

Jordan T. Yorgason, PhD
Curriculum Vitae

Dept. of Physiology and Developmental Biology
Brigham Young University
Provo, UT 84602

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E-mail: jordanyorg@byu.edu

EDUCATION

Wake Forest School of Medicine	2013	PhD	Neuropharmacology
Brigham Young University	2008	BS	Neuroscience
Utah Valley University	2004	AS	General

RESEARCH EXPERIENCE

Faculty Appointment

2018-Present **Assistant Professor**
Department of Physiology and Developmental Biology
Brigham Young University

Postdoctoral

2016-2018 **Postdoctoral Fellow** with Scott C. Steffensen, PhD
Department of Psychology
Brigham Young University

2013-2016 **Postdoctoral Fellow** with John T. Williams, PhD
Vollum Institute
Oregon Health and Science University

Graduate

2009-2013 **Graduate Student Trainee** with Sara R. Jones, PhD
Department of Physiology and Pharmacology / Neuroscience Program
Wake Forest School of Medicine

2008 **Graduate Student Rotation** with Jeffrey L. Weiner, PhD
Department of Physiology and Pharmacology / Neuroscience Program
Wake Forest School of Medicine

Post-Baccalaureate

2007-2008 **Research Assistant / Technician** with Scott C. Steffensen, PhD
Department of Psychology
Brigham Young University

Undergraduate

2004-2007 **Research Assistant** with Scott C. Steffensen, PhD
Department of Psychology
Brigham Young University

HONORS AND AWARDS

2015-2016 NIDA F32DA040409 individual training grant: Oregon Health and Science University; Trainee
2013-2015 NIDA T32DA007262 training grant: Oregon Health and Science University, Kim Neve; Trainee
2013 Predoctoral Enoch Gordis Award Recipient, Research Society on Alcoholism
2011-2013 NIAAA F31AA020439 individual training grant: Wake Forest School of Medicine; Trainee
2012 Tenth International Catecholamine Symposium Travel Award recipient
2012 Western North Carolina Society for Neuroscience, Mary A. Bell Award recipient
2009-11 NIAAA T32AA007565 training grant: Wake Forest School of Medicine, Brian A. McCool; Trainee
2006 Office of Research and Creative Activities mentored training grant, Brigham Young University, Scott C. Steffensen; Trainee

PUBLICATIONS

Research Papers

Yorgason JT, Hedges DM, Obray JD, Jang EY, Bills KB, Woodbury W, Williams B, Parsons MJ, Andres MA, Steffensen SC (Accepted, 2020). Methamphetamine increases dopamine release in the nucleus accumbens through calcium-dependent processes. *Psychopharmacology*.

Bills KB, Obray JD, Clarke T, Parsons M, Brundage J, Yang CH, Kim HY, **Yorgason JT**, Blotter JD, Steffensen SC (2019). Mechanical stimulation of cervical vertebrae modulates the discharge activity of ventral tegmental area neurons and dopamine release in the nucleus Accumbens. *Brain Stimulation*.

Gao F, Chen D, Ma X, Sudweeks S, **Yorgason JT**, Gao M, Turner D, Eaton JB, McIntosh JM, Lukas RJ, Whiteaker P, Chang Y, Steffensen SC, Wu J (2019). Alpha6-containing nicotinic acetylcholine receptor is a highly sensitive target of alcohol. *Neuropharmacology*.

Williams SB, **Yorgason JT**, Nelson AC, Lewis N, Nufer TM, Edwards JG, Steffensen SC (2018). Glutamate Transmission to Ventral Tegmental Area GABA Neurons Is Altered by Acute and Chronic Ethanol. *ACER*.

Karkhanis A, Leach A, **Yorgason J**, Uneri A, Barth S, Niere F, Alexander N, Weiner JL, McCool B, Raab-Graham K, Ferris M, Jones S (2018). Chronic social isolation stress during adolescence alters presynaptic dopamine terminal dynamics via changes in dopamine availability. *ACS Chemical Neuroscience*.

Kutlu GM, Brady LJ, Peck EG, Hofford RS, **Yorgason JT**, Siciliano CA, Kiraly DD, Calipari ES (2018; Under Review). Granulocyte colony stimulating factor enhances reward learning through potentiation of mesolimbic dopamine system function. *J Neurosci*.

