

Colin John Saldanha

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Education

Ph.D.	1995	Biopsychology	Columbia University, New York, NY
M.Phil.	1993	Biopsychology	Columbia University, New York, NY
M.A.	1991	Biopsychology	Columbia University, New York, NY
B.A.	1988	Biology & Psychology	Gustavus Adolphus College, St Peter, MN

Positions Held

Program Director	2018-2020	BIO/IOS/Neural Systems. National Science Foundation.
Professor	2011-	Biology. American University. Washington, DC
Affiliate Professor	2011-	Psychology. American University. Washington, DC
Professor	2001 - 11	Biological Sciences. Lehigh University. Bethlehem, PA
Postdoctoral Res.	1996 - 01	Brain Research Institute, UCLA, Los Angeles, CA

Research Support, Honors & Awards*Active*

2021-	PI	IOS 2050230	Targeted neurosteroidogenesis and complex memory function.
2019-	CoPI	NIH R15	Dev manipulation of estrogen signaling alters adult visual function.
2016-	CoPI	NSF MRI	Acquisition of an analytical transmission electron microscope.

Pending

2017	PI	NIH R21.	Aromatization in Hippocampal Neurons and memory function.
2001-	PI	NIH RO1.	<i>Synaptic Aromatase; a novel form of estrogen delivery.</i>

Completed

2016-2017	PI	AU FRSG.	Genomics of songbird sex determination.
2012-2016	PI	NIH R21.	<i>Neural estrogen synthesis by astrocytic aromatase.</i>
2011-2014	PI	NSF.	15 th & 16 th Annual Meetings of the Soc for Beh Neuroendocrinol
2009-2012	PI	NIH RO1.	<i>Supplement to Promote Diversity</i> (Kelli A Duncan Ph.D)
2008-2010	Co-PI	NIH R21.	<i>Estrogen & central auditory processing in birds.</i> C. Mello (PI)
2009-2011	Spons.	AHA.	<i>Predoctoral Fellowship</i> (Bradley J. Walters– trainee)
2007-2009	PI	Pennsylvania Dept. of Health.	<i>Structural Bases of Cell Communic.</i>

- 2003-2004 PI Pennsylvania Dept. of Health. *Structural plasticity of the vertebrate brain.*
 1999-2001 PI Investigator Initiated Grant. Alzheimer's Association.
 1997-2001 PI John Douglas French Alzheimer's Foundation.

Honors & Awards

- 2017- Editorial Board. Hormones & Behavior
 2018-2020 Program Director. IOS Neural Systems. National Science Foundation.
 2018 Guest Editor. Physiology & Behavior. Special Issue: Sex Differences.
 2013 Guest Editor. Hormones & Behavior. Hormones and Neurotrauma.
 2012 NSF. Panelist. Modulation II. Neural Systems Cluster.
 2010 NIH. Special Emphasis Panel. ZRG1 IFCN-C.
 2009-2013 NIH. Neuroendocrinology, Neuroimmunology, Rhythms & Sleep.
 2009 NIH. Neuroendocrinology, Neuroimmunology & Behavior.
 2008 NSF. Modulation – Neural Systems Cluster (declined).
 2003- NSF. Ad-hoc Reviewer.
 2005-2007 Alzheimers Association. Ad-hoc Reviewer.
- 2010 Nominee Hillman Award for Graduate Advising (student nominated)
 2006 Awardee Stabler Award for Excellence in Teaching (student nominated)
 2005 Awardee Eleanor & Joseph F. Libsch Early Award (faculty nominated)
 2003 Awardee Christian & Mary Lindback Foundation. Minority Faculty Award

Published Journal Articles

- Kaufmann J, Asalone KC, Corizzo R, Saldanha CJ, Bracht JR, & Japkowicz N. (2020). One-Class Ensembles for Rare Genomic Sequences Identification. The proceedings of the 23rd international conference on Discovery Science (DS'2020). 340-354. Springer Nature, Switzerland.
- Saldanha CJ. (2020). Estrogen as a neuroprotectant in both sexes: stories from the bird brain. *Frontiers in Neurology – Neurotrauma* 11(497): 1-8.
- Duncan KA & Saldanha CJ. (2020). Central aromatization: a dramatic and responsive defense against threat and trauma to the vertebrate brain. *Frontiers in Neuroendocrinology*. 56: 100816. Epub Nov 28, 2019.
- Gould, CJ, Saldanha CJ & Connaughton, VP. (2019). Acute exposure to 4-OH-A, not PCB1254, alters brain aromatase activity but does not adversely affect growth in zebrafish. *Environmental Toxicology & Pharmacology*.
- Biederman MK, Nelson MM, Asalone KC, Pedersen AL, Saldanha CJ, Bracht JR. (2018). Discovery of the first germline-restricted gene by subtractive transcriptomic analysis in the zebra finch, *Taeniopygia guttata*. *Current Biology*, 28(10):1620-1627

