summer internship, 6/2005-8/2005
- Porsha Roney, Howard University, STARS program internship, 6/2002-8/2002
- Sarah Tehrani, Medical Student, Karolinska Institute, Sweden, Summer Internship, 6/2002-8/2002
- Jonathon Stroebel, Robert E. Lee University, Summer Internship, 7/2001-8/2001

PROFESSIONAL ACTIVITIES

Journal Activities:

Invited reviewer for (year of first request):

- Autism Research (2010)
- Behavioral Brain Research (2009)
- Behavioral Neuroscience (2004)
- Biological Psychiatry (2005)
- British Journal of Pharmacology (2003)
- Cognitive and Behavioral Neurology (2010)
- Depression and Anxiety (2011)
- European Journal of Neuroscience (2003)
- European Journal of Pharmacology (2002)
- European Journal of Neuropsychopharmacology (2009)
- Experimental Brain Research (2007)
- Experimental Neurology (2012)
- Frontiers in Pharmacology (2012)
- Genes, Brain and Behavior (2008)
- International Journal of Neuropsychopharmacology (2008)
- Journal of Neuroscience (2005)
- Journal of Neuroscience Methods (2014)
- Journal of Psychopharmacology (2004)
- Journal of Pharmacology and Experimental Therapeutics (2010)

- Lancet Psychiatry (2014)
- Molecular Psychiatry (2011)
- Neurobiology of Aging (2013)
- Neuropeptides (2008)
- Neuropharmacology (2009)
- Neuropsychopharmacology (2001)
- Neuroscience (2006)
- Neuroscience and Biobehavioral Reviews (2004)
- Pharmacology, Biochemistry and Behavior (2002)
- PLoS Computational Biology (2007)
- PLoS One (2010)
- Progress in Neuropsychopharmacology & Biological Psychiatry (2008)
- Proceedings of the National Academy of Sciences (2014)
- Psychological Medicine (2009)
- Psychoneuroendocrinology (2006)
- Psychopharmacology (2001)
- Psychophysiology (2013)
- Schizophrenia Bulletin (2010)

- Editorial Board, *Frontiers in Pharmacology*
- Editorial Board, *Frontiers in Neuropharmacology*
- Editorial Board, *Acta Neuropsychiatrica*
- Editorial Board, *Neuropharmacology*
- Guest Editor, Special Issue on Posttraumatic Stress Disorder, *Neuropharmacology* 2011
- Guest Editor, *Current Topics in Behavioral Neuroscience*, Special Volume on Posttraumatic Stress Disorder, 2014

Grant Review Activities:

- Chair, Department of Defense, Congressionally Directed Medical Research Programs, Discovery-Psychotropic Medications Review Panel, 2014
- Member, National Institute of Health Molecular and Neuropharmacology and Signaling (MNPS), July 2014
- Reviewer, US Army Medical Research and Materiel Command, AIMBS, 2012
- Ad hoc reviewer, National Institute of Health Molecular and Neuropharmacology and Signaling (MNPS) study section, February and June cycle 2012, June cycle 2013
- Reviewer, Mental Health and Behavioral Science Panel A, Veterans Affairs, 2011
- Reviewer, Mental Health and Behavioral Science Panel A, Veterans Affairs, 2009

- Reviewer, National Institute of Mental Health Special Emphasis Panel, ZMH1 ERB-C, 2009
- Reviewer, National Institute of Mental Health Brain Disorders and Clinical Neuroscience IRG [BDCN] 2010

- Reviewer, Scottish Medical Foundation, 2010
- Reviewer, Research and Health Sciences Division, Catalan Agency for Health Technology Assessment and Research (CAHTA), 2009
- Scientific Reviewer, Department of Defense, Congressionally Directed Medical Research Programs 2007
- External Grant Reviewer for the Netherlands Organization for Health Research and Development (ZonMw), 2007
- External Reviewer, Canadian Institutes of Health Research, International Opportunities Program, Development/Planning Grants