Hedges DM, Obray JD, **Yorgason JT**, Jang EY, Bellinger FP, de Klerk Uys J, Steffensen SC (2018). Methamphetamine induces striatal dopamine efflux through interactions between VMAT2 and sigma receptors. *Neuropsychopharm*.

Yorgason JT, Zeppenfeld DM, Williams JT (2017). Cholinergic interneurons underlie spontaneous dopamine release in nucleus accumbens. *J Neurosci* 37:2086-2096.

Vaaga CE, **Yorgason JT**, Williams JT, Westbrook GL (2017). Presynaptic gain control by endogenous cotransmission of dopamine and GABA in the olfactory bulb. *J Neurophysiol* 117:1163-1170.

Siciliano CA, Calipari ES, **Yorgason JT**, Lovinger DM, Mateo Y, Jimenez VA, Helms CM, Grant KA, Jones SR (2016). Increased presynaptic regulation of dopamine neurotransmission in the nucleus accumbens core following chronic ethanol self-administration in female macaques. *Psychopharmacology (Berl)*.

Wook Koo J, Labonté B, Engmann O, Calipari ES, Juarez B, Lorsch Z, Walsh JJ, Friedman AK, **Yorgason JT**, Han MH, Nestler EJ (2016). Essential role of mesolimbic brain-derived neurotrophic factor in chronic social stress-induced depressive behaviors. *Biol Psychiatry* 80:469-78.

Calipari ES, Bagot RC, Purushothaman I, Davidson TJ, **Yorgason JT**, Peña CJ, Walker DM, Pirpinias ST, Guise KG, Ramakrishnan C, Deisseroth K, Nestler EJ (2016). In vivo imaging identifies temporal signature of D1 and D2 medium spiny neurons in cocaine reward. *Proc Natl Acad Sci U S A*, pii: 201521238.

Siciliano CA, Calipari ES, **Yorgason JT**, Mateo Y, Helms CM, Lovinger DM, Grant KA, Jones SR (2016). Chronic ethanol self-administration in macaques shifts dopamine feedback inhibition to predominantly D2 receptors in nucleus accumbens core. *Drug Alcohol Depend*, 158: 159-163.

Yorgason JT, Calipari ES, Ferris MJ, Karkhanis AN, Fordahl SC, Weiner JL, Jones SR (2016). Social isolation rearing increases dopamine uptake and psychostimulant potency in the striatum. *Neuropharmacology*, 101: 471-479.

Prince CD, Rau AR, **Yorgason JT**, España RA (2015). Hypocretin/Orexin regulation of dopamine signaling and cocaine self-administration is mediated predominantly by hypocretin receptor 1. *ACS Chem Neurosci*, 6(1): 138-146.

Yorgason JT, Rose JH, McIntosh JM, Ferris MJ, Jones SR (2015). Greater ethanol inhibition of presynaptic dopamine release in C57BL/6J than DBA/2J mice: Role of nicotinic acetylcholine receptors. *Neuroscience*, 284: 854-864.

Schilaty ND, Hedges DM, Jang EY, Folsom RJ, **Yorgason JT**, McIntosh JM, Steffensen SC (2014). Acute ethanol inhibits dopamine release in the nucleus accumbens via $\alpha 6$ nicotinic acetylcholine receptors. *Journal of Pharmacology and Experimental Therapeutics*, 349(3): 559-567.

Yorgason JT, Ferris MJ, Steffensen SC, Jones SR (2014). Frequency-dependent effects of ethanol on dopamine release in the nucleus accumbens. *Alcoholism: Clinical and Experimental Research*, 38(2):438-447.

Shin SI, Andersen DJ, Hansen DM, **Yorgason JT**, Schilaty ND, Busath DD, Steffensen SC (2013). Connexin-36 Knock-Out Mice have Increased Threshold for Kindled Seizures: Role of GABA Inhibition. *Biochemistry & Pharmacology (Los Angel)*, S1:006.

Yorgason JT, España RA, Konstantopoulos JK, Weiner JL, Jones SR (2013). Enduring increases in anxiety-like behavior and rapid nucleus accumbens dopamine signaling in socially isolated rats. *European Journal of Neuroscience*, doi:10.1111/ejn.12113.

