

## DAVID HAROLD ZALD, Ph.D.

Curriculum Vitae

September, 2020

### A. Personal Information

Home: 220 Blake Avenue  
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E-mail: david.zald@rutgers.edu  
Age: 54  
Citizenship: American  
Place of Birth: Nashville, Tennessee

Office: Center for Advanced Human  
Brain Imaging Research  
142 Staged Research Building  
661 Hoes Lane West, Piscataway, NJ  
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### B. Degrees Earned

- 1990-1997      Ph.D. Received 4/97  
Doctoral Program in Clinical Psychology: University of Minnesota, Minneapolis  
Advisors: William Grove, Ph.D. and Auke Tellegen, Ph.D.  
Minor: Personality: Assessment and Biological Bases  
Dissertation: Serotonergic influences on self-reported affect: A D,l-fenfluramine Challenge Study.
- 1984-1989      B.A. Received 5/89  
Residential College: University of Michigan, Ann Arbor  
Majors: Music and Film/Video

### Nondegree Education

- 1989            University of Michigan, Ann Arbor  
Non-degree coursework in Psychology
- 1988-1989      Hebrew University, Jerusalem, Israel  
Non-degree coursework in Near Eastern Studies

### C. Employment History

- 2020-present    Director, Center for Advanced Human Brain Imaging Research and Henry Rutgers Term Chair, Brain Health Institute and Department of Psychiatry, Robert Wood Johnson Medical School, Rutgers University, Piscataway, NJ.
- 2017-2020      Cornelius Vanderbilt Professor of Psychology, Vanderbilt University, Nashville, TN.  
Director: Interdisciplinary Program in Neuroscience for Undergraduates (2015-2020) / Associate Director for Undergraduates Education, Vanderbilt Brain Institute (2017-2020)  
Secondary appointment: Department of Psychiatry, Vanderbilt University Medical Center, Nashville, TN.  
Additional faculty membership, Kennedy Center for Research on Human Development.

- 2012-2017 Professor: Department of Psychology (primary), Department of Psychiatry (secondary) Vanderbilt University/Vanderbilt University Medical Center, Nashville, TN.
- 2007-2012 Associate Professor: Department of Psychology (primary), Department Psychiatry (secondary) Vanderbilt University, Nashville, TN.
- 2000-2007 Assistant Professor: Department of Psychology, Vanderbilt University, Nashville, TN.
- 1998- 2000 Forensic Case Reviewer: Private practice  
Provided consultation for legal cases involving psychological assessment issues, or psychiatric clinical malpractice.
- 1997-2000 Post-doctoral Research Fellow: Cognitive Neuroimaging Unit - Minneapolis Veterans Affairs Medical Center, Division of Neuroscience Research in Psychiatry and Department of Pharmacology, University of Minnesota, Minneapolis, MN.  
Faculty supervisor: José V. Pardo, MD, Ph.D.
- 1995-1996 Neuropsychology Intern: Department of Psychology, Ann Arbor Veterans Affairs Medical Center and Program in Neuropsychology, Department of Psychiatry, University of Michigan Hospital, Ann Arbor, MI
- 1994-1999 Psychology Instructor: Department of Psychology, University of Minnesota, Minneapolis  
Taught undergraduate courses in Abnormal Psychology and Clinical Intervention Methods
- 1994-1994 Lab Instructor/Teaching Assistant: Department of Psychology, University of Minnesota, Minneapolis, MN. Taught and supervised administration of intellectual personality, psychiatric and neuropsychological assessment.
- 1991-1992 Psychiatric Interviewer: Family Health Study, Department of Family Social Science, University of Minnesota, St. Paul, MN
- 1990-1995 Research Assistant: University of Minnesota and Minneapolis Veterans Affairs Medical Center, Minneapolis, MN
- 1989-1990 Research Analyst: Institute for Survey Research, University of Michigan, Ann Arbor, MI

#### **D. Honors and Awards**

University of Michigan James B. Angell Scholar (1987)  
University of Michigan Phi Beta Kappa (1987)  
University of Michigan Senior Class Honors (1988)  
Hebrew University Faye Grand Memorial Scholarship (1989)  
University of Minnesota Graduate School Fellowship (1990)  
University of Minnesota, Dept. of Psychology/National Institute of Mental Health Predoctoral Training Award (1991-1992)  
University of Minnesota Eva O. Miller Fellowship (1994)

American Neuropsychiatric Association Young Investigator Award (1996)  
New York Times Magazine - Year in Ideas (2005)  
Vanderbilt University Chancellor's Award for Research (2011)  
Fellow - Association for Psychological Science (2013)  
Vanderbilt University College of Arts and Science Excellence in Graduate  
Mentoring Award (2014)  
Fellow- American Association for the Advancement of Science (2019)

## E. Publications

Publication metrics based on Google Scholar as of September, 2020

H-index = 70 I10-index= 131 Citations > 21,500

### Articles in refereed Journals

\*Papers that have > 100 citations are starred.

- 1) \*Kewman, D.G., Vaishampayan, N., Zald, D., Han, B. (1991). Cognitive impairment in musculoskeletal pain patients. *The International Journal of Psychiatry in Medicine*, 21, 253-262.
- 2) Sobell, J.L., Lind, T.J., Heston, L.L., Zald, D.H., Snitz, B.E., Grove, W.M., Sommer, S.S. (1995). The D5 dopamine receptor gene in schizophrenia: Identification of a nonsense mutation and multiple missense changes but lack of association with the disease. *Human Molecular Genetics*, 4, 507-514.
- 3) \*Zald, D.H., & Kim, S.W. (1996). The anatomy and function of the orbital frontal cortex, I: Anatomy, neurocircuitry and relevance to obsessive-compulsive disorder. *Journal of Neuropsychiatry and Clinical Neurosciences*, 8, 125-138.
- 4) \*Zald, D.H., & Kim, S.W. (1996). The anatomy and function of the orbital frontal cortex, II: Function and relevance to obsessive-compulsive disorder. *Journal of Neuropsychiatry and Clinical Neurosciences*, 8, 249-261.
- 5) \*Zald, D.H., & Pardo, J.V. (1997). Emotion, olfaction and the amygdala: Amygdala activation during aversive olfaction in humans. *Proceedings of the National Academy of Sciences*, 94, 4119- 4124.
- 6) \*Zald, D.H., Lee, J.T., Fluegel, K., Pardo, J.V. (1998). Aversive gustatory stimulation activates limbic circuits in humans. *Brain*. 121, 1143-1154.
- 7) Zald, D.H., Dondellinger, M., Pardo, J.V. (1998). Elucidating dynamic brain interactions with across-subjects correlational analysis of PET data: The functional connectivity of the amygdala-orbitofrontal cortex during olfactory tasks. *Journal of Cerebral Blood Flow and Metabolism*, 18, 896-905.
- 8) Zald, D.H., & Iacono, W. (1998). The development of spatial working memory abilities. *Developmental Neuropsychology*, 14, 563-578.
- 9) \*Lorig, T.G., Elmes, D.L., Zald, D.H., Pardo, J.V. (1999). A computer-controlled olfactometer for fMRI and electrophysiological studies of olfaction. *Behavior Research Methods: Instrumentation and Computers*, 31, 370-375.
- 10) \*Small, D.M., Zald, D.H., Jones-Gotman, M., Pardo, J.V., Zatorre, R., Frey, S., Petrides, M. (1999). Human cortical gustatory areas: A review of functional neuroimaging data. *Neuroreport*, 10, 7 -14.