National and International Society Activities

- Scientific Council, Anxiety and Depression Association of America 2013
- Committee on Key Note Panels, Anxiety and Depression Association of America 2013
- Associate Member, American College of Neuropsychopharmacology, elected 2011
- Program Reviewer for Anxiety and Depression Association of America Annual meeting, 2011-present
- Program Reviewer for International Society for Traumatic Stress Studies Annual meeting, 2013-present
- Chair, Education and Training Committee, International Behavioral Neuroscience Society, 2006-2007
- Member of Education and Training Committee, International Behavioral Neuroscience Society, 2003-2007
- Elected Student Representative on the Council for the International Behavioral Neuroscience Society, 2002-2003
- Founder and President of UCSD Behavioral Neuroscience Club, 2002-2004
- Member of the Anxiety Disorder Association of America
- Member of the American Women in Science Society
- Member of the Society for Neuroscience
- Member of the International Behavioral Neuroscience Society
- Elected Graduate Student Association representative for UCSD Neuroscience Dept., 1999-2001

Industry Activities

- Consultant for *in vivo* development, Arena Pharmaceuticals, 1999-2004, 2007, 2009
- Consultant for *in vivo* development, Behavioral Pharma Inc, 2005-2007
- Consultant for San Diego Instruments, Inc., 2008-2011

- Consultant for Cenomed Biosciences, 2009
- Consultant for Ferring Pharmaceuticals, 2009-2011

University Activities:

- Member, IACUC Committee, San Diego Veterans Affairs Hospital, 2010-present
- Member, Psychiatry Education and Training Committee, 2014-present
- Psychiatry Department Representative for Academic Senate Assembly, 2010-2011
- Member, Core Curriculum Committee for School of Medicine, UCSD, Fall 2009 – 2012

PUBLICATIONS (h-index: 25, i10 index: 35)

1. Marshall A, Acheson D, **Risbrough V**, Straus L, and Drummond S. (2014) Fear Conditioning, Safety Learning, and Sleep in Humans. *Journal of Neuroscience*, in press.
2. Acheson D, Geyer MA, **Risbrough VB** (2014) Psychophysiology of PTSD: where are we now and where do we want to be? *Current Topics in Behavioral Neuroscience*, in press.
3. Huang M, Yurgil K, Robb A, Angeles A, Diwakar M, **Risbrough V**, Nichols S, McLay R, Theilmann RJ, Song T, Huang C; Lee RR, Baker DG. Voxel-wise Resting-state MEG Source Magnitude Imaging Study Reveals Neurocircuitry Abnormality in Active-duty Service Members and Veterans with PTSD. *Neuroimage Clin*, in press.
4. Huang MX, Nichols S, Baker DG, Robb A, Angeles A, Yurgil KA, Drake A, Levy M, Song T, McLay R, Theilmann RJ, Diwakar M, **Risbrough VB**, Ji Z, Huang CW, Chang DG, Harrington DL, Muzzatti L, Canive JM, Christopher Edgar J, Chen YH, Lee RR. (2014) Single-subject-based whole-brain MEG slow-wave imaging approach for detecting abnormality in patients with mild traumatic brain injury. *Neuroimage Clin*. 2014 Jun 16;5:109-19.
5. Naviaux JC, Schuchbauer MA, Li K, Wang L, **Risbrough VB**, Powell SB, Naviaux RK. (2014) Reversal of autism-like behaviors and metabolism in adult mice with single-dose antipurinergic therapy. *Transl Psychiatry*. 2014 Jun 17;4:e400.
6. Minassian A, Geyer MA, Baker DG, Nievergelt CM, O'Connor DT, **Risbrough VB** (2014) Heart rate variability characteristics in a large group of active-duty marines and relationship to posttraumatic stress. *Psychosom Med*. 76, 292-301.
7. Nievergelt CM, Wineinger NE, Libiger O, Pham P, Zhang G, Baker DG; **Marine Resiliency Study Investigators**, Schork NJ. (2014) Chip-based direct genotyping of coding variants in genome wide association studies: utility, issues and prospects. *Gene*. 2014 Apr 25;540(1):104-9. *Consortium authorship
8. Schilling JM, Cui W, Godoy J, **Risbrough V**, Niesman I, Roth DM, Patel PM, Drummond JC, Patel HH, Zemlagic-Harpe A, Head BP. (2014) Long-term atorvastatin treatment leads to alterations in behavior, cognition, and hippocampal biochemistry. *Behavioural Brain Research* Volume 267: 6–11.

