

## Carlos Xavier Hernández

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Experience	Graduate Fellow in the Biophysics Program with Vijay Pande @ Stanford University		2013 - Present
	Undergraduate Researcher at the Center for Computational Biology and Bioinformatics with Raul Rabadan @ Columbia University Medical Center		2010 - 2013
	Undergraduate Fellow at the Department of Chemistry and Biochemistry with James Andrew McCammon @ University of California, San Diego		2012
	Undergraduate Fellow at the Department o with Stephen Goff @ Columbia University Me	2011	
Education	Stanford University Biophysics, PhD		Present
	Columbia University in the City of New York Applied Mathematics, BSc		2013
Skills	• Python   Java •	Computational Biochemistry	
	MATLAB   R   UNIX	Web   Mobile Development	
	HTML   CSS   JavaScript   SQL	Machine Learning   Data Mining	
Awards	Graduate Research Fellowship National Science Foundation		2013
	ADVANCE Summer Institute Fellowship Stanford University		2013
	Exceptional Research Opportunities Program Fellowship Howard Hughes Medical Institute		2012
	Summer Undergraduate Research Fellowshi Genentech	р	2011



Publications	MDTraj: a modern, open library for the analysis of molecular dynamics trajectories McGibbon R.T., Beauchamp K.A. Schwantes C.R., Wang LP., Hernández C.X., Harrigan M.P., Lane T.J., Swails J.M., and Pande V.S. Biophysical Journal. doi: 10.1016/j.bpj.2015.08.015	2015
	Markov State Models Provide Insights into Dynamic Modulation of Protein Function Shukla D., Hernández C.X., Weber J.K., and Pande V.S. Accounts of Chemical Research. doi: 10.1021/ar5002999	2015
	Structure-based Network Analysis of an Evolved G-Protein Coupled Receptor Homodimer Interface Nichols S.*, Hernández C.X.*, Wang, Y. and McCammon J.A. Protein Science. doi: 10.1002/pro.2258	2013
	Understanding the Origins of a Pandemic Virus Hernández C.X., Khiabanian H., Chan J. and Rabadan R. arXiv. arXiv: 1104.4568v1 [q-bio.PE]	2011
Press	Pandemic Flu Risk Raised by Lax Hog-Farm Surveillance Wired Science	2012
	The Origin and Evolution of a Pandemic Virus  MAGNet Newsletter, 4:15-18	2011
Mentorship	Irfan Kherani Global Health and Health Policy Student @ Princeton University Thesis: Cross-Hemispheric Phylogenetic Analysis of 2009 H1N1 Pandemic Influenza	2011
	Ravi Vaidya High School Student Thesis: Distinct Circulation of Influenza Virus in Geographically Diverse U.S. Air Force Installations	2010 s