- 11) Snitz, B. E., Curtis, C. E., Zald, D.H., Katsanis, J., & Iacono, W. G. (1999). Neuropsychological correlates of spatial working memory performance in schizophrenia: Relationships among putative frontal lobe tasks. *Schizophrenia Research*, 38, 37-50.
- 12) \*Zald, D.H., & Pardo, J.V. (1999). The functional neuroanatomy of voluntary swallowing. *Annals of Neurology*, 46, 281-286.
- 13) Curtis, C. E., Zald, D.H., Lee, J. T. Pardo, J.V. (2000). Object and spatial alternation at minimal delays activate the human hippocampus. *Neuroreport*, 11, 2203-2207.
- 14) Curtis, C.E., Zald, D.H., Pardo, J.V. (2000). Organization of working memory within the prefrontal cortex. A PET study of self-ordered working memory. *Neuropsychologia*, 38, 1503-1510.
- 15) \*Grove, W.G., Zald, D.H., Lebow, B., Snitz, B., Nelson, C. (2000). Clinical versus statistical prediction: A meta-analysis. *Psychological Assessment*, 12, 19-30.
- 16) \*Royet, J.P., Zald, D.H., Versace, R., Costes, N., Lavenne, F., Gervais, R. (2000). Emotional responses to pleasant and unpleasant olfactory, visual, and auditory stimuli: A PET study. *Journal of Neuroscience*, 20, 7752-7759.
- 17) \*Zald, D.H., & Pardo, J.V. (2000). Functional neuroimaging of the olfactory system in humans. *International Journal of Psychophysiology*, 36, 165-181.
- 18) \*Zald, D.H., & Pardo, J.V. (2000). Intraoral stimulation with water elicits robust cortical activation. *Chemical Senses*, 25, 267-275.
- 19) \*Royet, J.P., Hudry, J., Zald, D.H., Godinot, D., Gregoire, M.C., Lavenne, F., Costes, N., Holley A. (2001). Functional neuroanatomy of different olfactory judgments. *Neuroimage*, 13, 506-519.
- 20) Zald, D.H., & Depue, R.A. (2001) Serotonergic functioning correlates with positive and negative affect in healthy males. *Personality and Individual Differences*, 30, 71-86.
- 21) Hagen, M. C., Zald, D.H., Thornton, T. A., & Pardo, J.V. (2002). Somatosensory Processing in the human inferior prefrontal cortex. *Journal of Neurophysiology*, 88, 1400-1406.
- 22) Zald, D.H., Curtis, C. E., Folley, B. & Pardo, J.V. (2002). Prefrontal contributions to delayed spatial and object alternation: a positron emission tomography study. *Neuropsychology* 16: 182-189.
- 23) \*Zald, D.H., Hagen, M. C. & Pardo, J.V. (2002). Neural correlates of tasting concentrated quinine and sugar solutions. *Journal of Neurophysiology*, 87, 1068-1075
- 24) \*Zald, D.H., Matson, D.L. & Pardo, J.V. (2002). Brain activity in the ventromedial prefrontal cortex correlates with individual differences in negative affect. *Proceedings of the National Academy of Sciences USA* 99, 2450-2454.
- 25) \*Zald, D.H., & Pardo, J.V. (2002). The neural correlates of aversive auditory stimulation. *Neuroimage*, 16, 746-753.

- 26) \*Zald, D.H. (2003). The human amygdala and the emotional evaluation of sensory stimuli. *Brain Research Reviews* 41, 88-123.
- 27) \*Zald, D.H., Boileau, I., El Deredy, W. Gunn, R., McGlone, F., Dichter, G. and Dagher, A. (2004). Dopamine transmission in the human striatum during monetary reward tasks. *Journal of Neuroscience* 24, 4105-4112.
- 28) Zald, D.H., Curtis, C.E., Chernitsky, L. & Pardo, J.V. (2005). Frontal lobe activation during object alternation acquisition. *Neuropsychology* 19, 97-105.
- 29) \*Woodward, N.D., Purdon, S.E., Meltzer, H. and Zald, D.H. (2005). A meta-analysis of neuropsychological change to clozapine, olanzapine, quetiapine, and risperidone in schizophrenia. *International Journal of Neuropsychopharmacology* 8, 181-197.
- 30) \*Most, S.B., Chun, M.M., Widders, D.M., Zald, D.H. (2005). Attentional rubbernecking: Cognitive control and personality in emotion-induced blindness. *Psychonomic Bulletin & Review* 12, 654-661.
- 31) \*Gottfried, J., & Zald, D.H. (2005). On the Scent of Human Olfactory Orbitofrontal Cortex: Meta-Analysis and Comparison to Non-Human Primates. *Brain Research Reviews* 50, 287-304.
- 32) \*Kilpatrick, L., Zald, D.H., Pardo, J.V., & Cahill, L. (2006). Sex-related differences in amygdale connectivity during resting conditions. *Neuroimage* 30, 452-61.
- 33) \*Riccardi, P., Li, R. Ansari, M.S., Zald, D., Park, S., Dawant, B., Anderson, S., Doop, M. Woodward, N., Schmidt, D., Baldwin, R., Kessler, R. (2006). Amphetamine induced displacement of [<sup>18</sup>F] Fallypride in striatum and extrastriatal regions. *Neuropsychopharmacology*, 31, 1016-1026.
- 34) Riccardi, P., Zald, D., Park, S., Li, R. Ansari, M.S., Dawant, B., Anderson, S., Woodward, N., Schmidt, D., Baldwin, R., Kessler, R. (2006). Sex differences in amphetamine-induced displacement of [<sup>18</sup>F]fallypride in striatal and extrastriatal regions: a PET study. *American Journal of Psychiatry*, 163, 1639-1641.
- 35) Manrique, D., Zald, D.H. (2006). Individual differences in oral thermosensory abilities. *Physiology and Behavior*, 88, 417-424.
- 36) Smith, S.D., Most, S.B., Newsome, L. & Zald, D.H. (2006). An emotion-induced attentional blink elicited by aversively conditioned stimuli. *Emotion*, 6, 523-527.
- 37) \*Woodward, N.D., Meltzer, H., Purdon, S.E., Zald, D.H. (2007). A meta-analysis of cognitive change with haloperidol in clinical trials of atypical antipsychotics: dose effects and comparison to practice effects. *Schizophrenia Research*, 8, 211-224.
- 38) \*Fecteau, S., Pascual-Leone, A., Zald, D.H., Liguori, P., Théoret, H., Boggio, P., Fregni, F. (2007). Activation of prefrontal cortex by transcranial direct current stimulation reduces appetite for risk during ambiguous decision making. *Journal of Neuroscience*, 27, 6212-6218.

- 39) \*Most, S.S., Smith, S.D., Levy, B., Cooter, A., Zald, D.H. (2007). The naked truth: Emotional Blindness induced by erotic stimuli. *Cognition and Emotion*, 21, 964-981.
- 40) \*Yang, E, Zald, D.H., Blake, R. (2007). Fearful expressions gain preferential access to awareness during continuous flash suppression. *Emotion*, 7, 882-886.
- 41) Zald, D.H. (2007). Orbital versus dorsolateral prefrontal cortex: Anatomical insights into content vs. process differentiation models of the prefrontal cortex. *Annals of the New York Academy of Sciences*. 1121, 395-406.
- 42) Hakyemez, H.S., Dagher, A. Smith, S.D., Zald, D.H. (2008). Striatal dopamine transmission in healthy humans during passive monetary reward task. *Neuroimage* 39, 2058-65.
- 43) Lishner, D.A., Cooter, A.B., Zald, D.H. (2008). Addressing measurement limitations in affective rating scales: Development of an empirical valence scale. *Cognition and Emotion*, 22, 180-192.
- 44) Smith, S.D. Abou-Khalil, B., Zald, D.H. (2008). Post-traumatic stress disorder in a patient with no left amygdala. *Journal of Abnormal Psychology*, 117, 479-484.
- 45) \*Buckholtz J.W., Asplund, C.L., Dux, P.E., Zald D.H., Gore, J.C., Jones, O.D., Marois, R.M. (2008). The neural correlates of third-party punishment. *Neuron*. 60, 930-940.
- 46) \*Zald, D.H., Cowan, R.L., Riccardi, P., Baldwin, R., Ansari, M.S., Li, R., Shelby, E.S. Smith, C.E., McHugo, M., Kessler, R. M. (2008). Midbrain dopamine receptor availability is inversely associated with novelty-seeking traits in humans. *Journal of Neuroscience*, 28, 14372-14378.
- 47) Lishner, D.A., Cooter, A.B., Zald, D.H. (2008). Rapid emotional contagion and expressive congruence under strong test conditions, *Journal of Nonverbal Behaviors*, 32, 225-239.
- 48) Woodward, N.D, Zald, D.H, Ding Z., Riccardi, P., Ansari, M.S., Baldwin, R., Cowan, R.L., Li, R., Kessler, R. M. (2009). Cerebral morphology and dopamine D2/D3 receptor distribution in humans: A combined [18F]fallypride and voxel-based morphometry study. *Neuroimage* 46, 31-38.
- 49) \*Kessler, R.M, Woodward, N.D., Riccardi, P., Li, R., Ansari, M.S., Anderson, S, Dawant, B, Zald, D.H., Meltzer, H.Y. (2009). Dopamine D2 receptor levels in striatum, thalamus, substantia nigra, limbic regions, and cortex in schizophrenic subjects. *Biological Psychiatry* 65, 1024-31.
- 50) \*Stice, E., Spoor, S., Ng,J. , Zald, D.H. (2009). Relation of obesity to consummatory and anticipatory food reward. *Physiology and Behavior*, 97, 551-60.
- 51) \*Treadway, M.T., Buckholtz, J.W., Schwartzman, A.N., Lambert, W.E., Zald, D.H. (2009) Worth the 'EEfRT'? The Effort Expenditure for Rewards Task as an objective measure of motivation and anhedonia. *PLOS One*. 4, e6598.
- 52) Zald, D.H. (2009) Orbitofrontal cortex contributions to food selection and decision making. *Annals of Behavioral Medicine*, 38 Suppl 1:S18-24.