9. **Risbrough V**, Ji B, Hauger R, Zhou X (2014). Generation and Characterization of Humanized Mice Carrying COMT158 Met/Val Alleles. *Neuropsychopharmacology*. 39(8):1823-32.
10. Toth M, Gresack, Bangasser DA, Plona Z, Valentino RJ, Flandreau EI, Mansuy I, Merlo-Pich E, Geyer MA, **Risbrough V** (2014) Forebrain-specific CRF over-production during development is sufficient to induce enduring anxiety and startle abnormalities in adult mice. *Neuropsychopharmacology* 39(6):1409-19
11. van Enkhuizen J, Acheson D, **Risbrough V**, Drummond S, Geyer MA, Young JW. (2014) Sleep deprivation impairs performance in the 5-choice continuous performance test: similarities between humans and mice. *Behav Brain Res*. 2014 Mar 15;261:40-8
12. Yurgil KA, Barkauskas DA, Vasterling J, Nievergelt CM, Larson GE, Schork NJ, Litz B, Nash WP, Baker DG, for the **Marine Resiliency Study Team*** (2014) Association Between Traumatic Brain Injury and Risk of Posttraumatic Stress Disorder in Active-Duty Marines *JAMA Psychiatry*
*Consortium authorship
13. Gresack J, Seymour P, Schmidt C, **Risbrough V** (2014) Inhibition of phosphodiesterase 10A has differential effects on dopamine D1 and D2 receptor modulation of sensorimotor gating. *Psychopharmacology* 231(10):2189-97
14. Toth M, Gresack J, Hauger, R, Halberstadt A, **Risbrough V**. (2013) The role of PKC signaling in CRF-induced modulation of startle. *Psychopharmacology* 229(4):579-89
15. Acheson D, Feifel D, de Wilde S, McKinney R, Lohr J, **Risbrough V** (2013) The effect of intranasal oxytocin treatment on conditioned fear extinction and recall in a healthy human sample. *Psychopharmacology* 229(1):199-208
16. Glatt SJ, Tylee DS, Chandler SD, Pazol J, Nievergelt CM, Woelk CH, Baker DG, Lohr JB, Kremen WS, Litz BT, Tsuang MT, **Marine Resiliency Study I*** (2013) Blood-based gene-expression predictors of PTSD risk and resilience among deployed marines: a pilot study. *Am J Med Genet B Neuropsychiatr Genet* 162B: 313-26 *Consortium authorship
17. Liu X, Hong SI, Park SJ, Dela Pena JB, Che H, Yoon SY, Kim DH, Kim JM, Cai M, **Risbrough V**, Geyer MA, Shin CY, Cheong JH, Park H, Lew JH, Ryu JH (2013) The ameliorating effects of 5,7-dihydroxy-6-methoxy-2(4-phenoxyphenyl)-4H-chromene-4-one, an oroxylin A derivative, against memory impairment and sensorimotor gating deficit in mice. *Arch Pharm Res* 36: 854-63
18. Tatro ET, **Risbrough V**, Soontornniyomkij B, Young J, Shumaker-Armstrong S, Jeste DV, Achim C (2013) Short-Term Recognition Memory Correlates with Regional CNS Expression of microRNA-138 in Mice. *Am J Geriatr Psychiatry* 21: 461
19. Li X, **Risbrough VB**, Cates-Gatto C, Kaczanowska K, Finn MG, Roberts AJ, Markou A. (2013) Comparison of the effects of the GABAB receptor positive modulator BHF177 and the GABAB receptor agonist baclofen on anxiety-like behavior, learning, and memory in mice. *Neuropharmacology*. 70:156-167.
20. Toth M, Ziegler M, Sun P, Gresack J, **Risbrough V**. (2013) Impaired conditioned fear response and startle reactivity in epinephrine deficient mice. *Behavioral Pharmacology*, 24(1):1-9.

