

NSF BIOGRAPHICAL SKETCH

NAME: Bertram, Richard

POSITION TITLE & INSTITUTION: Professor, Florida State University

(a) PROFESSIONAL PREPARATION -(see PAPPG Chapter II.C.2.f.(a))

INSTITUTION	LOCATION	MAJOR / AREA OF STUDY	DEGREE (if applicable)	YEAR YYYY
Florida State University	Tallahassee, Florida	Applied Mathematics	BS	1985
Florida State University	Tallahassee, Florida	Applied Mathematics	PHD	1993
National Institutes of Health	Bethesda, Maryland		Postdoctoral Fellow	1993 - 1996

(b) APPOINTMENTS -(see PAPPG Chapter II.C.2.f.(b))

2009 - present Professor, Florida State University, Tallahassee, FL
2005 - 2009 Associate Professor, Florida State University, Tallahassee, FL
2001 - 2005 Assistant Professor, Florida State University, Tallahassee, FL
1999 - 2001 Assistant Research Professor, Florida State University, Tallahassee, FL
1996 - 1999 Assistant Professor, Penn State University, Erie, PA

(c) PRODUCTS -(see PAPPG Chapter II.C.2.f.(c))

Products Most Closely Related to the Proposed Project

1. Korshunov KS, Blakemore LJ, Bertram R, Trombley PQ. Spiking and Membrane Properties of Rat Olfactory Bulb Dopamine Neurons. *Front Cell Neurosci.* 2020;14:60. PubMed Central PMCID: [PMC7100387](https://pubmed.ncbi.nlm.nih.gov/33110387/).
2. Ross MT, Flores D, Bertram R, Johnson F, Wu W, Hyson RL. Experience-Dependent Intrinsic Plasticity During Auditory Learning. *J Neurosci.* 2019 Feb 13;39(7):1206-1221. PubMed Central PMCID: [PMC6381233](https://pubmed.ncbi.nlm.nih.gov/3211233/).
3. Galvis D, Wu W, Hyson RL, Johnson F, Bertram R. Interhemispheric dominance switching in a neural network model for birdsong. *J Neurophysiol.* 2018 Sep 1;120(3):1186-1197. PubMed PMID: [29924715](https://pubmed.ncbi.nlm.nih.gov/30924715/).
4. Carroll BJ, Bertram R, Hyson RL. Intrinsic physiology of inhibitory neurons changes over auditory development. *J Neurophysiol.* 2018 Jan 1;119(1):290-304. PubMed Central PMCID: [PMC6335093](https://pubmed.ncbi.nlm.nih.gov/32335093/).
5. Blanco W, Bertram R, Tabak J. The Effects of GABAergic Polarity Changes on Episodic Neural Network Activity in Developing Neural Systems. *Front Comput Neurosci.* 2017;11:88. PubMed Central PMCID: [PMC5649201](https://pubmed.ncbi.nlm.nih.gov/35649201/).

Other Significant Products, Whether or Not Related to the Proposed Project

1. Shaughnessy DW, Hyson RL, Bertram R, Wu W, Johnson F. Female zebra finches do not sing yet share neural pathways necessary for singing in males. *J Comp Neurol.* 2019 Mar 1;527(4):843-855. PubMed PMID: [30370534](https://pubmed.ncbi.nlm.nih.gov/30370534/).
2. Ross MT, Flores D, Bertram R, Johnson F, Hyson RL. Neuronal Intrinsic Physiology Changes

During Development of a Learned Behavior. eNeuro. 2017 Sep-Oct;4(5) PubMed Central PMCID: [PMC5649544](#).

3. Galvis D, Wu W, Hyson RL, Johnson F, Bertram R. A distributed neural network model for the distinct roles of medial and lateral HVC in zebra finch song production. J Neurophysiol. 2017 Aug 1;118(2):677-692. PubMed Central PMCID: [PMC5539438](#).
4. Elliott KC, Wu W, Bertram R, Hyson RL, Johnson F. Orthogonal topography in the parallel input architecture of songbird HVC. J Comp Neurol. 2017 Jun 15;525(9):2133-2151. PubMed PMID: [28188629](#).
5. Basista MJ, Elliott KC, Wu W, Hyson RL, Bertram R, Johnson F. Independent premotor encoding of the sequence and structure of birdsong in avian cortex. J Neurosci. 2014 Dec 10;34(50):16821-34. PubMed Central PMCID: [PMC6608506](#).

(d) SYNERGISTIC ACTIVITIES -(see PAPPG Chapter II.C.2.f.(d))

1. Currently associate editor of Mathematical Biosciences and editorial board member of Bulletin of Mathematical Biology
2. Chair of the SIAM Life Sciences activity group (2015-2017)
3. Director of the FSU Biomathematics graduate program since 2010
4. Standing member (2010-2015) and Chair (2014-2015) of the Modeling and Analysis of Biological Systems (MABS) NIH study section
5. Served on NSF review panels on most years since 2005