- 53) \*Blackford, J.U., Avery, S.N., Shelton, R.C., Zald, D.H. (2009). Amygdala temporal dynamics: Temperamental differences in the timing of amygdala response to familiar and novel faces. *BMC Neuroscience* 10:145.
- 54) \*Piech, R.M., Pastorino, M., Zald, D.H. (2010). All I saw was the cake: Hunger effects on attentional capture by visual food cues. *Appetite*. 54, 579-82.
- 55) \*Blackford, J.U., Buckholtz, J.W., Avery, S.N., Zald, D.H. (2010). A unique role for the human amygdala in novelty detection. *Neuroimage*. 50, 1188-93.
- 56) \*Buckholtz, J.W., Treadway, M.T., Cowan, R.L., Woodward, N.D., Benning, S.D., Li, R., Ansari, M. S., Baldwin, R.M., Schwartzman, A. N., Shelby, E.S., Smith C., Cole, D., Kessler R. M., Zald, D.H. (2010). Mesolimbic Dopamine Reward System Hypersensitivity in Individuals with Psychopathic Traits, *Nature Neuroscience*, 13, 419-21.
- 57) Zald, D.H., Woodward, N.D., Cowan, R.L., Riccardi, P., Baldwin, R., Ansari, M.S., Li, R., Smith, C.E., Kessler, R. M. (2010). The interrelationship of dopamine D2-like receptor availability in striatal and extrastriatal brain regions in healthy humans: A principal component analysis of [<sup>18</sup>F]fallypride binding. *Neuroimage*, 51, 53-62.
- 58) \*Buckholtz, J.W., Treadway, M.T., Cowan, R.L., Woodward, N.D., Li, R., Ansari, M. S., Baldwin, R.M., Schwartzman, A. N., Shelby, E.S., Smith C., Kessler R. M., Zald, D.H. (2010). Dopaminergic network differences in human impulsivity, *Science*, 329(5991), 532.
- 59) Piech, R., McHugo M., Smith, S.S., Dukic, S, Van Der Meer, J., Abou-Khalil, B., Zald, D.H. (2010). Fear-enhanced visual search persists after amygdala lesions. *Neuropsychologia*, 48, 3430-5.
- 60) \*Zald, D.H. & Andreotti, C. F. (2010). Neuropsychological assessment of the orbitofrontal cortex. *Neuropsychologia*, 48(12):3377-91.
- 61) Ciesielski, B, Armstrong, T., Zald, D., Olatunji, B. O. (2010). Emotion modulation of visual attention: Categorical and temporal characteristics. *PLoS ONE* 5(11), e13860.
- 62) Blackford, J.U., Avery, S.N., Cowan, R.L, Zald, D.H. (2011). Sustained amygdala response to both novel and newly familiar faces characterizes inhibited temperament. *Social, Cognitive and Affective Neuroscience*. 6, 621-629.
- 63) Eapen, M., Zald, D.H., Gatenby, J.C., Ding, Z, Gore, J.C. (2011). Using high resolution MRI at 7T to evaluate the anatomy of the midbrain dopaminergic system. *American Journal of Neuroradiology*. 32, 688-694.
- 64) Woodward, N.D., Cowan, R.L., Park, S. Ansari, M.S., Baldwin, R.M., Li, R., Doop, M., Kessler, R. M., Zald, D.H. (2011). Correlation of individual differences in schizotypal personality traits with amphetamine-induced dopamine release in striatal and extrastriatal brain regions. *American Journal of Psychiatry* 168, 418-26.
- 65) \*Treadway, M. & Zald, D.H. (2011). Reconsidering anhedonia in depression: Lessons from translational neuroscience. *Neuroscience & Biobehavioral Reviews* 35, 537-55.

- 66) \*Stice E, Yokum S, Zald D, Dagher A. (2011). Dopamine-based reward circuitry responsivity, genetics, and overeating. *Current Topics in Behavioral Neuroscience* 6, 81-93.
- 67) Olatunji, B. O., Ciesielski, B., Armstrong, T., Zald, D. (2011). Making something out of nothing: Neutral content modulates attention in generalized anxiety disorder. *Depression and Anxiety* 28, 427-434.
- 70) Olatunji, B.O., Ciesielski, B. G., Armstrong, T., Zald, D.H. (2011). Emotional expressions and visual search efficiency: Specificity and effects of individual differences in anxiety. *Emotion* 5, 1073–1079.
- 71) Coaster, M., Rogers, B. P., Jones, O.D., Viscussi, K. W., Merkle, K., Zald, D.H., Gore, J.C. (2011). Variables influencing the neural correlates of perceived risk of physical harm. *Cognitive Affective and Behavioral Neuroscience*, 11, 494-507.
- 72) Essex, B., Lejuez, C.W., Qian, R.Y., Bernstein, K., Zald, D.H. (2011). The Balloon Analog Insurance Task (BAIT): A behavioral measure of protective risk management. *PLOS-ONE*, 6, e21448.
- 73) Olatunji, B. O., Ciesielski, B., Zald, D. (2011). A selective impairment in attentional disengagement from erotica in obsessive-compulsive disorder. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 35, 1977-1982.
- 74) Piech, R., McHugo M., Smith, S.S., Dukic, S, Van Der Meer, J., Most, S., Zald, D.H. (2011). Attentional capture by emotional stimuli is preserved in patients with amygdala lesions. *Neuropsychologia*, 49, 3314-3319.
- 75) \*Armstrong, T., Zald, D.H., Olatunji, O. (2011). Attentional control in OCD and GAD: Specificity and associations with core cognitive symptoms. *Behaviour Research and Therapy*, 49, 756-762.
- 76) \*Wardle, M.C., Treadway. M.T., Mayo, L.M., Zald, D.H., de Wit, H. (2011). Amping up effort: Effects of d-amphetamine on human effort-based decision-making. *J. Neuroscience*, 31, 16597-16602.
- 77) \*Ray, R. D., & Zald, D.H. (2012). Anatomical insights into the interaction of emotion and cognition in the prefrontal cortex. *Neuroscience & Biobehavioral Reviews*, 36, 479-501.
- 78) Lahey, B.B., McNealy, K., Zald, D.H., Sporns, O., Manuck, S.B., Flory, J.D., Applegate, B., Hariri, A.R. (2012). Using confirmatory factor analysis to measure contemporaneous activation of defined neural networks in functional magnetic resonance imaging. *Neuroimage*, 60, 1982-1991.
- 79) \*Treadway, M.T., Buckholtz, J.W., Cowan, R.L., Woodward, N.D., Li, R., Ansari, M. S., Baldwin, R.M., Schwartzman, A. N., Smith C., Kessler R. M., Zald, D.H. (2012). Dopaminergic mechanisms of individual differences in human effort-based decision-making. *J. Neuroscience*, 32, 6170-6176.
- 80) \*Treadway, M.T., Nicholas A Bossaller, Shelton, R.C., Zald, D.H. (2012) Effort-based decision making in major depressive disorder: A translational model of decisional anhedonia. *Journal of Abnormal Psychology*. 121, 553-558.