21. Bomyea J, **Risbrough V**, Lang A. (2012) A consideration of select pre-trauma factors as key vulnerabilities in PTSD. *Clinical Psychology Review*, 32(7):630-41.
22. Acheson DT, Stein MB, Paulus MP, Ravindran L, Simmons AN, Lohr JB, **Risbrough VB**. (2012) Effects of anxiolytic treatment on potentiated startle during aversive image anticipation. *Hum Psychopharmacol* 27(4):419-27.
23. Baker DG, Nash WP, Litz BT, Geyer MA, **Risbrough VB**, Nievergelt CM, O'Connor DT, Larson GE, Schork NJ, Vasterling JJ, Hammer PS, Webb-Murphy JA; the MRS Team. (2012) Predictors of Risk and Resilience for Posttraumatic Stress Disorder among Ground Combat Marines: Methods of the Marine Resiliency Study. *Prev Chronic Dis* 9:E97.
24. Acheson DT, Stein MB, Paulus MP, Geyer MA, **Risbrough VB**. (2012) The effect of pregabalin on sensorimotor gating in 'low' gating humans and mice. *Neuropharm*. 2012 Sep;63(3):480-5.
25. Soontornniyomkij V, **Risbrough VB**, Young JW, Soontornniyomkij B, Jeste DV, Achim CL. (2012) Hippocampal calbindin-1 immunoreactivity correlate of recognition memory performance in aged mice. *Neurosci Lett*. 10;516(1):161-5
26. Hellgren C, Bannbers E, Åkerud H, **Risbrough V**, Poromaa IS. Decreased startle modulation during anticipation in the postpartum period in comparison to late pregnancy. (2012) *Arch Womens Ment Health*. 2012 Apr;15(2):87-94.
27. Ahmari SE, **Risbrough VB**, Geyer MA, Simpson HB. (2012) Impaired sensorimotor gating in unmedicated adults with obsessive-compulsive disorder. *Neuropsychopharmacology*, 37(5):1216-23.
28. Tanaka S, Young JW, Gresack JE, Geyer MA, **Risbrough VB**. (2012) Factor analysis of attentional set-shifting performance in young and aged mice. *Behav Brain Funct*, 7:33.
29. Acheson D, Gresack J, **Risbrough V** (2012) Hippocampal Dysfunction Effects on Context Memory: Possible Etiology for Post-traumatic Stress Disorder. *Neuropharmacology*, 62(2):674-85.
30. Stecker T, **Risbrough V** (2012) Pharmacological treatment of PTSD - Established and new approaches. *Neuropharmacology*, 62(2):617-27
31. **Risbrough V** and Stein M (2012) Neuropharmacology Special Issue on Posttraumatic Stress Disorder (PTSD): Current State of the Art in Clinical and Preclinical PTSD Research. *Neuropharmacology*, 62(2):539-41
32. Bannbers E, Kask K, Wikström J, **Risbrough V**, Sundström Poromaa I. (2011) Patients with premenstrual dysphoric disorder have increased startle modulation during anticipation in the late luteal phase period in comparison to control subjects. *Psychoneuroendocrinology*, 36(8):1184-92.
33. Soontornniyomkij V, **Risbrough V**, Young J, Soontornniyomkij B, Jeste DJ, Achim, C (2012) Increased hippocampal accumulation of autophagosomes predicts short-term recognition memory impairment in aged mice. *Age (Dordr)* 34(2):305-16.