- Saldanha CJ, Davidson TL. (2018). Special Issue of Physiology & Behavior: Sex Differences. *Physiol & Behav.* 187:1
- Pedersen, AL, Brownrout, JL, & Saldanha CJ. (2018). Neuroinflammation and neurosteroidogenesis: Reciprocal modulation during injury to the adult zebra finch brain. *Physiol & Behav* 187:51-56
- Pedersen, AL. & Saldanha CJ. (2017). Reciprocal interactions between prostaglandin E2- and estradiol-dependent signaling pathways in the injured zebra finch brain. *J. Neuroinflammation.* 14(1): 262
- Pedersen, AL, Gould CL & Saldanha CJ. (2017). Activation of the peripheral immune system regulates neuronal aromatase in the adult zebra finch brain. *Scientific Reports.* 7(1): 10191.
- Pedersen, AL, Brownrout, JL, & Saldanha CJ. (2017). Central administration of indomethacin mitigates the injury-induced upregulation of aromatase expression and estradiol content in the zebra finch brain. *Endocrinology.* 158(8): 2585-92.
- Bailey DJ, Makeyeva, YV, Paitel, ER, Pedersen, AL, Hon, AT, Gunderson, JA & Saldanha, CJ. (2017). Hippocampal aromatization modulates spatial memory and characteristics of the synaptic membrane in the male zebra finch. *Endocrinology.* 158(4): 852-859.
- Pedersen, AL, Nelson, LH & Saldanha, CJ. (2016). Centrally Synthesized Estradiol is a Potent Anti-Inflammatory in the Injured Zebra Finch Brain. *Endocrinology* 157(5): 2041-51.
- Mehos, CM, Nelson, LH & Saldanha CJ. (2016). A quantification of injury-induced aromatase expression and estrogenic milieu in the zebra finch (*Taeniopygia guttata*). *J. Neuroendocrinol.* 28(2).
- Bailey DJ & Saldanha CJ. (2015). The importance of neural aromatization in the acquisition, recall, and integration of song and spatial memories in passerines. *Horm Behav.* 27(15): 116-124.
- Calisi RM & Saldanha CJ. (2015). Neurohormones, Brain, and Behavior: A Comparative Approach to Understanding Rapid Neuroendocrine Action. *Integr Comp Biol.* 55(2):264-7.
- Bailey, DJ, Ma, C, Soma, KK & Saldanha, CJ. (2013). Inhibition of hippocampal aromatization impairs spatial memory performance in a male songbird. *Endocrinology.* 154(12): 4707-14.
- Saldanha, CJ, Burstein, SR & Duncan, KA. (2013). Induced synthesis of estrogens by glia in the songbird brain. *J. Neuroendocrinology.* 11: 1032-1038.
- Saldanha, CJ & Sohrabji, F. (2013). Hormones and Neurotrauma: Protection, degeneration and plasticity. Editorial. *Hormones & Behavior* 63: 191-192.
- Duncan, KA, Walters, BJ & Saldanha, CJ. (2013). Traumatized and inflamed, but resilient: glial aromatization and the avian brain. *Hormones and Neurotrauma: Protection, degeneration and plasticity.* 63(2): 208-215.
- Cornil, CA, Leung, CH, Pletcher, ER, Naranjo, KC, Blauman, SJ & Saldanha, CJ. (2012). Acute and specific modulation of presynaptic aromatization in the vertebrate brain. *Endocrinology.* 153 2562-2567.

