

Scott A Juntti, Ph.D.

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Education

- 2003-2010 University of California, San Francisco, Neuroscience Graduate Program
Ph.D. Thesis advisor: Nirao Shah, M.D., Ph.D.
- 1997-2001 University of Wisconsin-Madison
Bachelor of Science (With Honors). Majors: Zoology, Psychology

Research Experience

- 2010-2017 *Postdoctoral Fellow*, Stanford University. Mentor: Russell Fernald, Ph.D.
Regulation of social behavior in the cichlid fish *Astatotilapia burtoni*.
Generated the first transgenic and CRISPR deletion fish to identify electrical synapses and genes that control social behavior.
- 2004-2010 *Ph.D. Student*, University of California, San Francisco. Mentor: Nirao Shah, MD, Ph.D. Control of sexually dimorphic behaviors by steroid hormone receptors. First graduate student; initiated new methods to identify function of androgen-responsive neural circuits.
- 2002-2003 *Research Associate*, The Scripps Research Institute. Mentor: Lisa Stowers, Ph.D. As first lab member, set up assays to identify molecular mediators for pheromone detection in mice.
- 2001-2002 *Research Associate*, Max Planck Institut für Experimentelle Medizin. Mentor: Nils Brose, Ph.D. Generated of knock-in mice to probe the role of protein interactions in learning and memory. Managed an international collaboration.
- 2000-2001 *Undergraduate Researcher*, University of Wisconsin-Madison. Mentor: Johannes Hell, Ph.D. Characterized signaling complexes in dendritic spine microdomains.

Publications

Juntti SA, Hilliard AT, Kent K, Kumar A, Nguyen A, Jimenez MA, Loveland JL, Mourrain P, Fernald RD (2016). A neural basis for control of cichlid female reproductive behavior by prostaglandin F_{2α}. *Current Biology* **26**, 943–949.
- Previewed in *Current Biology*.

Juntti SA, Fernald RD (2016). Timing reproduction in teleost fish: cues and mechanisms. *Current Opinion in Neurobiology* **38**: 57-62.

Roberts NB, Juntti SA, Ryan AQ, Fernald RD, Roberts RB (2016). Polygenic sex determination in the cichlid fish *Astatotilapia burtoni*. *BMC Genomics* **17**, 835-47.

Bryant AS, Greenwood AK, Juntti SA, Byrne AE, Fernald RD (2016). Dopaminergic inhibition of gonadotropin-releasing hormone neurons in the cichlid fish, *Astatotilapia burtoni*. *J Exp Biol* doi 10.1242/jeb.147637.

Ma Y*, Juntti SA*, Hu CK, Huguenard JR, Fernald RD (2015). Electrical synapses connect a network of gonadotropin releasing hormone neurons in a cichlid fish. *PNAS* **112**:3508-3510.
- Highlighted in Faculty of 1000.

Juntti SA*, Hu CK*, Fernald RD (2013). Tol2-mediated generation of a transgenic haplochromine cichlid, *Astatotilapia burtoni*. *PLoS ONE* **8**(10):e77647.

Yang CF, Chiang M, Gray DC, Prabhakaran M, Alvarado M, Juntti SA, Unger EK, Wells JA, Shah NM. Sexually dimorphic neurons in the ventromedial hypothalamus govern mating in both sexes and aggression in males. *Cell* **153**:896-909.

Halt AR, Dallapiazza RF, Zhou Y, Stein IS, Qian H, Juntti S, Wojcik S, Brose N, Silva AJ, Hell JW (2012). CaMKII binding to GluN2B is critical during memory consolidation. *EMBO J* **31**(5):1203-1216.

Juntti SA*, Tollkuhn J*, Wu MV, Fraser EJ, Soderborg T, Tan S, Honda S-I, Harada N, Shah NM (2010). The androgen receptor governs execution but not programming of male sexual and territorial behaviors. *Neuron* **66**:260-272.

- Media coverage: *Nature* Research Highlights, *Neuron* Preview, *The Economist*.

Juntti SA*, Coats JK*, Shah NM (2008). A genetic approach to dissect sexually dimorphic behaviors. *Hormones and Behavior* **53**:627-37.

* Denotes equal contribution

Competitive Research Support

2012-2015 NIH Ruth Kirschstein Postdoctoral National Research Service Award (NRSA)

2004-2007 National Science Foundation Graduate Research Fellowship

Presentations

2016 *Invited seminar*: Identifying neural pathways in the social brain: insights from female sexual behavior in genetically tractable cichlid fish. Cold Spring Harbor Laboratory Neuroscience Seminar Series.

2016 *Poster*: Prostaglandin F_{2α} controls reproductive behavior: Insights from genetically tractable cichlid fish. Cold Spring Harbor Neural Circuits meeting.

2015 *Poster*: Prostaglandin F_{2α} controls reproductive behavior: Insights from genetically tractable cichlid fish. Society for Behavioral Neuroendocrinology.

2015 *Selected conference presentation*: The neural basis for control of cichlid reproduction by prostaglandin F_{2α}. Janelia Farm Research Conference on sexual behavior.

2014 *Invited seminar*: The neural basis for control of reproduction by prostaglandin F_{2α}. Max Planck Institute for Neurobiology, Martinsried, Germany.

2014 *Poster*: Control of sexual behavior by prostaglandin F_{2α} in a genetically tractable cichlid fish. Cold Spring Harbor Conference: Neural Circuits.

- 2014 *Poster*: A neural substrate for control of teleost sexual behavior by prostaglandin F_{2α}. Gordon Research Conference: Genes and Behavior.
- 2013 *Poster*: A neural substrate for control of teleost sexual behavior by prostaglandin F_{2α}. Society for Behavioral Neuroendocrinology.
- 2012 *Poster*: Dissecting the neural and hormonal control of social behavior in a transgenic cichlid. Bay Area Neuroscience Gathering.
- 2010 *Poster*: The androgen receptor governs execution but not programming of male sexual and territorial behaviors. Gordon Research Conference: Genes and Behavior.
- 2009 *Seminar*: Androgen receptor in the brain controls male sexual and territorial behaviors. UCSF Center for Reproductive Sciences.
- 2008 *Seminar*: Dissecting the role of the androgen receptor in sexually dimorphic behaviors. UCSF graduate student research talk.

Teaching Experience

- 2007 *Lecturer*, UCSF Neuroscience core course N201B. Developed original lecture and led discussion section.
- 2005 *Teaching Assistant*, UCSF Dental School. Organ systems & human pathophysiology.
- 2004 - 2006 *Scientist-teacher*, UCSF-San Francisco Unified School District Science-Education Partnership.

Mentoring Experience

Stanford: Mentored 10 undergraduates, including 9 women and 4 under-represented minorities. Three completed honors theses thus far, including one winner of Firestone Award for best undergraduate thesis. Mentored two rotation students (10 weeks).

UCSF: Mentored two rotation students (10 weeks), and two undergraduates (10 week program).

Academic Service

Peer reviewer: *Current Opinion in Behavioral Sciences*; *Brain Behavior & Evolution*.

Organize & plan semi-annual Stanford Biology Department postdoc research symposia (2015 – present).

References

Russell D. Fernald, Ph.D.
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