34. van den Buuse M, Becker T, Kwek P, Martin S, Ruimschotel E, **Risbrough V** (2011) Disruption of prepulse inhibition by 3,4-methylenedioxymethamphetamine (MDMA): comparison between male and female wild-type and 5-HT_{1A} receptor knockout mice. *International Journal of Neuropsychopharmacology*, 14(6):856-61.
35. van den Buuse M, Ruimschotel E, Martin S, **Risbrough VB**, Halberstadt AL (2011) Enhanced effects of amphetamine but reduced effects of the hallucinogen, 5-MeO-DMT, on locomotor activity in 5-HT_{1A} receptor knockout mice: Implications for schizophrenia. *Neuropharmacology*, 61(1-2):209-16
36. Ali S, Young J, Wallace C, Gresack J, Jeste D, Geyer M, Dugan L, **Risbrough V**. (2011) Synaptic superoxide production is associated with poor short-term memory in aged mice. *Brain Research*, 1368:65-70
37. Gresack JE & **Risbrough VB**. (2011) The role of α_2 , α_1 , and β noradrenergic receptors in CRF-induced alterations in startle plasticity. *International Journal of Neuropsychopharmacology*, 21:1-16.
38. **Risbrough VB** (2010) Behavioral correlates of anxiety. *Curr Top Behav Neurosci*, 2:205-28.
39. Gresack J, Powell S, Geyer MA, Stenzel-Poore MS, Coste S, **Risbrough VB** (2010) CRF(2) null mutation increases sensitivity to isolation rearing effects on locomotor activity in mice. *Neuropeptides* 209:80-4
40. Winn ME, Zapala MA, Hovatta I, **Risbrough VB**, Lillie E, Schork NJ (2010) The effects of globin on microarray-based gene expression analysis of mouse blood. *Mamm Genome* 21: 268-75
41. Soontornniyomkij V, **Risbrough VB**, Young JW, Wallace CK, Soontornniyomkij B, Jeste DV, Achim CL (2010) Short-term recognition memory impairment is associated with decreased expression of FK506 binding protein 51 in the aged mouse brain. *Age (Dordr)* 32(3):309-22
42. Young JW, Powell SB, Geyer MA, Jeste DV, **Risbrough VB** (2010) The mouse attentional set-shifting task: a method for assaying successful cognitive aging? *Cognitive, Affective, & Behavioral Neuroscience*. 10: 243-251
43. Adamec R, Fougere D, **Risbrough V** (2010) CRF receptor blockade prevents initiation and consolidation of stress effects on affect in the predator stress model of PTSD. *International Journal of Neuropsychopharmacology* 13: 747-57
44. Gresack JE, **Risbrough VB**, Scott CN, Coste S, Stenzel-Poore M, Geyer MA, Powell SB (2010) Isolation rearing-induced deficits in contextual fear learning do not require CRF2 receptors. *Behavioural Brain Research* 209: 80-84
45. Young JW, Wallace CK, Geyer MA, **Risbrough VB** (2010) Age-associated improvements in cross-modal prepulse inhibition in mice. *Behav Neurosci* 124: 133-40
46. Hauger RL, **Risbrough VB**, Oakley R, Olivares-Reyes J, Dautzenberg F (2009) Role of CRF receptor signaling in stress vulnerability, anxiety, and depression. *Annals of NY Academy of Sciences* 1179:120-43
47. Baker DG, Nievergelt CM, **Risbrough VB** (2009) Post-traumatic stress disorder: emerging concepts of pharmacotherapy. *Expert Opinion on Emerging Drugs* 14(2): p. 251-272

48. Duvvuri V, **Risbrough VB**, Kaye WH, Geyer MA (2009): 5-HT(1A) receptor activation is necessary for 5-MeODMT-dependent potentiation of feeding inhibition. *Pharmacology, Biochemistry and Behavior* 93(3):349-53
49. Halberstadt AL, van der Heijden I, Ruderman MA, **Risbrough VB**, Gingrich JA, Geyer MA, Powell SB (2009) 5-HT_{2A} and 5-HT_{2C} receptors exert opposing effects on locomotor activity in mice. *Neuropsychopharmacology*, 34(8):1958-67
50. Young JY, Powell SB, **Risbrough VB**, Grant H, Geyer MA (2009) Using the MATRICS to guide development of a preclinical test battery for research in schizophrenia. *Pharmacology and Therapeutics* 122(2):150-202
51. **Risbrough VB**, Geyer MA, Hauger RL, Coste S, Stenzel-Poore M, Wurst W, Holsboer F (2009) CRF(1) and CRF(2) Receptors are required for potentiated startle to contextual but not discrete cues. *Neuropsychopharmacology* 34(6):1494-503
52. Halberstadt A, Buell M, Masten V, **Risbrough V**, Geyer M (2008) Modification of the effects of 5-methoxy- N, N -dimethyltryptamine on exploratory behavior in rats by monoamine oxidase inhibitors. *Psychopharmacology*. 201(1):55-66
53. Jonkman S*, **Risbrough VB***, Geyer MA, Markou A. (2008) Spontaneous nicotine withdrawal potentiates the effects of stress in rats. *Neuropsychopharmacology* 33:2131-8. *Co-first authors
54. Vinkers C, **Risbrough VB**, Geyer MA, Caldwell S, Low M, Hauger RL. (2007) Role of dopamine D1 and D2 receptors in CRF-induced disruption of sensorimotor gating. *Pharmacology, Biochemistry and Behavior* 86:550-558
55. Ponder C, Kliethermes C, Drew M, Muller J, Das K, **Risbrough V**, Crabbe J, Gilliam T, Palmer A. (2007) Selection for contextual fear conditioning affects anxiety-like behaviors and gene expression. *Genes, Brain and Behavior*, 6:736-49
56. **Risbrough VB**, Stein MA (2006) Role of Corticotropin Releasing Factor in anxiety disorders: A translational research perspective. *Hormones and Behavior*, 50:550-61
57. **Risbrough VB**, Masten V, Caldwell S, Paulus M, Low M, Geyer MA (2006) Differential contributions of dopamine D1, D2, and D3 receptors to MDMA-induced effects on locomotor behavior patterns in mice. *Neuropsychopharmacology*, 31:2349-58
58. Hauger RL, **Risbrough VB**, Brauns O, Dautzenberg FM (2006) Corticotropin Releasing Factor (CRF) receptor signaling in the central nervous system: New molecular targets. *Current Drug Targets* 5:453-479
59. **Risbrough VB**, Geyer MA (2005) Anxiogenic treatments do not increase fear-potentiated startle in mice. *Biological Psychiatry* 57:33-43
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Book Chapters:

1. Young JA and **Risbrough VB** (2010) Animal Models of Successful Cognitive Aging, In: Handbook of Successful Cognitive and Emotional Aging, Eds. Jeste, D., Depp, C. American Psychiatric Publishing, Inc. Arlington, VA.
2. Baker D, **Risbrough V**, Schork N (2008) Posttraumatic stress disorder: Genetic and environmental risk factors. In: US ARMY Medical Research and Command State of the Art Report: Biobehavioral Resilience to Stress. Boca Raton, FL: Taylor and Francis, pp 177-218.
3. **Risbrough VB**, Geyer MA (2008) Preclinical Approaches to Understanding Anxiety Disorders. In: Handbook of Anxiety and Anxiety Disorders. Eds. Antony MM, Stein MB. Oxford University Press (New York).

PRESENTATIONS

Oral Presentations, Invited Lectures and Symposium Chair Duties

Risbrough VB (2013) Chair: Peripheral Immune and Endocrine Pathways as Markers of PTSD Risk and Symptom Development: Evidence from Prospective Studies .52nd *American College of Neuropsychopharmacology Annual Meeting*. Hollywood, Florida December 10, 2013.

Risbrough VB (2013) Development and characterization of humanized mice for the COMT val158met polymorphism. In: “Building a More Predictive Mouse: Humanized Mouse Models for Neuropsychiatric Disorders”. 52nd *American College of Neuropsychopharmacology Annual Meeting*. Hollywood, Florida from December 12, 2013. (Chair Mark A Geyer.)

Risbrough VB (2013) Chair: Oxytocin Effects in Anxiety and Depression: Translational Studies and Early Clinical Findings, *Anxiety and Depression Association of America*, Annual Meeting, La Jolla CA April 5th, 2013

Risbrough VB (2012) “Unraveling the Neurobiology of Fear Extinction”, *Technology & Innovation for the Prevention & Treatment of PTSD*, Los Angeles, California October 31, 2012 (Chairs: Chris Reist, Skip Rizzo, Jim Lohr)

Risbrough VB (2012) Speaker in “Prospective Neuronal Response Trajectories in Populations at High Risk for Stress and Trauma Related Disorders”, *Annual Meeting International Society of Psychoneuroendocrinology*, New York, New York September 2012. (Chair: Eric Vermetten).

Risbrough VB (2011) Co-Chair: PTSD Biomarkers Discussion Group, *American College of Neuropsychopharmacology*, Annual Meeting, Hawaii.

Risbrough VB (2011) Chair: 7th *Annual Psychiatry Department Junior Faculty Symposium*, April 11th, University of California, San Diego.

Risbrough VB (2011) Chair: Translational Methods in Anxiety Disorders Research: From Animals to Humans and Back Again. *Anxiety Disorders Association of America Annual Meeting*, March 25th, New Orleans, LA.

Risbrough VB (2011) Corticotropin releasing factor mechanisms of anxiety: from mice to men. *Anxiety Disorders Association of America Annual Meeting*, March 25th, New Orleans, LA.

Risbrough VB (2011) Corticotropin releasing factor mechanisms of anxiety: from mice to men. March 14th, University of California, Irvine, Host: Dr. Tallie Baram.

Risbrough VB (2010) Understanding Mechanisms of Trauma: From Mice to Men, Keynote speaker for 6th *Annual Psychiatry Department Junior Faculty Symposium*, April 10, University of California, San Diego.