- Ash, LA, Saldanha, CJ & Bailey, DJ. (2012). Calbindin-D28K expression increases in the dorsolateral hippocampus following corticosterone treatment in female zebra finches (*Taeniopygia guttata*). *Hippocampus* 22: 510-515.
- Remage-Healey, L, Saldanha, CJ & Schlinger, BA. (2011). Estradiol synthesis and action at the synapse: evidence for “synaptocrine” signaling. *Frontiers in Neuroendocrine Science*. 2(28): 1-13.
- Taves, MD, Ma, C, Heimovics, SA, Saldanha, CJ & Soma, KK. (2011). Measurement of steroid concentrations in brain tissue: methodological considerations. *Frontiers in Neuroendocrine Science*. 2(39): 1-13.
- Duncan, KA. & Saldanha, CJ. (2011). Neuroinflammation induces glial aromatase expression in the uninjured songbird brain. *J. Neuroinflammation*. July 18, 18(1): 81. Epub ahead of print.
- Charlier, TD, Newman, AEM, Heimovics, SA, Po, KWL, Saldanha, CJ & Soma, KK. (2011). Rapid effects of aggressive interactions on aromatase activity and estradiol in discrete brain regions of wild male white-crowned sparrows. *J. Neuroendocrinology*. May 28 (epub ahead of print).
- Saldanha, CJ, Remage-Healey, L & Schlinger, BA. (2011). Synaptocrine signaling: steroid synthesis and action at the synapse. *Endocrine Reviews*. 32(4):532–549
- Walters, BJ, Alexiades, NG & Saldanha, CJ. (2011). Intracerebral estrogen provision increases neurogenesis and cell proliferation in the injured zebra finch brain. *Developmental Neurobiology*. 71(2): 170-81.
- Mirzaton, A, Spence, RD, Naranjo, KC, Saldanha, CJ & Schlinger, BA. (2010). Injury-induced regulation of steroidogenic gene expression in the cerebellum. *Journal of Neurotrauma*. 27(10):1875-82
- Charlier, TD, Po, KW, Newman, AE, Shah, AH, Saldanha, CJ & Soma KK. (2010). 17beta-estradiol levels in male zebra finch brain: combining Palkovits punch technique and an ultrasensitive radioimmunoassay. *General & Comparative Endocrinology*. 167(1):18-26.
- Saldanha, CJ, Walters, BJ & Fraley, G. (2010). Neurons that colocalize kisspeptin- and aromatase-like immunoreactivity may modulate the hypothalamo-pituitary-gonadal axis in the mallard drake (*Anas platyrhynchos*). *General & Comparative Endocrinology*. 166(3):606-13.
- Bailey, DJ & Saldanha, CJ. (2010). Ecological validity and the study of procedural and episodic memory in songbirds. *Cognitive Sciences*. 5(1): 1-20.
- Magliaro, BC. & Saldanha, CJ. (2009). Clozapine protects PC-12 cells from death due to oxidative stress induced by hydrogen peroxide via a cell-type specific mechanism involving inhibition of extracellular signal-regulated kinase phosphorylation. *Brain Research*. 1283: 14-24.
- Saldanha, CJ, Duncan, KA. & Walters, BJ. (2009). Neuroprotective actions of brain aromatase. *Frontiers in Neuroendocrinology*. 30(2): 106-118.
- Bailey, DJ, Wade, J. & Saldanha, CJ. (2009). Hippocampal lesions in juvenile zebra finches impair spatial memory performance, but not song - a developmental study of independent memory systems. *Developmental Neurobiology*. 69(8): 491-504.

- Walters, BJ. & Saldanha, CJ. (2008). Glial aromatization increases the expression of bone morphogenetic protein-2 (BMP2) in the injured zebra finch brain. *Journal of Neurochemistry*. 106(1): 216-223.
- Wynne, RD, Maas, S & Saldanha, CJ. (2008). Molecular characterization of the injury-induced transcript in the adult zebra finch brain. *Journal of Neurochemistry*. 105(5): 1613-24.
- Wynne, RD, Walters, BJ, Bailey, DJ, & Saldanha, CJ. (2008). Inhibition of injury-induced glial aromatase reveals a wave of secondary degeneration in the songbird brain. *GLIA*. 56(1): 97-105.
- Pinaud, R, Saldanha, CJ, Wynne, RD, Lovell, P, & Mello, CV (2007). The Excitatory Thalamo-"Cortical" Projection within the Song Control System of Zebra Finches is Formed by Calbindin-Expressing Neurons. *Journal of Comparative Neurology*. 504: 601-618.
- Rohmann, KN, Schlinger, BA. & Saldanha, CJ. (2007). The sub-cellular compartmentalization of aromatase is sexually dimorphic in the adult zebra finch brain. *Developmental Neurobiology*. 67 (1): 1-9.
- Schlinger BA & Saldanha CJ. (2005). Songbirds: A Novel Perspective on Estrogens and the Aging Brain. *AGE*. 27(4): 287-296.
- Peterson, RS, Yarram, L, Schlinger, BA & Saldanha, CJ. (2005). Aromatase is Pre-Synaptic and Sexually Dimorphic in the Adult Zebra Finch. *Proceedings of the Royal Society B: Biological Sciences*. 272: 2089-2096.
- Goodson, JL, Saldanha, CJ, Hahn, TP & Soma, KK. (2005). Recent advances in behavioral Neuroendocrinology: Insights from studies in birds. *Hormones & Behavior*. 48(4): 460-473.
- Saldanha, CJ, Rohmann, KN, Coomaralingam, L, & Wynne, RD. (2005). Estrogen provision by reactive glia decreases apoptosis in the zebra finch (*Taeniopygia guttata*). *Journal of Neurobiology*. 64(2): 192-201.
- Saldanha, CJ & Coomaralingam, L. (2005). Overlap and co-expression of estrogen synthetic and responsive neurons in the songbird brain – a double label immunocytochemical study. *General and Comparative Endocrinology*. 141(1): 66-75.
- Wynne, RD & Saldanha, CJ. (2004). Glial aromatization decreases neural injury in the zebra finch (*Taeniopygia guttata*): influence on apoptosis. *Journal of Neuroendocrinology* 16(8): 676-683.
- Oberlander, JG, Schlinger, BA, Clayton, NS & Saldanha, CJ. (2004). Neural aromatization accelerates the acquisition of spatial memory via an influence on the songbird hippocampus. *Hormones and Behavior*. 45 (4): 250-258.
- Saldanha, CJ, Schlinger, BA, Miceyvich, PE & Horvath, TL. (2004). Presynaptic NMDA-receptor expression is increased by estrogen in an aromatase-rich area of the songbird hippocampus. *Journal of Comparative Neurology*. 429: 522-534.
- Soma, KK, Schlinger, BA, Wingfield, JC & Saldanha, CJ. (2003). Brain Aromatase, 5 α -reductase, and 5 β -reductase change seasonally in wild song sparrows: relationship to aggressive and sexual behavior. *Journal of Neurobiology*. 56(3): 209-21.