- 81) \*Lahey, B. B., Applegate, B., Hakes, J.K., Zald, D.H., Hariri, A.R. Rathouz. P.J. (2012). Is there a general factor of prevalent of psychopathology during adulthood? *Journal of Abnormal Psychology*, 21, 971-977.
- 82) Davis, F.C., Knodt, A., Sporns, O., Lahey B.B., Zald, D.H., Brigidi, B.D., & Hariri, A.R. (2013). Impulsivity and the modular organization of resting-state neural networks. *Cerebral Cortex*, 23, 1444-1452
- 83) Essex, B.G., Clinton, S., Wonderley, L., Gallagher, M.J. & Zald, D.H. (2012). The posterior parietal and dorsolateral prefrontal cortices differentially influence the optimization of long-term vs. immediate value. *Journal of Neuroscience* 32, 15403-15413.
- 84) Samanez-Larkin, G.R., Buckholtz, J.W., Cowan, R.L, Woodward, N.D., Li, R., Ansari, M. S., Arrington, C.M., Baldwin, R.M., Smith C., Treadway, M.T., Kessler R. M., Zald, D.H (2013). A thalamocortico-striatal dopamine circuit for psychostimulant-enhanced human cognitive flexibility. *Biological Psychiatry*. 74, 99-105.
- 85) Olatunji, B. O., Armstrong, T., McHugo, M., Zald, D.H. (2013). Heightened attentional capture by threat in veterans with PTSD. *Journal of Abnormal Psychology*. 122, 397-405.
- 86) \*McHugo, M, Olatunji, B., & Zald, D.H. (2013). The emotional attentional blink: What we know so far. *Frontiers in Human Neuroscience*, 7, 151.
- 87) Barry, R. L., Coaster, M., Rogers, B.P. Newton, A.T., Moore, J., Anderson, A. W., Zald, D.H., Gore, J.C. (2013). On the origins of signal variance in fMRI of the human midbrain at high field. *PLOS One*, 8(4), e62708.
- 88) Treadway, M.T., Buckholtz, J.W. & Zald, D.H. (2013) Perceived stress predicts altered reward and loss feedback processing in medial prefrontal cortex. *Frontiers in Human Neuroscience*, 180.
- 89) \*Treadway, M.T. & Zald, D.H. (2013). Parsing anhedonia: Translational models of reward-processing deficits in psychopathology. *Perspectives on Psychological Science*, 22, 244-249.
- 90) Edmiston E.K., McHugo M., Smith, S.D., Abou-Khalil, B., Zald, D.H. (2013). Enhanced visual cortical activation for emotional stimuli is preserved in patients with unilateral amygdala resection. *Journal of Neuroscience*, 33 11023-11031.
- 91) Benningfield M., Blackford, J.U., Ellsworth M.E., Samanez-Larkin, G.R., Martin, P.R., Cowan, R.L., Zald, D.H. (2013). Caudate responses to reward anticipation associated with delay discounting behavior in healthy youth. *Developmental Cognitive Neuroscience* 7, 43-52.
- 92) Savage, S.W., Zald, D.H., Cowan, R. L., Volkow, N.D. Marks-Shulman P., Kessler R.M., Abumrad, N.N., Dunn J. P. (2014). Regulation of novelty seeking by midbrain dopamine D2/D3 signaling and ghrelin are altered in obesity. *Obesity*, 22, 1452-1457.
- 93) \*Kessler, R., Zald, D., Ansari, M.S., Li, R., Cowan, R. (2014). Changes in dopamine release and dopamine D2/3 receptor levels with the development of mild obesity. *Synapse* 68, 317-320

- 94) \*Zald, D.H., Ray, K.L., McHugo M., Glahn, D., Eickhoff, S.D., Laird, A.R. (2014). Meta-analytic connectivity modeling reveals differential functional connectivity of the medial and lateral orbitofrontal cortex. *Cerebral Cortex*. 24, 232-248.
- 95) Lahey, B.B., Zald, D.H., Hakes, J.K, Krueger, R.F., Rathouz, P.J. (2014). Patterns of heterotypic continuity associated with the cross-sectional correlational structure of prevalent mental disorders in adults. *JAMA Psychiatry* 71, 989-996.
- 96) Kessler, R.M., Seibyl, J.S., Cowan, R.L., Zald, D.H. Young, J., Ansari, M.S., Stabin, M. (2014). Radiation dosimetry of [<sup>18</sup>F]FPEB in humans. *Journal of Nuclear Medicine*, 55, 1119-1121.
- 97) Welland, B.J., Heitzeg, M.M., Zald, D.H., Cummiford, C., Love, T., Zucker, R.A., Zubieta, J. -K. (2014). Medial prefrontal cortex activation during reward anticipation is associated with impulsiveness and mediates striatal dopaminergic responses. *Psychiatry Research: Neuroimaging*, 223, 244-252
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### Invited Commentaries/Brief Reviews & Book Reviews

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- 3) Zald, D.H. (2014). Book Review of Noggle and Dean's Neuropsychology of Psychopathology, *Cognitive and Behavioral Neurology*, 27, 57-58.
- 4) Lahey, B.B., Krueger, R.F., Rathouz, P.J., Waldman, I.D., & Zald, D.H. (2017). Validity and utility of the general factor of psychopathology. *World Psychiatry*. 16, 142-144.
- 5) Docherty, A.R., Fonseca-Pedrero, E., Debbane, M., Chan, R.C.K., Linscott, R.J., Jonas, K.G., Cicero, D.C., Green, M.J., Simms, L.J., Mason, O., Watson, D., Ettinger, U., Waszczuk, M., Rapp, A., Grant, P., Kotov, R., DeYoung, C.G., Ruggero, C.J., Eaton, N.R., Krueger, R.F., Patrick, C., Hopwood, C., O'Neill, F.A., Zald, D.H., Conway, C.C., Adkins, D.E., Waldman, I.D., van Os, J., Sullivan, P.F., Anderson, J.S., Shabalin, A.A., Sponheim, S.R., Taylor, S.F., Grazioplene, R.G., Bacanu, S.A., Bigdeli, T.B., Haenschel, C., Malaspina, D., Gooding, D.C., Nicodemus, K., Schultze-Lutter, F., Barrantes-Vidal, N., Mohr, C., Carpenter, W. T., Cohen, A.S. (2018). Enhancing psychosis-spectrum nosology with an international data sharing initiative. *Schizophrenia Bulletin*, 44 (suppl. 2) S460-S467.
- 6) Hopwood, C.J., Krueger, R.F., Watson, D., Widiger, T.A., Althoff, R.R., Ansell, E.B., Bach, B., Bagby, R.M., Blais, M.A., Bornovalova, M.A., Chmielewski, M., Cicero, D.C., Conway, C., De Clerq, B., De Fruyt, F., Docherty, A.R., Eaton, N.R., Edens, J.F., Forbes, M.K., Forbush, K.T., Hengartner, M.P., Ivanova, M.Y., Leising, D., Lukowitsky, M.R., Lynam, D.R., Markon, K.E., Miller, J.D., Morey, L.C., Mullins-Sweatt, S.N., Ormel, J., Patrick, C.J., Pincus, A.L., Ruggero, C., Samuel, D.B., Sellbom, M., Tackett, J.L., Thomas, K.M., Trull, T.J., Vachon, D.D., Waldman, I.D., Waszczuk, M.A., Waugh, M.H., Wright, A.G.C., Yalch, M.M., Zald, D.H., Zimmermann, J. (2019). Commentary on "The Challenge of Transforming the Diagnostic System of Personality Disorders". *J. Personality Disorders*, 4, 419-436.
- 7) Perkins, E.R., Joyner, K.J., Patrick, C.J., Bartholow, B.D., Latzman, R.D., DeYoung, C.G., Kotov, R., Reininghaus, U. n Cooper, S. E., Afzali, M.H., Docherty, A.R., Dretsch, M.N., Eaton, N.R., Goghari, V.G., Haltigan, J.D., Krueger, R.F., Martin, E.A., Michelini, G., Ruocco, A.C., Shackman, A.J., Tackett, J.L., Venables, N.C., Waldman, I.D., Zald, D.H. (in press). Neurobiology and the hierarchical taxonomy of psychopathology: Progress toward ontogenetically informed and clinically useful nosology. *Dialogues in Clinical Science*,