Yorgason JT, España RA, Jones SR (2011). Demon Voltammetry and Analysis Software: Analysis of Cocaine-Dopamine Transporter Interactions Using Several Kinetic Measurements. *Journal of Neuroscience Methods: In Vivo Methods Conference special edition*, 202(2): 158-164.

Yorgason JT, España RA, Jones SR (2011). Low and high affinity dopamine transporter inhibitors block dopamine uptake within 5 sec of intravenous injection. *Neuroscience*, 182: 125-132.

Silberman Y, Ariwodola OJ, Chappell AM, **Yorgason JT**, Weiner JL (2010). Lateral Paracapsular GABAergic Synapses in the Basolateral Amygdala Contribute to the Anxiolytic Effects of $\beta 3$ Adrenoceptor Activation. *Neuropsychopharmacology*, 35(9): 1886-1896

Ludlow K, Bradley K, Taylor SR, **Yorgason JT**, Hansen DM, Walton C, Allison DW, Sudweeks SN, and Steffensen SC (2009). Acute and chronic ethanol modulate dopamine D2-subtype receptor responses in ventral tegmental area GABA neurons. *Alcoholism: Clinical and Experimental Research*, 33(5): 804-811.

Steffensen SC, Walton CH, Hansen DM, **Yorgason JT**, Gallegos RA, Criado JR (2009). Contingent and non-contingent effects of low-dose ethanol on GABA neuron activity in the ventral tegmental area. *Pharmacology Biochemistry and Behavior*, 92(1): 68-75.

Reviews

Ferris MJ, Calipari EC, **Yorgason JT**, Jones SR (2013). Examining the complex regulation and drug-induced plasticity of dopamine release and uptake using voltammetry in brain slices. *ACS Chemical Neuroscience*, 4(5):693-703.

Books

Yorgason JT, (2013). Ethanol inhibition of dopamine transmission in animal models of alcohol abuse liability. Wake Forest University. Dissertation Committee: Jones SR, Pratt WE, Constantinidis C, McCool BA, Weiner JL.

Conference Proceedings

Yorgason JT, Weiner JL, Jones SR (2013). Early Life Stress Increases Nucleus Accumbens Dopamine Signaling. Proceedings of the Tenth International Catecholamine Symposium Asilomar Sept 9-13, 2012: A New Era of Catecholamines in the Laboratory and the Clinic (In Press).

Yorgason JT, España RA, Jones SR (2010). Demon Voltammetry and Analysis Software: Analysis of Cocaine-Dopamine Transporter Interactions Using Several Kinetic Measurements. *Monitoring Molecules in Neuroscience: Proceedings of the 13th international Conference on In Vivo Methods*, 325-327.

España RA, **Yorgason JT**, Jones SR (2010). Single and Repeated Intravenous Cocaine Injections Produce Only Modest Dopamine Uptake Inhibition When Measured in Real Time. *Monitoring Molecules in Neuroscience: Proceedings of the 13th international Conference on In Vivo Methods*, 424-426.

Abstracts/Poster Presentations (from 49 published abstracts)

Yorgason JT, Hedges D., Woodbury MC, Williams SB, Stapley S, Lewis N, Nelson JJ, Bellinger FP, Andres M, Steffensen, SC. (2018) Methamphetamine triggers dopamine release through calcium dependent processes. Soc. Neurosci. Absts 48. 632.02

Steffensen SC, Clarke TJ, Obray JD, Brundage J, Rutter D, Williams SB, **Yorgason JT**, Hope S. (2018) Acute ethanol increases monocyte infiltration of the CNS and influences microglia activation. Soc. Neurosci. Absts 48. 601.19

Obray JD, Jang EY, Clarke TJ, Klomp A, Richardson AP, Parsons M, Yang CH, **Yorgason JT**, Steffensen SC. (2018) Ethanol enhancement of dopamine release in the nucleus accumbens and ethanol reward are mediated by peripheral neuroimmune interactions. Soc. Neurosci. Absts 48. 601.02

Yorgason JT, Gao F, Ma X, Chen D, Gao M, Taylor D, Eaton B, Whiteaker P, Wu J, Steffensen SC (2018). Alpha 6-containing nicotinic acetylcholine receptor is a sensitive target for low dose alcohol. *Alcoholism: Clin. Exp. Res.* 42(S1) 294