- Pravosudov, VV, Kitaysky, AS, Saldanha, CJ, Wingfield, JC & Clayton, NS. (2002). The Effect of Photoperiod on Adrenocortical Stress Response in Mountain Chickadees (*Poecile gambeli*). *General and Comparative Endocrinology*. 126(2):242-8.
- Schlinger, BA, Soma, KK & Saldanha, CJ. (2001). Advances in Avian Behavioral Endocrinology. *The Auk*. 118(2): 283-289.
- Peterson, RS, Saldanha, CJ & Schlinger, BA. (2001). Rapid upregulation of aromatase mRNA and protein following neural injury in the zebra finch (*Taeniopygia guttata*). *The Journal of Neuroendocrinology*. 13: 317-323.
- Saldanha, CJ, Silverman, A-J & Silver, R. (2001). Direct innervation of GnRH neurons by encephalic photoreceptors. *Journal of Biological Rhythms* 16(1): 39-49.
- Saldanha, CJ, Schultz, JD, London, SE & Schlinger, BA. (2000). Telencephalic aromatase, but not a song circuit in a sub-oscine passerine, the golden collared manakin (*Manacus vitellinus*). *Brain Behavior and Evolution* 56: 29-57.
- Soma, KK, Sullivan, KA, Tramontin, AD, Saldanha, CJ, Schlinger, BA & Wingfield, JC. (2000). Acute and chronic effects of an aromatase inhibitor on territorial aggression in breeding and nonbreeding song sparrows. *Journal of Comparative Physiology A*. 186: 759-769.
- Saldanha, CJ, Tuerk, MJ, Kim, Y-H, Fernandes, AO, Arnold, AP & Schlinger, BA. (2000). The distribution and regulation of telencephalic aromatase in the zebra finch revealed with a novel antibody. *Journal of Comparative Neurology* 423: 619-630.
- Saldanha, CJ, Schlinger, BA & Clayton, NS. (2000). Rapid effects of corticosterone on cache-recovery in mountain chickadees (*Parus gambeli*). *Hormones and Behavior*. 37: 109-115.
- Deviche, PJ, Saldanha, CJ & Silver, R. (2000). Re establishment of photosensitivity is accompanied by a decrease in VIP expression in juncos (*Junco hyemalis*). *General and Comparative Endocrinology*. 117: 8-19.
- Saldanha, CJ, Clayton, NS & Schlinger, BA. (1999). Androgen metabolism in the juvenile oscine forebrain: a cross-species analysis at neural sites implicated in memory function. *Journal of Neurobiology*. 40: 397-406.
- Saldanha, CJ, Popper P, Micevych PE & Schlinger, BA. (1998) The passerine hippocampus is a site of high aromatase: inter- and intra-species comparisons. *Hormones and Behavior - Special Issue on Estrogen effects on Cognition across the Lifespan*. 34(2) 85-97.
- Saldanha, CJ & Schlinger, BA. (1997). Estrogen synthesis and secretion in the brown-headed cowbird (*Molothrus ater*). *General and Comparative Endocrinology*. 105: 390-401.
- Saldanha, CJ & Silver, R. (1995). Intraventricular prolactin inhibits hypothalamic vasoactive-intestinal polypeptide expression in doves. *Journal of Neuroendocrinology*. 7: 881-887.
- Saldanha, CJ, Leak, RK & Silver, R. (1994). Detection and transduction of daylength in birds. *Psychoneuroendocrinology*. 19: 641-656.
- Saldanha, CJ, Deviche, PJ & Silver, R. (1994). Increased VIP and decreased GnRH expression in photorefractory dark-eyed juncos (*Junco hyemalis*). *General and Comparative Endocrinology*. 93: 128-136.