- 8) Kotov, R., Jonas, K. G., Carpenter, W. T., Dretsch, M. N., Eaton, N. R., Forbes, M. K., Forbush, K. T., Hobbs, K., Reininghaus, U., Slade, T., South, S. C., Sunderland, M., Waszczuk, M. A., Widiger, T. A., Wright, A. G. C., Zald, D. H., Krueger, R. F., Watson, D., & HiTOP Utility Workgroup. (2020). Validity and utility of Hierarchical Taxonomy of Psychopathology (HiTOP): I. Psychosis superspectrum. *World Psychiatry*, 19, 151-172.
- 9) Lahey, B.B., Kaczkurkin, A., Moore, T., Zald, D.H. (2020). Hierarchical models of psychopathology: Empirical support, implications, and remaining issues. *World Psychiatry*, 16,142-144

### **Working Papers (under Review or in Preparation)**

- 1) Lahey, B.B., Class, Q.C., Rathouz, P.J., Van Hulle, C.A., Applegate, B., Hinton, K.H., Perkins, S.F., Villalta-Gil, Zald, D.H., (in review). Transdiagnostic associations of psychological constructs with the general factor of psychopathology
- 2) Kotov, R., Barch, D.M., Barlow, D.H., Carpenter, W.T., Hasin, D.S., Heckers, S.H., Krueger, R.F., Miller, G.A., Ruggero, C.H., Watson, D., Zald, D.H. (in review). A psychopathology phenome project: The best investment in mental health today.
- 3) Zald, D.H., Hinton, K.E., Vilalta-Gil, V., Burgess, L.L., Chodes, L.K., Perkins, S., Rathous, P.J., Landman, B. A., Lahey, B.B. (in preparation). Overall brain volume, and network volumetrics correlate with broad dimensions of psychopathology.
- 4) Van Hulle, C., Rathouz, P., Waldman, I., Zald, D.H., Lahey, B.B. (in preparation). Prognostic value of the general and specific factors of psychopathology: Homotypic and heterotypic continuity from adolescence to adulthood.
- 5) Lahey, B.B., Hinton, K.E., Meyer, F.C., Landman, B.A., Villalta-Gil, V., Yang, X., Applegate, B., Zald, D.H., (in review). Dispositional negative emotionality in childhood and adolescence predicts structural variation in the amygdala and caudal anterior cingulate during early adulthood: Theoretically and empirically based tests.
- 6) Smith, Z.R, Zald, D.H., Lahey, B.B. (in review). Sluggish cognitive tempo and depressive symptoms in children and adolescents predict adulthood psychopathology.
- 7) Zald, D.H. (in preparation). The influence of dopamine autoreceptors on personality and addiction.
- 8) Latzman, R.D., DeYoung, C.G., Kotov, R., Keyser-Marcus, L., Krueger, R.F., Zald, D.H., Moeler, F.G., Kwako, L.E., Ramey, T. (in preparation). New approaches to deep phenotyping in addiction.
- 9) Piech, R., Crump, M., & Zald, D.H. (in review). The negative contingency illusion: A cognitive bias leading to misjudgment of protection.
- 10) Hansen, C., Yang, Q., Lyu, I., Rheault, F., Kerley, C., Qamar, B., Fadnavis, S., Williams, O., Shafer, A.T., Resnick, S.M., Zald, D.H., Morgan, V., Cutting, L., Taylor, W., Boyd, B. Garyfallidis, E., Anderson, A.W, Descoteaux, M., Landman, B.A., Schilling K.C. (in review). Pandora: 4-D white matter bundle population-based atlases derived from state-of-the-art diffusion MRI fiber tractography.

- 11) Hinton, K. E., Meyer, F.C. , Lahey, B. B., Villalta-Gil V. , Burgess, L. L., Ganesh, S. , Bell, N. , Rubinov, M., Zald, D. H. Relations between latent factors of psychopathology and structural network topology in adulthood vary based on childhood poverty status.
- 12) Trujillo, P., Song, A., Hay, K., Aumann, M., Lin, Y-C, Kang, H, Deutch, A., Zald, D.H., Donajue, M.J., Claassen, D.O. (in preparation). Dopamine pathways and thalamic GABA concentration in Parkinsons disease,

## F. Grants

- 7/96-10/99      National Research Service Award - National Institute of Mental Health  
Neural Correlates of Emotion  
Role: Principal Investigator (PI)  
Cumulative Total \$59,600
- 9/00-8/02      National Science Foundation  
fMRI Institutional development grant (PI: Randolph Blake)  
Role: co-investigator  
Cumulative Total \$234,772
- 6/01- 5/03      Vanderbilt Intramural Discovery Grant  
Development of fMRI techniques for ventral brain regions  
Role PI  
Cumulative Total \$50,000
- 6/01- 12/01      Unilever Research  
Dopamine Modulation during Reward Processing: Analysis phase (Total \$8,200)  
Role: PI
- 3/03-12/04      Unilever Research  
Thermosensation: Step Change in Sensory Processing –Chemical Senses subgrant  
Combined grants  
Role: PI  
Cumulative Direct \$55,486; No indirect
- 3/03-12/04      Unilever Research  
Neural correlates of Flavour Judgment and Preference: Step Change in Sensory  
Processing –Implicit Measures subgrant  
Role: PI  
Cumulative Direct \$153,710; No Indirect
- 7/03-6/06      National Science Foundation  
Neuroimaging of neurotransmitter release in humans during cognitive and behavioral  
tasks  
Role: PI  
Cumulative Direct \$419,819; Cumulative Indirect \$115;519  
(No-cost extension to 5/07)
- 4/06- 12/09      National Institute of Drug Abuse

- R01: Individual Differences in Extrastriatal DA Release  
Role: PI  
Cumulative Direct \$871,687; Cumulative Indirect \$464,393  
(No-cost extension to 12/10)
- 7/07- 6/12 National Institute of Mental Health  
R01: Role of the Amygdala in the Emotional Modulation of Attention  
Role: PI  
Cumulative Direct \$900,000; Cumulative Indirect \$448,962
- 9/09-9/11 ARRA Administrative Supplement to the above grant  
Cumulative Direct \$111,948; Cumulative Indirect \$62,123
- 7/08-6/10 National Institute of Mental Health  
R03: Emotion Induced Attentional Blink in OCD (PI: Olatunji)  
Role: Co-investigator  
Cumulative Direct \$100,000; Cumulative Indirect \$50,825
- 7/09-6/11 Shire Pharmaceuticals  
Psychostimulant Treatment of TBI-Related Attention Deficits:  
fMRI Analysis of Neural Mechanisms of Response (PI: Tramontana)  
Role: Co-investigator  
Direct costs \$254,000
- 6/10-12/13 Novo-Nordisk  
Investigator Initiated Weight Loss Study (PI Niswender)  
Role: Co-investigator  
Cumulative Direct if paid in full \$10,077,519; Cumulative Indirect if paid in full \$2,922,481. Note this grant was paid out in portions, based on benchmarks. The final total may have been less than this total, but I do not have access to that information.
- 1/11-12/12 National Institute of Mental Health  
R21: Anhedonia and the neural basis of effort-based decision-making in depression  
Role: PI  
Cumulative Direct \$250,000; Indirect \$136,108
- 9/11-9/13 National Institute of Drug Abuse  
R21: Dopamine Influences on Self-Regulation and Impulsivity  
Role: PI  
Cumulative proposed direct \$248,187; Indirect \$118,701
- 6/12-5/14 National Institute of Drug Abuse  
R21/R34: [18F]FPEB Studies of the mGluR5 Receptor and Methamphetamine Abuse (PI Kessler)  
Role: Co-investigator  
Cumulative direct \$336,000; Indirect \$153,650
- 9/12-5/16 National Institute of Mental Health  
R01: RDoC Constructs: Neural Substrates, Heritability and Relation to Psychopathology  
Role: Contact PI  
Cumulative direct \$ 3,355,651; Indirect \$1,076,553.78 (costs include subcontracts)

