

Lillian J. Horin

Curriculum Vitae

Harvard University
Cambridge, MA
lillianhorin.com

EDUCATION

Harvard University Ph.D. Candidate, Biological and Biomedical Sciences Ph.D Program	Cambridge, MA 2017-present
Pitzer College B.A. Biology with Honors, Chemistry minor Senior Thesis: Spatio-Temporal Activity of Key Warburg Effect Genes in the Retina	Claremont, CA 2013-2017
La Academia Latinoamericana de Español Spanish Certification Level: Superior	Quito, Ecuador Spring 2015

HONORS AND AWARDS

- 2016 SACNAS National Conference Travel Scholarship (2016)
- Goldwater Scholarship for Excellence in Science (2016)
- First Place in APS Comparative & Evolutionary Physiology Section Scholander Award (2016)
- David S. Bruce Excellence in Undergraduate Research Award (2016)
- David S. Bruce Outstanding Undergraduate Abstract Award (2016)
- Outstanding Undergraduate Poster Presentation in Physiology/Pathology, SACNAS Conference (2015)
- 2015 SACNAS National Conference Travel Scholarship (2015)

RESEARCH EXPERIENCE

Harvard Medical School PhD Student <u>Advisors:</u> Timothy Mitchison and Joseph Italiano	2018-Present
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Harvard Medical School – HHMI EXROP Intern HHMI EXROP Intern <u>Advisor:</u> Constance Cepko	Summer 2016
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- Identified putative gene enhancers in the retina through analysis of UCSC Genome Browser data
- Designed primers for amplification of mouse genome and cloned amplicon into plasmids
- Harvested, imaged, and stained mouse pup and adult mouse retinas

University of California, Merced IOSP Fellow <u>Advisor:</u> Rudy Ortiz	Summer 2015
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- Characterized changes in protein concentration of CD36 in northern elephant seal pups in response to thyroid-stimulating hormone
- Optimized western blot conditions for use with northern elephant seals adipose tissue
- Statistically analyzed changes in concentration of CD36 and plasma insulin and glucose

PROFESSIONAL ORGANIZATIONS

American Physiological Society (APS), American Society for Biochemistry and Molecular Biology (ASBMB), Sigma Xi, Society for the Advancement of Chicanos and Native Americans in Science (SACNAS)

FELLOWSHIPS

- Ford Foundation Predoctoral Fellowship 2017-2022
- National Science Foundation Graduate Research Fellowship (NSF GRFP) 2017-2022
- Exceptional Research Opportunities Program (EXROP), Howard Hughes Medical Institute 2016
- Integrative Organismal Systems Physiology (IOSP) Undergraduate Summer Research Fellowship, American Physiological Society 2015

MENTORSHIP AND COMMUNITY ENGAGEMENT

Health Professions and Recruitment & Exposure Program (HPREP), Harvard Medical School

Mentor 2017-Present

- Directly mentored an HPREP student in essay writing and presentation delivery
- Implemented a socially inclusive professionalism workshop that was rated 4.6/5 for long-term usefulness by the inaugural class

Survey Analyst 2017-2018

- Designed surveys administered to HPREP volunteers and students in order to gauge usefulness, support, fulfillment, and clarity of each HPREP session
- Briefed program executives on quantitative and qualitative survey data results
- Presented suggestions to improve program functioning that was incorporated into the governing structure for the following HPREP session

RELATED PROFESSIONAL EXPERIENCE

- Graphic Designer, Science in the News, Harvard University 2017-2019
- Writing Center Fellow (Fellowship Consultant), Pitzer College 2016-2017
- Resident Assistant, Office of Student Affairs, Pitzer College 2014-2016

INVITED TALKS

Horin, L.J. "Broadening Participation and Increasing Retention of Underrepresented Students in STEM Programs: An Undergraduate Perspective." Oral presentation delivered at the NSF Integrative Organismal Systems (IOS) Broadening Participation (BP) PI Meeting, Bethesda, MD, September 21, 2015.

PUBLICATIONS

Martinez, B., Soñanez-Organis, J. G., Godoy-Lugo, J. A., **Horin, L. J.**, Crocker, D. E., & Ortiz, R. M. (2017). Thyroid hormone-stimulated increases in PGC-1 α and UCP2 promote life history-specific endocrine changes and maintain a lipid-based metabolism. *American Journal of Physiology - Regulatory, Integrative and Comparative Physiology*, 312(2), R189–R196.

CONFERENCE PRESENTATIONS

Horin, L.J., Chinchore Y., & Cepko C. Spatio-temporal activity of enhancer elements in key photoreceptor Warburg effect genes. Poster presentation delivered at the Society for the Advancement of Chicanos and Native Americans in Science National Conference, Long Beach, C.A., October 14, 2016.

Horin, L.J., Martinez B., Crocker D.E., & Ortiz R.M. Glucose-stimulated insulin secretion is delayed after infusion of thyroid-stimulating hormone in prolonged-fasting northern elephant seal pups. Poster presentation delivered at the Experimental Biology 2016 Meeting, San Diego, CA, April 2–6, 2016.

Horin, L.J., Martinez B., Crocker D.E., & Ortiz R.M. Protein expression of CD36 increases after infusion of thyroid-stimulating hormone during prolonged-fasting in northern elephant seal pups. Poster presentation delivered at the Society for the Advancement of Chicanos and Native Americans in Science National Conference, Washington D.C., October 30, 2015.