- Wallman, J, Saldanha, CJ & Silver, R. (1994). A putative suprachiasmatic nucleus in birds responds to visual motion. *Journal of Comparative Physiology - A*. 174: 297-304.
- Silver R. & Saldanha, CJ. (1993). VIP and prolactin in avian reproduction. *Advances in Comparative Endocrinology* 1: 127-145.

Published Book Chapters

- Bailey, DJ & Saldanha, CJ. (2020). Estrogenic regulation of spatial memory in songbirds. In: *Estrogens and Memory: Basic Research and Clinical Implications*. Frick KM (Ed). Oxford University Press.
- Saldanha CJ. (2019). Brain derived steroids and behaviors. In: *Oxford Encyclopedia of Neuroendocrine and Autonomic Systems*. Nelson RJ (Ed). Oxford University Press.
- Pedersen AL & Saldanha CJ. (2017). Steroids and Plasticity. In: *Oxford Encyclopedia of Neuroendocrine and Autonomic Systems*. Nelson RJ (Ed). Oxford University Press.
- Saldanha, CJ, Mehos, CJ, Pedersen, AL & Wiggins, WA. (2015). Astrocytic aromatization and injury. In: *Estrogens and Traumatic Brain Injury*. Ducan, KA (Ed). Elsevier.
- Saldanha, CJ, Ramage-Healey, L & Schlinger, BA. (2012). Neuroanatomical distribution of aromatase in birds: cellular and subcellular analyses. In: "Brain, aromatase, estrogens and behavior," Balthazart, J & Ball, GF (eds). Oxford University Press.
- Duncan, KA & Saldanha, CJ. (2012). Inducible aromatase is astroglia: protection and recovery from neural perturbation in birds. In: "Brain, aromatase, estrogens and behavior," Balthazart, J & Ball, GF (eds). Oxford University Press.
- Saldanha, CJ & Schlinger BA. (2008). Steroidogenesis and Neuroplasticity in the songbird brain. In: *Neuroactive Steroids in Brain Function, Behavioral and Neuropsychiatric Disorders. Novel Strategies for Research and Treatment*. M.S. Ritsner and A. Weizman (eds). Springer.
- Saldanha, CJ & Schlinger, BA. (1998). The effects of estrogens in birds. In: *Encyclopedia of Reproduction*. (Knobil, E & Neill, J. (eds)). Academic Press.
- Saldanha, CJ & Silver, R. (1998). A general introduction to hormones. In: *Comparative Psychology: a Handbook*. (Greenberg, G & Haraway, M. (eds)).
- Silver, R & Saldanha, CJ. (1993). VIP and prolactin in avian reproduction. In: *Advances in Comparative Endocrinology I*. (Menon, GE (ed)). pp 127-145. CSRI. Trivandrum.

Professional Presentations

Invited Presentations

- 2020 ~~Distinguished Speaker. Keck Center of Behavioral Biology. North Carolina State University, Raleigh, NC~~
~~Brain Awareness Night. Science Café. North Carolina Museum of Natural Sciences, Raleigh, NC~~
- 2019 Dept. of Biology. University of Louisville. Louisville, KY.