Administrative Supplement issued 8/2014. Cumulative Direct \$21,817; Indirect \$12,458

- 9/12-8/15 National Institute of Aging  
R01: Dopaminergic Modulation of Subjective Valuation across Adulthood  
Role: PI  
Cumulative Direct \$ 1,123,366; Indirect \$590,612
- 1/13-12/14 National Institute of Drug Abuse  
R21: Neural mechanisms of increased cortical excitability in human MDMA/Ecstasy Users (PI Cowan)  
Role: Co-investigator  
Cumulative direct \$275,000; Indirect \$154,000
- 2/14-1/19 National Institute of Aging  
RO1: Dopaminergic Neuromodulation of Decision Making in Young and Middle-Aged Adults  
Role: PI  
Cumulative Direct \$1,621,617; Indirect \$733,416
- 8/14- 5/19 National Institute of Mental Health  
R01: Neural Networks for Attention to Internal and External Sensory Cues in ASD (PI Cascio)  
Role: Co-investigator  
Cumulative Direct \$1,250, 000; Indirect \$538, 678
- 8/16-5/21 National Institute of Neurological Disorders and Stroke  
Biological Determinants of Impulsivity in Parkinson's Disease  
Role: Co-investigator  
Cumulative Direct \$1,719,088 Indirect \$947,788
- 4/17-1/19 National Institute of Mental Health  
Disgust Learning as a Distinct OCD Endophenotype (PI Olatunji)  
Role: Co-investigator  
Cumulative Direct \$225,000 Indirect \$85,500
- 7/18-6/20 National Institute of Neurological Disorders and Stroke  
Investigating Long-Term Clinical Outcomes and Metabolic Network Activity Following Subthalamic Nucleus Deep Brain Stimulation in Early Stage Parkinson's Disease (PI Hacker)  
Role: Co-investigator  
Cumulative Direct \$225,000 Indirect \$173,680
- 7/19-6/24 National Institute of Mental Health -RO1  
The General Factor of Psychopathology in Psychosis and Severe Mental Illness  
Role: PI  
Cumulative Direct Costs \$3,191,805 Indirect \$ 749,990

## Training Grants

- 7/10-6/15 National Institute of Mental Health  
T32: Development of Psychopathology: From Biopsychosocial Processes to Intervention  
Role: Co-PI (Contact PI: Garber)  
Cumulative Direct \$1,883,438; Cumulative Indirect \$80,695
- 7/15-6/20 National Institute of Mental Health  
T32: Development of Psychopathology: From Biopsychosocial Processes to Intervention  
Role: Co-PI (Contact PI: Garber)  
Cumulative Direct \$1,404,880; Cumulative Indirect \$86,780
- 4/15-3/20 National Institute of Neurological Disorders and Stroke  
R25: Enhancing Neuroscience Diversity with the Tennessee State Education and Research  
Vanderbilt Experience: TSU-NERVE  
Role: Vanderbilt Subaward PI  
Cumulative Direct \$650,000 (approx.); Cumulative Indirect \$52,000 (approx.)
- Pending National Institute of General Medical Sciences  
MARC at Vanderbilt  
Role: Organizing Faculty Member  
Cumulative Direct \$7,465,400; Cumulative Indirect \$7,656,212

## G. Invited Presentations and Published Abstracts

### Invited Presentations & Conference Symposia

Functional neuroimaging of the human amygdala. The Killam Lecture Series in Cognitive Neuroscience. Montreal Neurological Institute, Montreal Canada (1998).

Functional neuroimaging of the amygdala and orbitofrontal cortex. Grand Rounds, Department of Psychiatry, University of Minnesota, Minneapolis, MN (1998).

Positron emission studies of olfaction and olfactory hedonics. Advances in brain imaging and electrophysiological measurement of olfactory function in health and disease: symposium. Achems, Sarasota, FL. (1998).

Functional neuroimaging of the amygdala and orbitofrontal cortex. Grand Rounds, Department of Psychiatry, VA Medical Center, Minneapolis, MN (1999).

The amygdala, smell, taste and emotion. International Neuropsychological Symposium, Arcachon, France (1999).

Neuroimaging of the orbitofrontal cortex and amygdala. Cognitive Sciences Institut Lyon, France (2001).

Neuroimaging the dynamic interplay of olfaction and emotion. The dynamic interplay of olfaction and emotion: symposium. Achems, Sarasota FL. (2003).

Beyond Taste: The neural correlates of oral texture and temperature hedonics. The need to feed is food for thought: symposium. Organization for Human Brain Mapping, Budapest Hungary (2004).

Emotion, Attention and the Amygdala-Orbitofrontal Axis in Humans. Rotman Institute, Toronto, Canada (2005).

The Orbitofrontal Cortex. J.B. Pierce Institute, Yale University, New Haven, CT (2007).

Session Chair, New York Academy of Sciences. Linking Affect to Action: Critical Contributions of the Orbitofrontal Cortex (2007).

Dynamic Coding of Reward Value. NIH Conference – Decision Making in Eating Behavior: Integrating Perspectives from the Individual, Family, and Environment, Bethesda, MD (April 2008).

Novelty, Dopamine, Personality & Psychopathology. McGovern Institute Symposium, MIT, Boston (April 2008).

The Orbitofrontal Cortex. Grand Rounds, Dept. of Psychiatry, Vanderbilt University (2007).

Emotion and Attention: Neural Substrates and Relevance for Psychopathology, McLean Hospital, Boston (September 2008).

Dopamine and Novelty, Understanding the neural substrates of Personality & Psychopathology, Psychology Department, University of Alabama Birmingham (March 2009).

Dopamine and Novelty, Understanding the neural substrates of Personality & Psychopathology, Center on Drug and Alcohol Research, University of Kentucky (March 2009).

Multimodal Imaging of Dopamine and Reward. American College of Neuropsychopharmacology, Hollywood, FL (December 2009).

Personality and Behavioral Correlates of Dopamine Midbrain Functioning. Organization for Human Brain Mapping, Barcelona, Spain (June 2010).

Dopaminergic Substrates of Personality, University of Minnesota, Minneapolis, MN (March 2011)

The Frontal Lobes- Continuing Medical Education Workshops, presented by the Institute for Brain Potential (Nashville, Little Rock, Memphis -May 2011; Chattanooga, Cookeville, Knoxville – May 2012).

Dopamine, Impulsivity and the Neural Substrates of Drug Abuse Risk. Grand Rounds, Dept. of Psychiatry, Vanderbilt University (September 2011).

Dopamine and Externalizing Personality Traits. Dept. of Psychology, University of Chicago (May 2012).

Dopaminergic Substrates of Personality. European Conference on Personality. Trieste, Italy (July 2012).

Dopamine, Motivation, and Decision to Expend Effort. Workshop on Positive Psychobiology sponsored by the Princeton University Center for Research on Experience and Well Being. Miami, FL (March, 2013).

Neuroeconomics of Addiction and Conservation. BlueMind 3, Block Island, RIs (May, 2013).

Races, Rewards and Behavioral Change. Science of Behavioral Change Workshop, Sponsored by NIH. Bethesda, MD, (September, 2013).

This is Your Brain on Dopamine, Dept. of Psychology, University of Maryland College Park (October, 2013).

The Power of Music as a Therapeutic Tool, HealthSouth Directors Meeting, Nashville, TN (November, 2013).