Obray JD, Parsons M, Lattin J, Clarke T, Jang EY, Hope S, Yang CH, **Yorgason JT**, Steffensen SC. (2018) Ethanol enhancement of dopamine release in the nucleus accumbens and ethanol reward is mediated by peripheral neuroimmune interactions. *Alcoholism: Clin. Exp. Res.* 42(S1) 032

Clarke T, Obray JD, Brundage J, Lattin J, Williams S, **Yorgason JT**, Hope S, Steffensen SC. (2018) Acute ethanol increases monocyte infiltration of CNS and influences microglia phenotype. *Alcoholism: Clin. Exp. Res.* 42(S1) 021

Obray JD, Clarke T, Jang EY, Garcia B, Klomp A, Richardson A, Payne A, Hope S, Yang CH, **Yorgason JT**, Steffensen SC. (2017) Ethanol enhancement of dopamine release in the nucleus accumbens and ethanol reward are mediated by peripheral neuroimmune interactions. *Soc. Neurosci. Absts* 42. 77.24

Torres D, Chao C, **Yorgason JT**, Korukawa S, Andres M, Steffensen SC, Bellinger FP, Hagiwara A. (2017) Role of Selenoprotein P in dopaminergic transmission and modulation by methamphetamine. *Soc. Neurosci. Absts* 42. 286.14

Yorgason JT, Finuf C, Steffensen SC. (2017) Effects of cocaine on spontaneous dopamine release varies across striatal regions. *Soc. Neurosci. Absts* 42. 334.22

Bills K, **Yorgason JT**, McCarthy S, Woodbury M, Steffensen SC. (2017) Exercise-induced down-regulation of D2 autoreceptors in the nucleus accumbens. *Soc. Neurosci. Absts* 42. 515.06

Yorgason JT, Pistorius SS, Bills K, Steffensen SC. (2017) Ethanol-mediated inhibition of ventral tegmental area GABAergic neurons and involvement of connexin-36 mediated electrical coupling. *Alcoholism: Clin. Exp. Res.* 41(S1) 027(027)

Bair SD, Pistorius SS, Nelson AC, Matthews DM, Clark D, **Yorgason JT**, Steffensen SC (2017) Glutamate NMDA receptor-mediated plasticity in the ventral tegmental area by ethanol. *Alcoholism: Clin. Exp. Res.* 41(S1) 029(029)

Obray JD, Jang EY, Garcia B, Payne A, Hope S, Yang CH, **Yorgason JT**, Steffensen SC. (2017) Ethanol enhancement of dopamine release. *Alcoholism: Clin. Exp. Res.* 41(S1) 042(699)

Torres D, Barayuga S, Rueli R, **Yorgason JT**, Andres M, Steffensen SC, Bellinger F. (2016) Developmental methamphetamine exposure causes lasting changes to mesolimbic dopamine signaling. *Soc. Neurosci Absts* 41. 76.07

Hedges D, Jang EY, **Yorgason JT**, Carr C, Skidmore J, Weerasekara VK, Bellinger FP, Uys JD, Steffensen SC. (2016) Methamphetamine induces striatal dopamine efflux through interactions between VMAT2 and sigma receptors. Soc. Neurosci Absts 41. 348.12

Yorgason JT, Williams JT (2015). Striatal cholinergic interneuron activity underlies cocaine-induced spontaneous dopamine release. Gordon Research Conference on Catecholamines, Sunday River, ME.

Juarez B, Friedman AK, Calipari ES, **Yorgason JT**, Crumiller M, Ku SM, Zhang H, Morel C, Chaudhury D, Han MH (2015). Functional adaptations of mesolimbic dopamine neurons underlying individual alcohol drinking behaviors. Society for Neuroscience, Chicago, IL.

Hedges DM, Jang E, Perez AW, Schilaty ND, Schriever ES, Foley N, Blumell BR, **Yorgason JT**, Bellinger FP, Uys JD, Steffensen SC (2015). Acute methamphetamine induces hydrogen peroxide formation in dopamine terminals of the nucleus accumbens. Society for Neuroscience, Chicago, IL.

Torres DJ, Barayuga SN, Rueli RHLH, Hedges DM, Schilaty ND, **Yorgason JT**, Andres MA, Steffensen SC, Bellinger FP (2015). Selenium deficiency alters dopamine transmission and response to methamphetamine in the mouse nucleus accumbens. Society for Neuroscience, Chicago, IL.