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- 2018 Keynote address. Western Michigan Regional Undergraduate Science (WMRUGS). Grand Rapids, MI.
SFN Short Course 1. Estradiol as a neuroprotectant in both sexes. Sex Differences in the Brain: Balancing Sex in preclinical research. Jill Becker & Jessica Tollkuhn, Organizers. Society for Neuroscience. San Diego, CA.
- 2017 Neuroscience Seminar Series. Uniformed Services University Medical School. Washington, DC.
Symposium on Reproductive Neuroendocrinology. University of Massachusetts. Amherst, MA.
- 2016 *Session Co-Chair and Speaker*. Society for Behavioral Neuroendocrinology, Montreal, Canada.
Department of Anatomy & Neurobiology, Virginia Commonwealth University, Richmond, VA.
- 2015 Department of Psychology. University of California Berkeley.
15th CNS Symposium. University of Massachusetts Amherst.
- 2014 International Conference on Hormones, Brain & Behavior. Liege, Belgium.
Laboratory for Neuroendocrinology. UCLA School of Medicine. Los Angeles, CA.
Neuroscience & Cognitive Science, University of Maryland. College Park, MD.
Dept. of Biological Sciences, Virginia Tech. Blacksburg, VA.
- 2013 Center for Behavioral Neuroscience Retreat. American University, Washington, DC.
Department of Physiology. Emory University School of Medicine. Atlanta, GA.
- 2012 A Celebration of Research. The American University, Washington, DC.
University of North Texas Health Sciences. Fort Worth, TX.
Session Chair & Organizer. Society for Behavioral Neuroendocrinology. Madison, WI.
Rutgers University. New Brunswick, NJ.
Tulane University. New Orleans, LA.
- 2011 American University, Washington, DC.
University of Puget Sound. Tacoma, WA.
Texas A&M. College Station, TX.
- 2010 Campos de Jordao, SP. Brazil.
2009. Department of Biology. Willamette University. Salem, OR.
2008. Department of Biomedical Sciences. Colorado State University. Fort Collins, CO.
Department of Biology. St. Norbert College, De Pere, WI.
Laboratory of Neuroendocrinology. UCLA. Los Angeles, CA.
Cognitive Science Program. Lehigh University. Bethlehem, PA.
- 2007 Society for Behavioral Neuroendocrinology. Session Organizer and Chair. Pacific Grove, CA.
- 2006 Dept. of Biology. Columbia University. New York City, NY.
Neurological Sciences Institute. Oregon Health Sciences University. Portland, OR.
Dept. of Biology. Hope College. Holland, MI.
- 2005 Workshop on Steroids and Brain Function. Breckenridge, CO.
Dept. of Animal Sciences. University of Maryland, College Park, MD.
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- 2004 Winter Conference on Learning and Memory. Park City, Utah.
- 2002 Department of Psychology. Bucknell University. Lewisburg, Pennsylvania.
Department of Biology. East Stroudsburg University. Stroudsburg, Pennsylvania.
- 2001 Department of Psychology. Lehigh University. Bethlehem, Pennsylvania.
Department of Biological Sciences. Lehigh University. Bethlehem, Pennsylvania.
- 2000 Department of Anatomy and Cell Biology. University of Southern California Health Sciences. Los Angeles, CA.
Department of Biology. Georgia State University. Atlanta, GA.
- 1999 Sex Hormones and Dementia. John Douglas French Alzheimer's Foundation Symposium. Los Angeles, CA.
- 1995 The Laboratory of Neuroendocrinology. University of California Los Angeles. Los Angeles, CA.

Contributed Presentations

- Saldanha, CJ & Pedersen, AL. (2018). Interactions between PGE2 and estradiol (E₂)-signaling pathways are neuroprotective in the injured brain. International Congress of Neuroendocrinology/Society for Behavioral Neuroendocrinology. Toronto, ON, Canada.
- Saldanha, CJ, Brownrout, JL, & Pedersen, AL. (2017). A feedback loop between PGE2 and estradiol (E₂)-dependent signaling pathways supports neuroprotection of the injured vertebrate brain. Society for Neuroscience. Washington, DC.
- Pedersen, AL & Saldanha, CJ. (2017). The interactions of prostaglandin E2 and estradiol-dependent signaling pathways in the injured vertebrate brain. Society for Behavioral Neuroendocrinology, Long Beach, CA.
- Saldanha CJ. (2016). Reciprocal interactions between inflammatory and neurosteroidogenic pathways during traumatic brain injury in the vertebrate brain. Society for Behavioral Neuroendocrinology, Montreal, Canada.
- Gould CJ, Pedersen, AL & Saldanha, CJ. (2016). Activation of the peripheral immune system increases central aromatase expression in the adult zebra finch brain. Society for Behavioral Neuroendocrinology, Montreal, Canada.
- Pedersen AL, & Saldanha, CJ. (2016). Peripheral or central administration of a cyclooxygenase (COX) inhibitor mitigates the injury-induced upregulation of aromatase and estradiol content of the zebra finch brain. Society for Behavioral Neuroendocrinology, Montreal, Canada.
- Mehos, CM, Blackshear, K, Duncan, KA & Saldanha, CJ (2015). Tumor necrosis factor- α , but not interleukin 1 β -signaling is necessary for the induction of aromatase in the injured mammalian brain. Society for Neuroscience.
- Bailey, DJ, Paitel, ER, Gundersen, JA, Makeyava, YV & Saldanha, CJ (2015). Hippocampal aromatization modulates spatial memory in the zebra finch via the action of estradiol on membrane receptors. Society for Neuroscience.