Translating Effort into Clinical Assessment, ABCT Association for Behavioral and Cognitive Therapies Annual Meeting, Nashville, TN (November, 2013)

The Emotional Attentional Blink: Neurobiology and Relevance to Psychopathology. Departmental Colloquium, Department of Psychology, University of Arizona, Tucson, AZ (March 2014)

Music and Mind: A discussion with Daniel Levitan and Ben Folds. Vanderbilt University (June 2014).

The Role of Dopamine in Externalizing Disorders (January, 2015). Dept. of Psychology, University of North Carolina, Chapel Hill.

Dopamine and Salience, Killam lecture, Montreal Neurological Institute, Montreal, QC, Canada (March 2015)

Dopamine, Externalizing and the Structure of Psychopathology, Yale University, New Haven, CT (September 2015)

Discussant. Consensus Workshop in fMRI and Reward Processing Tasks Standardization, Bethesda, MD (February, 2016)

Reward Abnormalities and Psychopathology. NIDA, Baltimore, MD (February, 2016)

The Meta-Structure of Psychopathology and RDoC. NIMH RDoC Workshop. Bethesda, MD (October 2016)

The Neurobiology of Addiction: A Primer. United South and Eastern Tribes - Opiate Addiction Summit. Nashville, TN (November, 2016)

Multimodal Imaging of Effort-Based Decision Making, ACNP, Ft. Lauderdale, FL (December, 2016)

How Confident Are We That Dopamine D2 Receptors Are Related To Weight And Obesity, Society for the Study of Ingestive Behavior (SSIB). Montreal, CA (July 2017)

The General Factor of Psychopathology. Psychiatry Grand Rounds, Vanderbilt University (January 2018)

Motivation and Effort Discounting in the Context of Aging and Dopamine. Workshop on Neural Processes of Affective Change in Aging, Bethesda, MD. (August, 2018).

Implications of the Structure of Psychopathology for Neuroimaging Research, Robert Wood Johnson Medical School, Piscataway, NJ (February, 2019)

Implications of the Structure of Psychopathology for Neuroimaging Research, Psychiatry Grand Rounds, University of Michigan (February, 2019)



Affective Neuroscience, Temperament and Aging. Department of Human Development, Cornell University, Ithaca, New York (February, 2019)

A Lowered Dopamine Autoregulation Model of Externalizing Disorders. Emory University, Atlanta GA (April, 2019)

Broad features of brain structure and higher-order factors of psychopathology. Society for Research on Psychopathology (September, 2019)

### Published Abstracts

A list of published conference abstracts is available on request.

## **H. Teaching-related Activities**

### **1. Courses**

Department of Psychology/Interdisciplinary Neuroscience Program/Vanderbilt Brain Institute), Vanderbilt University (note all classes listed below were taught multiple times-specific dates available by request)

Graduate courses:

Clinical Neuropsychology (6 times)  
Psychological Assessment (3 times)

Undergraduate courses:

Personality (15 times)  
Honors Seminar - Interdisciplinary Neuroscience Program (10 times)  
Developmental Psychopathology Proseminar (twice)  
Psychopharmacology (co-organized due to instructor falling ill mid-semester)

Guest lecturer (Asterisks marks courses in which I provided at least one lecture for multiple years):

Fundamentals of Neuroscience (graduate level)\*  
Systems Neuroscience (graduate level)\*  
Biological Basis of Mental Disorders\*  
Introduction to Neuroscience  
Abnormal Psychology  
Neurology and Psychiatry Residents Lecture (VUMC)  
Neuroscience (VU-School of Medicine)

3/94-12/99      Instructor: Department of Psychology, University of Minnesota, Minneapolis, MN  
Undergraduate courses:  
Abnormal Psychology (3 times)  
Clinical Intervention Methods (once)

1/94- 12/94      Lab Instructor/ Research Assistant: Department of Psychology, University of Minnesota, Minneapolis, MN. Taught and supervised administration of intellectual personality, psychiatric and neuropsychological assessment.

## 2. Mentoring

Graduate students for whom I served as primary mentor (current faculty appointments in parentheses)

Neil Woodward (Masters 2003: Ph.D. 2006) (Vanderbilt University)

Kate Berlin (Masters 2004)

Joshua Buckholtz (Ph.D. 2011) (Harvard University)

Brian Essex (Ph.D. 2011)

Michael Treadway (Ph.D. 2012) (Emory University)

Mariam Coaster (co-advisor with John Gore/ Ph.D. 2012)

Maureen McHugo (Ph.D. 2015)(Vanderbilt University)

Joyce Zhu (Masters, 2015)

Joseph Kim (Ph.D. 2016)

Allen J. Heritage (co-mentor; Ph.D., 2017)

Kendra E. Hinton (Ph.D, 2019)

Francisco C Meyer (TBD)

Megan Aumann (co-mentor TBD)

Other graduate students supervised for specific projects, during rotations, or served as a primary adviser, but who completed their Ph.D. in a different lab.

Brad Folley, Ph.D.

Maria Couppis, Ph.D.

Tricia Thornton-Wells, Ph.D.

Charissa Anderotti, Ph.D.

Kale Edminston, Ph.D.

Ph.D. Committees – for students whom I was not a primary or secondary advisor

Kushal Patel (2003)

Christopher Simien (2004)

Gabriel Dichter (2004)

Daniel Long (2005)

Richard Gustin (2010)

Erik Emeric (2010)

David Godlove (2013)

Suzanne Avery (2015)

Douglas Franklin (2016)

Emily Mason (2016)

Gwynne Davis (2017)

Katherine (Swett) Aboud (2019)

Asante Kamkwala (2019)

Mason Garrison (2020)

External Ph.D. Committees, McGill University (3), University of Sydney (1), Monash University (Melbourne, Australia)(1), Trevecca Nazarine University (1)

Post-doctoral Fellows (current faculty appointments in parentheses for past post-docs)

David Lischner, Ph.D. (University of Wisconsin Osh-Kosh)

Stephen D. Smith, Ph.D. (University of Winnipeg)

Steven Most, Ph.D. (co-sponsor, University of New South Wales)

Rebecca D. Ray, Ph.D. (Genetech)

Richard M. Piech, Ph.D. (Anglia Ruskin University, U.K.)

Greg Samanez-Larkin, Ph.D. (K99 sponsor, Duke University)

Lihn Dang, Ph.D. (Google)

David H. Zald, Ph.D.

Victoria Villalta, Ph.D. (Tennessee State University)

Christopher, T. Smith, Ph.D. (NC State)

Junior faculty who I mentored or mentored and sponsored for K-awards

Jennifer Blackford, Ph.D., Dept. of Psychiatry (K-awarded)

Margaret Benningfield, M.D., Dept. of Psychiatry (K-Awarded)

Daniel Claassen, M.D. (Department of Neurology) –(K-Awarded)

Katherine Gotham, Ph.D. (Department of Psychiatry) –(K-Awarded)

Richard, Darby M.D. (Department of Neurology)-Internal Edge Scholar (K in review)

External mentor (consultant) for K-awards

Barbara Welland, Ph.D. (University of Michigan)(K-Awarded)

Margaret Wardle (University of Texas Health Sciences-Houston/University of Illinois Chicago)(K-awarded)

Psychology and Neuroscience Honors Students (nonhonors available on request)

Emily Drabant (2004) (winner Nunnally award for best Honors project)

Suzanna Manrique (2005) (winner Nunnally award for best Honors project)

Steve Rich (2007)

Katherine Patterson (2007)

Stephanie Douglas (2008)

Liana Larceda (2009)

Nicole Krellerstein (2009)

Elaina Ziehm (2011)

Tawney Spinelli (2011)

Haijing Wu (2012)

Olivia Roman (2012)

Lydia Qualls (2013)

Meghan Anderson (2014)

Sarah Helton (2014)

Lauren Blair (2015)

Emily Long (2016)

Jayden Curry (2017)

Paul Kundzics (2019)

Swathi Ganesh (2019)

Anirudha Shekar (2019)

## **I. Service**

1. To departments (Vanderbilt)

Psychology Research Subject Pool Director (2002-2007)