Siciliano C, Calipari ES, **Yorgason JT**, Lovinger DM, Mateo Y, Jimenez VA, Helms CM, Grant KA, Jones SR (2015). Chronic ethanol self-administration in female macaques disrupts presynaptic dopamine neurotransmission. Society for Neuroscience, Chicago, IL.

Vaaga C, **Yorgason JT**, Williams JT, Westbrook GL (2014). A tale of two transmitters: Effects of dopamine and GABA on the olfactory bulb microcircuit. Society for Neuroscience, Washington, DC.

Steffensen SC, Hedges DM, Schilaty ND, Jang EY, **Yorgason JT**, Bellinger FP (2014). Acute methamphetamine induces reactive oxygen species in dopamine terminals of the nucleus accumbens. Society for Neuroscience, Washington, DC.

Schilaty N, Hedges D, Jang EY, Folsom J, **Yorgason JT**, McIntosh JM, Steffensen SC (2014). Ethanol inhibits dopamine release at GABA terminals in the nucleus accumbens via alpha-6 nicotinic acetylcholine receptors. Research Society on Alcoholism, Bellevue, WA.

Yorgason JT, Calipari ES, Ferris M, Alexander NJ, McCool BA, Weiner JL, Jones SR (2013). Increases in rapid nucleus accumbens dopamine signaling, and cocaine and methylphenidate potency in social isolation reared rats. Society for Neuroscience, San Diego, CA.

Schilaty N, **Yorgason JT**, Hedges DM, Jang EY, Folsom RJ, Nelson A, Vera A, Hanson S, Wallner M, Jones S, Steffensen SC (2013). Ethanol inhibits dopamine release at terminals in the nucleus accumbens via GABA receptors. Society for Neuroscience, San Diego, CA.

Yorgason JT, Steffensen SC, Jones SR (2013). Moderate ethanol concentrations attenuate phasic, but not tonic, dopamine release in nucleus accumbens of c57bl/6j mice. Research Society on Alcoholism, Orlando, FL.

Yorgason JT, Schilaty N, Hansen DM, Jones SR, Steffensen SC (2013). Ethanol inhibits dopamine release at terminals in the nucleus accumbens via GABA(B) receptors. Research Society on Alcoholism, Orlando, FL.

Calipari EC, **Yorgason JT**, McCool BA, Weiner JL, Jones SR (2013). Increases in rapid nucleus accumbens dopamine signaling and methylphenidate, but not cocaine, potency in socially isolated rats. Kappa Therapeutics, Boston, MA.

Yorgason JT, McCool BA, Weiner JL, Jones SR (2012). Early life stress increases nucleus accumbens dopamine signaling. Tenth International Catecholamine Symposium, Pacific Grove, CA.

Schilaty ND, Hansen DM, **Yorgason JT**, Hedges DM, Wallner M, Jones SR, Steffensen SC (2012). Pharmacology of ethanol-induced inhibition of dopamine release in the nucleus accumbens. Tenth International Catecholamine Symposium, Pacific Grove, CA.

Chappell AM, Carter E, **Yorgason JT**, Jones SR, McCool BA, Weiner JL (2012). Juvenile social isolation in rats increases behavioral and neurobiological risk factors of alcoholism. International Society for Biomedical Research on Alcoholism, Sapporo, Japan.

Yorgason JT, España RA, Jones SR (2011). Effects of social isolation rearing on nucleus accumbens dopamine dynamics and ethanol interactions. Society for Neuroscience, Washington, DC.

Hansen DM, **Yorgason JT**, Wilcox JD, Konstantopoulos JK, Jones SR, Steffensen SC (2011). Effects of d2 type autoreceptor antagonists on ethanol-induced inhibition of dopamine release in the nucleus accumbens. Society for Neuroscience, Washington, DC.

Yorgason JT, España RA, Jones SR (2011). Social isolation rearing changes dopamine kinetics. Research Society on Alcoholism, Atlanta, GA.

Yorgason JT, España RA, Jones SR (2010). Demon Voltammetry and Analysis Software: Analysis of Cocaine-Dopamine Transporter Interactions Using Several Kinetic Measurements. *Monitoring Molecules in Neuroscience: Proceedings of the 13th international Conference on In Vivo Methods*, Brussels, Belgium.