- Pedersen, AL & Saldanha, CJ (2015). Pre-treatment with a cyclooxygenase 2 (cox-2) inhibitor mitigates the injury-induced up-regulation of aromatase expression in the adult zebra finch brain. Society for Neuroscience.
- Mehos, CM & Saldanha, CJ (2015). A quantification of the injury-induced changes in central aromatase expression and estrogenic milieu in the zebra finch (*Taeniopygia guttata*). Society for Behavioral Neuroendocrinology.
- Pedersen, AL, Yergler, NL & Saldanha, CJ (2015). Peripheral administration of a cox-2 inhibitor mitigates the injury-induced upregulation of aromatase expression in the zebra finch brain. Society for Behavioral Neuroendocrinology.
- Pedersen AL, Nelson, LH & Saldanha, CJ (2014). Estradiol, synthesized by reactive glia, is a potent anti-inflammatory in the vertebrate brain. Society for Neuroscience.
- Saldanha, CJ, Pedersen, AL & Nelson, LH. (2014). Estradiol, synthesized by reactive astrocytes, is a potent anti-inflammatory in the vertebrate brain. International Conference on Neuroendocrinology/Society for Behavioral Neuroendocrinology. Sydney, Australia.
- Saldanha, CJ, Mehos, CM, Blackshear, K & Duncan, KA. (2014). Interleukin 1-beta signaling is not necessary for the induction and propagation of aromatase in the chronically injured mouse brain. International Conference on Neuroendocrinology/Society for Behavioral Neuroendocrinology. Sydney, Australia.
- Saldanha, CJ, Pedersen, AL, Mehos-Milliken, CJ & Duncan, KA. (2013). Neuroimmune regulation of aromatase expression in the female songbird brain. Society for Neuroscience.
- Pedersen, AL, Winkler, M, Mehos-Milliken, CJ, Nelson, L & Saldanha, CJ. (2013). Peripheral administration of lipopolysaccharide increases neural aromatase expression in a songbird. Society for Behavioral Neuroendocrinology.
- Makeyeva, Y, Mendez, TC, Thern, NL, Saldanha, CJ & Bailey, DJ. (2012). Vesicular Glutamate Transporter-2 expression is sexually dimorphic in zebra finch hippocampal neurons. Society for Neuroscience.
- Saldanha, CJ, Tremere, LA, Bailey, DJ & Pinaud, R. (2012). Presynaptic neurotransmission in HVC neurons is potently inhibited by androgens in the adult male zebra finch. Society for Neuroscience.
- Bailey, DJ & Saldanha, CJ. (2012). Hippocampal aromatase inhibition decreases acquisition of and performance on a spatial memory task. International Behavioral Neuroscience Society.
- Bailey, DJ & Saldanha, CJ. (2012). Aromatase inhibition in the zebra finch hippocampus decreases acquisition and performance in a spatial memory task. Society for Behavioral Neuroendocrinology.
- Cornil, CA, Leung, CH, Pletcher, ER, Naranjo, KC & Saldanha, CJ. (2011). Synaptosomal aromatase is more rapidly inhibited by calcium dependent phosphorylations than microsomal aromatase in the zebra finch brain
- Bailey, DJ & Saldanha, CJ. (2011). Local inhibition of constitutive, presynaptic aromatase in the passerine hippocampus decreases acquisition of spatial memory. Society for Neuroscience.

- Burstein, SR, Duncan, KA. & Saldanha, CJ. (2011). Temporal pattern of interleukin 1 (IL-1), interleukin 6 (IL-6), and aromatase protein expression in the injured songbird brain. Society for Behavioral Neuroendocrinology.
- Pletcher, ER, Duncan, KA. & Saldanha, CJ. (2011). LPS induces a peripheral cytokine response in White Leghorn chickens (*Gallus gallus*), but not in Zebra Finches (*Taeniopygia Guttata*): a comparative study. Society for Behavioral Neuroendocrinology.
- Saldanha, CJ & Duncan, KA. (2010). Temporal pattern of interleukin 1 (IL-1), interleukin 6 (IL-6), and aromatase protein expression in the injured songbird brain. Society for Neuroscience.
- Duncan, KA & Saldanha, CJ. (2010). PHA-induced neuroinflammation initiates the transcription and translation of glial aromatase in the uninjured songbird brain in males and females. Society for Neuroscience.
- Walters, BJ, Alexiades, NA & Saldanha, CJ. (2010). Intracerebral estrogen provision increases neurogenesis and cell proliferation in the injured zebra finch brain. Society for Neuroscience.
- Duncan, KA & Saldanha (2010). PHA-induced neuroinflammation initiates the transcription and translation of glial aromatase in the uninjured songbird brain in males and females. Society for Behavioral Neuroendocrinology.
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- Saldanha, CJ. (1998). Estrogen effects on songbird memory. Sex Hormones and Dementia. John Douglas French Alzheimer's Foundation Symposium. Los Angeles, CA.
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Service

Reviewer for Scientific Journals.

Proceedings of the National Academy of Science
Journal of Neuroscience
Neuroscience
Nature Neuroscience
Nature Neuroscience - Methods
Journal of Comparative Neurology
Proceedings of the Royal Society
Journal of Neurochemistry
Journal of Neuroendocrinology
European Journal of Neuroscience
Brain Research
Journal of Comparative Physiology
Brain Behavior and Evolution
Hormones and Behavior
Physiological and Biochemical Zoology
Developmental Neurobiology
Neurobiology of Learning and Memory
General and Comparative Endocrinology
Endocrinology

Service to the International Scientific Community, University, College and Department.