Colloquium Committee (2001-2007, 2010-2011)

Faculty Search Committees (4 Psychology, 2 Psychiatry)(chair of committee, once)

Faculty Staff Campaign (faculty coordinator for psychology - 2004)

Director of Undergraduate Studies (2007-2009)

Undergraduate Studies Committee (2007-2010)

Multiple Junior Faculty Review, Tenure Promotion, and Mentorship Committees (Psychology and Psychiatry) (2007-present)(chair of committee, three times)

Psychology Student Awards Committee (2016)

2. To college (Vanderbilt)

Phi Beta Kappa Selection Committee (2010 - present)

Committee on Educational Programs (2010 – 2012: Chair 2010-2011)

Senior Advisory Review Committee (Promotion and Tenure) (2013-2014)  
Committee on Interdisciplinary Programs (2015-present)  
Director, Interdisciplinary Neuroscience Program for Undergraduates (which is the third or fourth largest major in the College of Arts and Sciences) (2015-present).  
Director of Honors and Directed Study for the Neuroscience Major (2015-present).  
TSU-Nerve Steering Committee (2015-present)

3. To university (Vanderbilt)

Kennedy Center Membership Committee (2004- 2008)  
Kennedy Center Speakers Committee (2005- 2008)  
Kennedy Center Science Day Committee (2009-2010)  
Kennedy Center Colloquium Committee (2016)  
Institute for Imaging Science- 3T Steering Committee (2004- 2010)  
Institute for Imaging Science- PET Radiochemistry Committee (2013-present)  
Summer Conferences - genetics of addiction committee (2004)  
Community Giving Campaign (faculty coordinator for psychology-2003)  
Neuromodulation Group – Steering committee (2006)  
Mock Study Section Panel (2011)  
Discovery Grant Committee (2012-2013)  
Vanderbilt Brain Institute Steering Committee (2012-present)  
Vanderbilt Brain Institute Research Committee (2012-present)  
Vanderbilt Brain Institute Student Recruitment Committee (2015-present)  
Vanderbilt Brain Institute Director Search Committee (2016)  
Vanderbilt University Psychological Counseling Center Director Search Committee (2017)  
Vanderbilt Institute for Clinical and Translational Research Studio - Expert Reviewer for Junior Faculty Internal Grants Reviewer (x2)  
Calendar Committee (2016-2018)  
Grievance Committee (2018)  
Faculty Advisor-Vanderbilt Undergraduate Research Journal (2018)

4. To profession

Section Editor: Emotion and Social Neuroscience section, *Neuropsychologia* (2011- 2014),  
Editorial Advisory Board (2014-present)  
External Action Editor: *Journal of Experimental Psychology: General* (2011)  
Editorial Board: *Biology of Mood and Anxiety Disorders* (2011-2014)  
Editorial Board: *Journal of Neuroimaging in Psychiatry and Neurology* (2016-2018)  
Editor Selection Committee: *Perspectives in Psychological Science* (2018)  
Faculty of 1000  
Mentor: Organization for Human Brain Mapping Mentoring Program.

Ad-hoc journal peer reviewer (average 2+ a month over the last 2 decades, \* >10 reviews)

Journals: *Addiction Biology*, *Alzheimer's Disease and Associated Disorders*, *American Journal of Physiology: GI and Liver*, \**American Journal of Psychiatry*, *American Journal of Clinical Nutrition*, *Annals of Neurology*, *Annals of the New York Academy of Sciences*, \**Archives of General Psychiatry/JAMA Psychiatry*, *Behavioral Neuroscience*, \**Biological Psychiatry*, *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, *Biological Psychology*, *BMC Psychiatry*, *Brain*, *Brain Behavior and Immunity*, *Brain Structure and Function*, *Cell Metabolism*, *Cerebral Cortex*, *Chemical Senses*, *Chemosensory Perception*, *The Clinical Neuropsychologist*, *Cognition and Emotion*, *Cognitive, Affective, & Behavioral Neuroscience*, *Cortex*, \**Emotion*, *European Journal of Neuroscience*, *Experimental Brain Research*, *Frontiers in Neuroscience*, *Human Brain Mapping*, *International Journal of Psychophysiology*, *Journal of Abnormal Psychology*, *Journal of*

David H. Zald, Ph.D.

*Clinical Investigations, Journal of Clinical Psychiatry, Journal of Cognitive Neuroscience, Journal of Experimental Psychology, Journal of Neurology, Journal of Neurophysiology, \*Journal of Neuroscience, Journal of Neuroscience Methods, Journal of Neuropsychiatry and Clinical Neurosciences, Journal of Psychiatric Research, Learning & Memory, Magnetic Resonance Imaging, Molecular Psychiatry, Nature Neuroscience, \*NeuroImage, Neurology, Neuron, \*Neuropsychologia, Neuropsychology, Neuropsychopharmacology, Neuroscience, Pain, Perception, Personality and Mental Health, PLOS-ONE, Proceedings of the National Academy of Sciences, Psychiatry Research- Neuroimaging, Psychological Review, Psychological Science, Scandinavian Journal of Psychology, Science, Social Cognitive and Affective Neuroscience, Synapse, Translational Psychiatry*

Science Agencies and Foundations:

Austrian Science Foundation

Center for Rehabilitation Research at the University of Texas Medical Branch.

Centre Nationale Recherche Scientifique - Unité Support Agence Nationale de la Recherche (France)

John D. and Katherine T. McArthur Foundation

Minnesota Medical Research Foundation

National Center for Responsible Gambling

National Institute of Health (Center for Scientific Review)- Approximately 10 prior to 2014 including grants for NIMH, NIDA, and NIA). Since 2014 Ad hoc Cognition and Perception section, NIH Director's Early Independence Awards (2014), Interventions for Adult Disorders (NIMH-2014), P01/U01-Drug Addiction (NIDA-2014/2015), National Cancer Center Omnibus Review (2016), Mechanisms of Sensory, Perceptual, and Cognitive Processes (2017), Conflict Panel (Chair)(2017), Special Emphasis Panel (2019), Conflict Panel (2020).

National Science Foundation (multiple reviews)

New York Academy of Sciences

University of Minnesota Addiction Research Pilot Grant Program

Tenure and Promotion reviews for external institutions:

Auburn University, NIMH, Montreal Neurological Institute, J.B. Pierce Laboratory, KAIST (formerly the Korea Advanced Institute of Science and Technology), Johns Hopkins Medical School, Northwestern University, Stony Brook University, University of Buffalo, University of Minnesota, University of Wisconsin, University of California Los Angeles.

External Dissertation Reviewer:

McGill University x 4, University of Sydney, Monash University.

Book Publishers:

Lawrence Erlbaum Associates, McGraw-Hill, W.W. Norton, Prentice Hall, Oxford University Press, Sinauer Associates, Elsevier

Scientific Societies:

Symposia and Session Chair, Organization for Human Brain Mapping, Society for Neuroscience, New York Academy of Sciences

Conference abstract reviewer- Organization for Human Brain Mapping

To Community:

David H. Zald, Ph.D.

University Affairs Chair- Milaana. Milaana is a registered nonprofit organization that matches donors with students who have financial needs that extend beyond those covers by standard financial aid and scholarships.

Ad-hoc consultant or interviewee for science related stories:

ABC World News, Australian Broadcasting Company, BBC News Service, CBC News/CBC Radio); CBS Radio, CNN, Science News, Discover Magazine, Discovery News, Aromochology Review, Ladies Home Journal, LA Times, Nashville City Paper, Marketplace, Minnesota Public Radio, National Public Radio, National Geographic, Nature News, New York Times, Nightline, Philadelphia Enquirer, Sciencentral, Self Magazine, The Tennessean, The Wall Street Journal. WPLN.

Community Talks Provided:

Nashville Epilepsy Support Groups (Nashville and Hendersonville chapters)  
University School of Nashville  
Internet classroom presentations supported by the VU Medical Center  
Nashville Adventure Science Center  
Belcourt Theater –The Science of Horror (x2)  
National Student Leadership Conference  
Station Camp Middle School (Sumner County, TN)