España RA, **Yorgason JT**, Jones SR (2010). Single and Repeated Intravenous Cocaine Injections Produce Only Modest Dopamine Uptake Inhibition When Measured in Real Time. *Monitoring Molecules in Neuroscience: Proceedings of the 13th international Conference on In Vivo Methods*, Brussels, Belgium.

Steffensen SC, Bradley KD, Hansen DM, Wilcox JD, **Yorgason JT**, Merrill CB, Edwards JG (2010). Role of connexin-36 gap junctions in alcohol intoxication and reward. Research Society on Alcoholism, San Antonio, TX.

Hansen DM, Wilcox JD, **Yorgason JT**, Steffensen SC (2010). Ethanol-induced modulation of dopamine release in the mesolimbic dopamine system is blocked by d2 receptor antagonists. Research Society on Alcoholism, San Antonio, TX.

Yorgason JT, España RA, Jones SR (2009). Speed of dopamine uptake inhibition of cocaine, methylphenidate and high-affinity WF-23. Society for Neuroscience, Chicago, IL.

Steffensen SC, Bradley KD, Allison DW, Hansen DM, Wilcox JD, Foote M, Hoyt B, **Yorgason JT** (2009). The role of connexin-36 gap junctions in alcohol intoxication and reward. Society for Neuroscience, Chicago, IL.

Allison DW, Hansen DM, Wilcox JD, **Yorgason JT**, Steffensen SC (2009). Effects of dopamine receptor antagonists on ethanol-induced modulation of dopamine release in the nucleus accumbens. Research Society on Alcoholism, San Diego, CA.

Silberman Y, Ariwodola OJ, **Yorgason JT**, Chappell AM, Weiner JL (2009). Basolateral amygdala paracapsular cells may contribute to the anti-anxiety effects of β 3-adrenoceptor agonists: implications for ethanol actions. Research Society on Alcoholism, San Diego, CA.

Silberman Y, Ariwodola OJ, **Yorgason JT**, Weiner JL (2009). β 1-adrenoceptors are required for ethanol potentiation of lateral paracapsular gabaergic synapses in the rat basolateral amygdala: implications for ethanol actions. Research Society on Alcoholism, San Diego, CA.

Park JJ, **Yorgason JT**, Hansen DM, Wilcox JD, Walton CH, Steffensen SC (2009). Electroacupuncture blocks ethanol inhibition of VTA GABA neuron firing rate: role of endogenous opioids. Research Society on Alcoholism, San Diego, CA.

Steffensen SC, Allison DW, **Yorgason JT**, Hansen DM (2008). The retina as a window on alcohol effects on mesolimbic dopamine neurotransmission. Research Society on Alcoholism, Washington, DC.

Steffensen SC, Hales K, Bradley K, Trikha A, Hansen DM, **Yorgason JT**, Walton CH, Thomas SJ, Taylor SR, Askew CE, Allison DW (2008). Physiological and molecular adaptation of ventral tegmental area GABA neurons to chronic alcohol. Research Society on Alcoholism, Washington, DC.

Yorgason JT, Walton CH, Hansen DM, Gallegos RA, Criado JR, Steffensen SC (2008). Contingent and non-contingent effects of low-dose ethanol on GABA neuron activity in the ventral tegmental area. Western North Carolina Society for Neuroscience, Winston Salem, NC.

Yorgason JT, Walton CH, Hansen DM, Gallegos RA, Criado JR, Steffensen SC (2008). Contingent and non-contingent effects of low-dose ethanol on GABA neuron activity in the ventral tegmental area. Society for Neuroscience, Washington, DC.

Burnett J, **Yorgason J**, Layton S, Evans J, Hedges D, Franz K, Steffensen SC, Fleming DE (2006). Effects of exposure to perinatal ultrasound radiation on information processing in the auditory system. Society for Neuroscience, Atlanta, GA.