- 2018-2020 Prgm Director Neural Systems. IOS. Biological Sciences. NSF.
- 2015-2018 Member Executive Committee. PhD. Prgm in Behavior Cognition & Neuroscience.
- 2015-2018 Member Executive Committee. Society for Behavioral Neuroendocrinology
- 2015-2017 Secretary Society for Behavioral Neuroendocrinology.
- 2015 Chair Program Committee. 19th Annual Meeting of the SBN. Monterey, CA.
- 2014- Director Neuroscience Major. CAS. American University
- 2013-2017 Chair Department of Biology. American University
- 2012- Member Executive Committee. Center for Behavioral Neuroscience
- 2012-15 Chair Institutional Animal Care and Use Committee. American University
- 2012 Member Distinguished Professor Committee. American University.
- 2012 Co-Chair Developmental Biology Search Comm. Dept. of Biology, American Univ.
- 2012 Member Middle States Accreditation Committee on Faculty. American University
- 2012 Liason Library and Biology. American University
- 2011-13 Chair Rank & Tenure Committee – Natural Sciences. CAS. American Univ.
- 2011-13 Member Rank & Tenure Committee – Biology. American University.
- 2011 Member Computational Neuroscience Search Committee. CAS. American Univ.
- 2011 Member Undergraduate Education Committee, Dept. of Biology, American Univ.
- 2011 Member Search Committee – Computational Neuroscientist. American University
- 2011 Council Fed of Associations in Behavioral and Brain Sciences. Washington, DC
- 2010 Chair Tenure & Promotions Committee. CSAS. Lehigh University
- 2010 Chair Biology and the Health Initiative - Strategy. Dept. of Biological Sciences.
- 2010 Attendee Retreat. College of Arts and Sciences. Lehigh University
- 2010 Member Lehigh Committee on India
- 2010 Member Infrastructure Committee. Biological Sciences. Lehigh University.
- 2009-2013 Member Education Committee. Society for Behavioral Neuroendocrinology.
- 2009-2011 Chair Education Committee. Society for Behavioral Neuroendocrinology.
- 2009-2010 Member SuperCogs. Executive Member. Program in Cognitive Science.
- 2009 Mentor Society for Behavioral Neuroendocrinology Meeting. Postdoctoral
- 2009 Elected University Personnel Committee (declined)
- 2009 Co-Director (*Interim*). Animal Facility. Biological Sciences. Lehigh University.
- 2009 Facilitator College of Arts and Sciences Retreat. Balancing our Workloads.
- 2008-2009 Member Org Comm. Academic Symposium 2009: A Tradition of Excellence.
- 2008-2011 Member Tenure and Promotions Committee. CSAS. Lehigh Univ.
- 2008-2011 Member Executive Committee. Department of Biological Sciences.
- 2008 Speaker Candidates Day. College of Arts and Sciences. Lehigh University.
- 2008 Member Steering Committee. Strategic Thinking Initiative.
- 2008 Co-Chair. Strategic Thinking Working Groups – Scholarship and Grad Education
- 2007 Council Academic Symposium: the Inauguration of President Alice Gast.
- 2007- Member Website Committee. Society for Behavioral Neuroendocrinology

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- 2007-2007 Coordtr Doctoral Program: Integrative Biology & Neuroscience. Biological Sci.
2007 Speaker Junior Day. College of Arts and Sciences. Lehigh University.
2007 Member. Org Comm. Academic Symposium 2007: A Celebration of Scholarship.
2007-2009 Member IT Committee. Society for Behavioral Neuroendocrinology.
2006 Speaker Candidate's Day. College of Arts and Sciences. Lehigh University.
2006 Interviewee University Relations. Lehigh University.
2005 Member Signal Transduction Search Committee. Biological Sci. Lehigh Univer.
2004 Member Nominations Committee. Society for Behavioral Neuroendocrinology.
2004 Member Evolution Search Committee, Dept. of Biological Sciences. Lehigh Univ.
2004 Member Social Psychology Search Comm. Dept. of Psychology. Lehigh Univ.
2004 Contrib Bioengineering Program Planning Consortium. Lehigh University.
2003-2003 Member Undergraduate Curriculum Comm, Dept. of Biological Sci. Lehigh Univ.
2003 Host Behavioral Neuroendocrinology Social. Society for Neuroscience Mtg.
2003 Member Animal Facility Planning Comm, Dept. of Biological Sci. Lehigh Univ.
2002 Member Receptor Biologist Search Comm. Dept. of Biological Sci. Lehigh Univ.

Memberships and Affiliations

The Society for Behavioral Neuroendocrinology
The Society for Neuroscience
Organization for the Study of Sex Differences