Risbrough VB (2009) Marine Resiliency Study: A longitudinal study of physiological, biological and psychological factors contributing to risk and resiliency for operational combat stress. Keynote Speaker for *Annual Conference of the Australasian Society for Psychiatric Research (ASPR)*, Canberra Australia, December 3rd, 2009

Risbrough VB (2009): Dissecting the mechanisms of oxidative stress effects on anxiety and cognition across age. *Anxiety Disorder Association of America Annual Meeting*, Santa Ana Pueblo, March 14th, Julie Wetherall (Chair).

Risbrough VB (2009) CRF mechanisms of anxiety effects on startle: relevance to PTSD. January 20th, Ferring Pharmaceuticals, Host, Dr. Adrienne Day.

Risbrough VB (2008) Cognitive Correlates To Prepulse Inhibition In Man: Applicable For Research In Rodents? *International Behavioral Neuroscience Society Annual Meeting*, St. Thomas, June 20th, Jared Young (Chair).

Risbrough VB (2008) Exploiting genetic variance across inbred mouse strains to identify novel pharmacotherapeutic targets for neuropsychiatric disorders. January 15th, Arena Pharmaceuticals, Host, Dr. Andrew Grottick.

Risbrough VB (2007) Developing a startle test battery relevant to PTSD. *Stress Physiology Program Review Meeting*, Office of Naval Research, Pt. Loma, California

Risbrough VB (2007) Developing a startle test battery for anxiety disorders. *Center of Excellence for Stress and Mental Health/Mental Illness Research and Clinical Core Retreat*, Long Beach, California

Risbrough VB (2007) Animal and genomic studies of aging. *Stein Institute of Research on Aging External Advisory Board meeting*, Host: Dr. Dilip Jeste. San Diego, California.

Risbrough VB (2007) Translational genetic approaches to the study of fear and anxiety. Chair: Dr. Andrew Holmes, *International Behavioral Neurogenetics Society Annual Meeting*, Doorworth, The Netherlands

Risbrough VB (2005) CRF1 and CRF2 receptor modulation of information processing. "Animal models of deficient sensorimotor gating: A new role for the corticotropin-releasing factor system?" December 14th. Vaishali Bakshi (Chair). *American College of Neuropsychopharmacology*, Annual Meeting.

Risbrough VB (2005) Animal models of social cognition. "Mental Illness Research, Education, and Clinical Center (VAHS) Retreat", Long Beach CA. July 19th, Host: Dr. Michael Green

Risbrough VB (2004) Role of CRF receptors in defensive startle behaviors. Invited speaker to Max Planck Institute for Psychiatry, Munich, Germany. April 25th, Host: Professor Florian Holsboer

Risbrough VB (2004) Role of CRF receptors in defensive startle behaviors. Invited speaker to Psychogenics, New York, NY. December 6th, Host: Dr. Paul McGonigle

Risbrough VB (2004) 5-HT1A receptor KO mice exhibit hypersensitivity to corticotropin releasing factor effects on locomotor but not acoustic startle behaviors. "Student Travel Award Winner Symposium", R Gerlai (Chair), *International Behavioral Neuroscience Society 13th Annual Meeting*, Key West, Florida.

Risbrough VB, Hauger RL, Geyer MA (2003) Differential roles of CRF1 and CRF2 receptors in sensorimotor gating. "Psychopharmacology: New Vistas", Dr. T Steckler (Chair), *European Behavioral Pharmacology Society*, Antwerp, Belgium

Risbrough VB (2003) CRF1 receptor gene deletion mice reveal opposing influences of CRF1 and CRF2 receptors on prepulse inhibition of the startle response. "Hot-topics", J Coyle (Chair) *Annual meeting of American College of Neuropsychopharmacology*, San Juan, Puerto Rico.

Risbrough VB (2003) Role of CRF receptors in startle defensive behaviors. Invited speaker to Ohio State University, Columbus, Ohio. Oct 28th, Host: Dr. John Bruno

Risbrough VB (2003) Role of CRF in conditioned and unconditioned fear in mice. Invited speaker to University of Utrecht, Netherlands. Sept. 15th, Host: Dr. Lucianne Groenink

Risbrough VB, Geyer MA (2002) Pharmacology of Fear Potentiated Startle in Mice. Student Travel Award Winner Symposium, J Bruno (Chair), *International Behavioral Neuroscience Society 11th Annual Meeting*, Capri, Italy.

Risbrough VB (2002) Role of CRF receptors in startle behavior. Invited speaker to Neurocrine Biosciences, La Jolla, CA. Dec 17th, Host: Dr. Dimitri Grigoriadis