EDUCATIONAL ACTIVITIES

Teaching Experience

- 2018 **Guest Lecturer, NEURO 601 (Graduate Neuroscience)**
Neuroscience Program
Brigham Young University
Instructor: Rebecca Matheson, MD
Responsibilities include giving presentations from original material and moderating discussions
- 2017-Present **Course Director, PSYCH 697R (Neurophysiology Journal Club)**
Department of Psychology
Brigham Young University
Responsibilities include presenting neuroscience publications, facilitating discussion during student presentations, providing feedback on student presentations.
- 2016-2018 **Guest Lecturer, NEURO 205 (Neurobiology) and PSYCH 388 (Drugs, Reward and Addiction)**
Department of Psychology
Brigham Young University
Instructor: Scott C. Steffensen, PhD
Responsibilities include giving presentations from textbook material and administering quizzes.
- 2013-2015 **Lecturer (team-taught), NIDA/NIAAA Journal Club**
Vollum Institute and Department of Behavioral Neuroscience
Oregon Health and Science University
Responsibilities included creating study objectives, giving presentations from recent high impact neuroscience publications and administering quizzes.
- 2005-2007 **Teaching Assistant for Advanced Neuroscience, NEUR 480**
Department of Physiology & Developmental Biology
Brigham Young University
Instructor: Michael D. Brown, PhD

Responsibilities included giving weekly presentations on recent neuroscience publications and exam reviews, and grading daily quizzes.

Student Mentorship/Training

2018-Pres Corah Kimball, Brigham Young University, Undergraduate Student
2018-Pres Nathan Laudie, Brigham Young University, Undergraduate Student
2017-Pres Natalie Lewis, Brigham Young University, Undergraduate Student
2017-Pres Elise Eisinger, Brigham Young University, Undergraduate Student
2017-Pres Travis Clarke, Brigham Young University, Graduate Student
2017-Pres Elizabeth Anderson, Brigham Young University, Undergraduate Student
2017 Robert Stout, Brigham Young University, Undergraduate Student
2016-Pres Chris Finuf, Brigham Young University, Technician
2016-Pres Andrew Payne, Brigham Young University, Graduate Student
2016-Pres Daniel Obray, Brigham Young University, Graduate Student
2016-Pres Kyle Bills, Brigham Young University, Graduate Student
2016-Pres Stephanie Williams, Brigham Young University, Graduate Student
2016-2017 Stephanie Pistorius, Brigham Young University, Graduate Student
2016 Douglas Zeppenfeld, Oregon Health and Science University, Graduate Student
2013-2014 Chris Vaaga, Oregon Health and Science University, Graduate Student
2013 Nathan Nielson, Oregon Health and Science University, Graduate Student
2012-2013 Anushree Karkhanis, Wake Forest School of Medicine, Postdoctoral Fellow
2011-2013 Jamie Rose, Wake Forest School of Medicine, Graduate Student
2011-2013 James Melchior, Wake Forest School of Medicine, Graduate Student
2010-2012 Erin Calipari, Wake Forest School of Medicine, Graduate Student

TALKS

Invited

Yorgason JT (2018, Feb). Neural circuits involved in cocaine addiction. Neuroscience Seminar Series, Brigham Young University, Provo, UT.

Yorgason JT, Williams, JT (2015, Apr). Acute and chronic effects of cocaine on dopamine signaling. Basic Medical Sciences Seminar Series, University of Arizona College of Medicine, Pheonix, AZ.

Yorgason JT, Ferris MJ, Steffensen SC, Jones SR (2013, Jun). Moderate ethanol concentrations attenuate phasic dopamine release in the nucleus accumbens of C57, but not DBA mice. Research Society on Alcoholism, Orlando, FL.

Yorgason JT, McCool BA, Weiner JL, Jones SR (2012, Sept). Early life stress increases nucleus accumbens dopamine signaling. Tenth International Catecholamine Symposium, Pacific Grove, CA.

Institutional / Departmental

Yorgason JT (2017, Mar). Neural circuits involved in cocaine addiction. Neuroscience Seminar Series, Brigham Young University, Provo, UT.

Yorgason JT (2016, Jan). Striatal Cholinergic Interneuron Activity Underlies Cocaine-induced Spontaneous Dopamine Release. Vollum Neuroscience Seminar Series, Oregon Health and Science University, Portland, OR.

Yorgason JT (2014, Mar). Dopamine Inhibition by D2 and GABAB Receptors: Differential Effects between Cell Body and Terminal Regions. Vollum Neuroscience Seminar Series, Oregon Health and Science University, Portland, OR.

Yorgason JT (2012, Nov). Acute Effects of Ethanol on Rapid Dopamine Signaling within the Nucleus Accumbens. Neuroscience Seminar Series, Wake Forest School of Medicine, Winston-Salem, NC.

