

David A. Schwarz

Curriculum Vitae

Personal Details

Name David A. Schwarz
Address 214 Mainline Station Dr, Morrisville NC 27560
Voice c. (787) 645-0268 | o. (919) 668-1244
Email schwarz@neuro.duke.edu | david.a.schwarz.i@gmail.com
Country Puerto Rico
Date of Birth 25th April 1986
Citizenship American/USA

Education

2009 – Present **Ph.D. in Neurobiology**
Ongoing *Department of Neurobiology, Duke University*
Cortical control of primate locomotion.

2004 – 2009 **B.Sc. Biology**
Natural Sciences, University of Puerto Rico at Rio Piedras
Molecular biology, neuroscience, computational biology, and genetics.
GPA 3.94

Informal **Computer science**
Algorithm design, computer vision and AI.

Research Experience

2009 - Present **Graduate Student**
Department of Neurobiology, Duke University
Durham, NC
Laboratory of Miguel Nicolelis

2005-2009 **Undergraduate Research Student**
Medical Sciences Campus, University of Puerto Rico
San Juan, PR
Laboratory of Carlos A. Jimenez-Rivera

2008 **SoCal BSI Research Student**
Caltech
Los Angeles, California
Laboratory of Andrew Cameron

Teaching Experience

- 2012** **Mentor**
Outreach Program, North Carolina School of Science and Mathematics
 Mentored high school senior interested in brain machine interfaces.
- 2010** **TA for Concepts in Neuroscience**
Neurobiology, Duke University
 Reviewed assignments, answered questions, held exam review sessions.
- 2007-2009** **TA for Genetics**
Natural Sciences, University of Puerto Rico
 Reviewed assignments, administered quizzes, held exam review sessions.

Publications

- Journal Article** Jimenez-Rivera, Carlos A., Figueroa, J., Vazquez-Torres, R., Velez-Hernandez, M.E., Schwarz, D., Velasquez-Martinez, M.C., Arencibia-Albite, F. (2012) Presynaptic inhibition of glutamate transmission by α_2 receptors in the VTA. *European Journal of Neuroscience*, Vol. 35, pp. 1406–1415
 doi:10.1111/j.1460-9568.2012.08029.x
- Journal Article** Lebedev, M. A., Tate, A. J., Hanson, T. L., Li, Z., O'Doherty, J. E., Winans, J. A., Ifft, P. J., et al. (2011). Future developments in brain-machine interface research *Clinics (São Paulo, Brazil)*, 66 Suppl 1, 25–32.
- Journal Article** Schwarz, D., Bloom, D., Castro, R., Pagán, O. R., & Jiménez-Rivera, C. A. (2011). Parthenolide Blocks Cocaine's Effect on Spontaneous Firing Activity of Dopaminergic Neurons in the Ventral Tegmental Area *Current neuropharmacology*, 9(1), 17–20. doi:10.2174/157015911795017010
- Abstract** Schwarz, DA and Jimenez-Rivera, CA. Alpha-2 receptors modulate excitatory synaptic transmission in VTA DA cells. Abstract used in the ABRCMS convention, January, 2008.

Awards and Honors

- 2012** **Student Science Education Outreach Grant**
Duke Center for Science Education, Duke University
 Durham, NC
 "Introduction to Brain Machine Interfaces via Game Development"
- 2009** **Magna Cum Laude, B.S. in Biology**
Natural Sciences, University of Puerto Rico at Rio Piedras
 San Juan, PR
- 2008** **Outstanding Presentation: Neuroscience**
 Annual Biomedical Research Conference for Minority Students
 Anaheim, CA

Research Interests

<i>Primary</i>	Neuroscience Neural control of volitional motor movement, primate locomotion, brain machine interfaces, human computer interfaces, cognition.
<i>Secondary</i>	Computer Science Computer vision, human computer interfaces, artificial intelligence.

Languages

<i>Native</i>	<i>Spanish</i>
<i>Native</i>	<i>English</i>
<i>Basic</i>	<i>Portuguese</i>

Skills

<i>Generic</i>	Advanced user of Windows, Mac and Linux platforms.
<i>Artistic</i>	Skilled at producing diagrams and illustrations in Adobe Illustrator and Photoshop.
<i>Programming</i>	C/C++, C#, Python, MATLAB
<i>Writing</i>	Comfortable and experienced writing in academic, business, technical and informal styles.

References

The people listed here are willing to be contacted and/or send a written recommendation. Please get in touch with me to arrange for references to be sent or to provide you with contact information.

Academic ***Dr. Carlos A. Jimenez-Rivera***
Associate Professor, Physiology
University of Puerto Rico Medical Sciences Campus

Dr. Daniel Schmitt
Professor, Evolutionary Anthropology
Duke University

Dr. Mikhail Lebedev
Senior Researcher Scientist
Center for Neuroengineering , Duke University

Dr. Romulo Fuentes
Scientific Director
Edmond and Lily Safra International Institute of Neuroscience of Natal (ELS-IINN)