Yorgason JT (2011, Aug). Effects of Isolation Rearing on Dopamine and Ethanol. Neuroscience Seminar Series, Wake Forest School of Medicine, Winston-Salem, NC.

Yorgason JT (2010, Oct). Effects of Isolation Rearing on Dopamine and Ethanol Interactions. Physiology and Pharmacology Seminar Series, Wake Forest School of Medicine, Winston-Salem, NC.

Yorgason JT (2010, Oct). Effects of Isolation Rearing on Dopamine Release and Ethanol Responses. Neuroscience Tutorial Series, Wake Forest School of Medicine, Winston-Salem, NC.

Yorgason JT (2010, May). Speed of onset for dopamine transporter inhibitors. Physiology and Pharmacology Seminar Series, Wake Forest School of Medicine, Winston-Salem, NC.

Yorgason JT (2009, Aug). Speed of onset for dopamine transporter inhibitors. Neuroscience Tutorial Seminar Series, Wake Forest School of Medicine, Winston-Salem, NC.

SERVICE

Institutional

2014-2016	Presentation judge for Oregon Health and Science University Research Week
2010-2011	Brain Awareness Outreach and Kernersville Cares for Kids Events, Wake Forest School of Medicine
2005-2008	Brain Awareness Outreach, Brigham Young University

Other

2009-Present *Ad Hoc* Peer Review for Addiction Biology, Alcohol, Analyst, Journal of Neurophysiology, Neuropharmacology

RESEARCH SUPPORT

Completed

F32 DA040409 Yorgason Mentor: John T. Williams, PhD 10/2015 – 10/2016
NIDA

Cocaine enhances spontaneous dopamine release by increasing cholinergic activity

The goal of this award is to receive postdoctoral training in *ex vivo* electrophysiology techniques. This project is aimed at characterizing the role of striatal cholinergic interneuron activity on dopamine release, including cocaine interactions.

Role: Fellow

T32 DA007262 Neve Mentor: John T. Williams, PhD 10/2013 – 10/2015
NIDA

Biological Bases of Drug-Seeking Behavior

The goal of this award is to provide support for pre and postdoctoral trainees in drug abuse research. It also provides support in training, including classes on ethics, a postdoctoral fellow taught course/journal club, and an annual retreat for data presentation.

F31 AA020439 Yorgason Mentor: Sara R. Jones, PhD 8/2011 – 10/2013
NIAAA

Effects of isolation rearing on dopamine release and reuptake

The goal of this award is to receive graduate training in *ex vivo* and *in vivo* fast scan cyclic voltammetry. This project is aimed at describing changes in rapid dopamine signaling in a model of early life stress, social isolation rearing in rats, including dopamine autoreceptor activity, and ethanol effects on dopamine release.

Role: Fellow

T32 AA007565 McCool Mentor: Sara R. Jones, PhD 8/2009 – 8/2011
NIAAA

Multidisciplinary training in the biology of addiction

The goal of this award is to provide support for pre and postdoctoral trainees in alcohol research, as well as opportunities for training, including alcohol centric journal clubs and seminars.

SOFTWARE/HARDWARE DEVELOPMENT

2009-Present

Demon Voltammetry and Analysis Software ©

<http://www.wakeforestinnovations.com/technology-for-license/demon-voltammetry-and-analysis-software/>. Designed and developed software suite used for acquiring and analyzing voltammetric data from freely moving, anesthetized and *ex vivo* voltammetric experiments. Developed using National Instruments LabView programming language. Also designed hardware for interfacing software with potentiostat. Developed for Dr. Sara R. Jones alongside Dr. Rodrigo A. España.

2009-2013

Drug Self-Administration and Intracranial Self-stimulation Behavioral Software

Developed software suite for interfacing with self-administration and self-stimulation hardware, for recording and analyzing reinforcement related behavior under guidance from Drs. Rodrigo A. España and Dave C. S. Roberts. Also designed hardware for interfacing computer components with Med-Associates levers, pumps, and internally developed voltammetry equipment. Developed for Drs. Rodrigo A. España, Sara R. Jones and Dave C. S. Roberts

2006-2008

Electrophysiology Software

Developed software for performing single unit and evoked field recordings in anesthetized preparations. Included paradigms for examining baseline firing rates, peri-event burst firing, and population spike ratios with field recordings. Developed for Dr. Scott C. Steffensen.