JESÚS MARTÍNEZ-GÓMEZ

jm2722@cornell.edu

EDUCATION

Cornell University — Ithaca, NY Ph.D Candidate, Plant Biology Section	2018 - Present
University of California (UC) — Berkeley, CA Ph.D. Student, Integrative Biology	2016 - 2018
University of Washington (UW) — Seattle, WA B.S. Molecular, Cellular, and Developmental Biology	2012 - 2016

RESEARCH EXPERIENCE

Dissertation Research: UC Berkeley/Cornell

Fall 2016 - present

Evolutionary and Developmental approach to investigate the origin of branch architecture in the Amaryllis family. I implement a combination of Bayesian model based methods to study trait evolution and diversification, and developmental genetic approach to asses gene function. architecture in Amaryllidaceae.

Advisor: Chelsea D. Specht, PhD

Undergraduate Research: University of Washington

Summer 2012 - 2016

Studied the development mechanisms of the petaloidy in the perianth of *Thalictrum*; As well as the evolution of floral scent during the transitions from insect pollinated to wind pollinated flowers.

Advisor: Vernica S. Di Stilio, PhD

New York University School of Medicine Summer Undergraduate Research Program (NYU SURP)

Investigated the environmental influence on stem cell signaling in *C. elgans* germline.

Advisor: E. Jane Albert Hubbard, PhD

ACADEMIC PUBLICATIONS

- 1. Galimba, K. D., **Martínez-Gómez, J.**, & Di Stilio, V. S. (2018). Gene Duplication and Transference of Function in the paleoAP3 Lineage of Floral Organ Identity Genes. *Frontiers in Plant Science*, 9, 334.
- 2. Wang, T. N., Clifford, M. R., **Martínez-Gómez, J.**, Johnson, J. C., Riffell, J. A., & Di Stilio, V. S. (2018). Scent matters: differential contribution of scent to insect response in flowers with insect vs. wind pollination traits. *Annals of Botany*.
- 3. Howard, C. C., Martínez-Gómez, J., Tribble, C. Digging deeper: the evolutionary complexity of underground storage organs. *In Review, American Journal of Botany Invited Paper*.
- 4. Sullivan, M. A., Schulfer, F. A., Galimba, D. K., Snelson, S., **Martínez-Gómez, J.**, Di Stilio, V. S., Natural homeotic mutants reveal genetic control of floral organ identity in a ranunculid. *In prep.*

RESEARCH FUNDING, FELLOWSHIPS AND SCHOLARSHIPS

Graduate Fellowships

NSF Graduate Research Fellowship Program
(3 years of Graduate Stipend + Tuition)

(1 semester of Graduate Stipend + Tuition) UC Berkeley Hellman Fellowship (2 Semester Stipend) UC Berkeley Chancellor Fellowship (2 years of Graduate Stipend + Tuition) Research and Travel Funding Cornell Graduate Travel Award (\$600 Travel) UC Berkeley Graduate Travel Award (\$900 Travel) UC Berkeley Graduate Assembly Travel Grant (\$300 Travel) American Society of Plant Taxonomy Graduate Funding (\$1000 Research) Pacific Bulb Society Mary Sue Ittner Grant (\$500- Research) UC Berkeley Graduate Travel Award (\$900 Travel) UC Berkeley: Integrative Biology Travel Award (\$250 Travel) University of Washington Ronald E. McNair Research Funding (\$2,000 - Research Funding: received twice)	2016-2018 2016-2018 2018 2018 2018 2018 2017
(2 Semester Stipend) UC Berkeley Chancellor Fellowship (2 years of Graduate Stipend + Tuition) Research and Travel Funding Cornell Graduate Travel Award (\$600 Travel) UC Berkeley Graduate Travel Award (\$900 Travel) UC Berkeley Graduate Assembly Travel Grant (\$300 Travel) American Society of Plant Taxonomy Graduate Funding (\$1000 Research) Pacific Bulb Society Mary Sue Ittner Grant (\$500- Research) UC Berkeley Graduate Travel Award (\$900 Travel) UC Berkeley: Integrative Biology Travel Award (\$250 Travel) University of Washington Ronald E. McNair Research Funding	2016-2018 2018 2018 2018 2018 2017
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UC Berkeley: Integrative Biology Travel Award (\$250 Travel) University of Washington Ronald E. McNair Research Funding	2011
University of Washington Ronald E. McNair Research Funding	2017
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	2015 & 2016
- /	Summer 2015
(\$3,300 - Research)	
Frye-Hotson-Rigg Department of Biology Research Scholarship (\$1,200 - Research)	Fall 2014
$Under graduate\ Scholar ships/Internships$	
UW Department of Biology Excellence in Biology Scholarship (\$4,800 UW Tuition)	2015
UW Education Opportunity Program Scholarship (\$1,000 UW Tuition: received twice)	2013, 2014
Washington Research Foundation Distinguished Scholar	2012-2013
(\$1,600 UW Tuition) University of Washington Costco Diversity Scholar	2012
(\$40,000 UW Tuition)	2012
	ners 2013-2015
Funding for three summers (\$4000 each) to work in a developmental Biology lab	C 9010
University of Washington ALVA GenOM Internship Research experience for incoming freshmen the summer before Fall Semester.	Summer 2012
research experience for incoming meanmen the summer before ran beforester.	
RESEARCH AWARDS/ DISTINCTIONS	
Hispanic Scholarship Fellow	2017
Society for Developmental Biology 75th Annual Meeting	2016
*Second Place in Undergrad Poster Presentations UW Cultivating Discovery Undergraduate Research Video	2016
UW Ronald E. McNair Research Fellow	
LSAMP Annual Conference	
*Best Poster Presentation	2016 2014 - 2016 2014

TEACHING AND MENTORSHIP

Teaching

UC Berkeley Graduate Student Instructor: PMB107 Plant Morphology

UW Undergraduate TA: BIO355 Foundations in Cellular & Molecular Biology

UW Undergraduate TA: BIOL317 Plant Classification and Identification

Spring 2013

Mentorship

Lab Mentor Jason Rose

Fall 2018 - Present

Assisting me in data collection for Amaryllidaceae project.

Graduate Students Mentoring Undergraduates

Fall 2018 - Present

Mentors undergraduate interested in graduate school, attend monthly dinner check-ins.

PLANTS Botany 2017 Conference Mentor

Summer 2017

Served as a mentor for rising Master student Kasey Pham at the Botany 2017 conference.

Summer Counselor for ALVA GenOM

Summer 2016

Supervised a cohort of 21 incoming freshmen as part of the GenOM research internship. Most students were either low income, first generation Americans or students of color. Helped foster an inclusive community for students and assisted with final research poster presentation.

Undergraduate Research Leader

2013-2016

Promoted research opportunities to undergraduates on campus. Participated in panels, presented at first year interest groups and assisted students with contacting faculty for undergraduate research opportunities.

Laboratory Mentor for Summer Student: Mary Swadener

Summer 2015

Summer lab mentor for undergraduate. Guided her with execution and presentation of project. She won best Poster in Plant section at the 2016 Emerging Research Conference (Washington DC).

Leader Del Futuro Mentor

2014-2015

Paired with a freshmen undergraduate from a Hispanic background. Helped her navigate the University of Washington and develop habits for success.

University of Washington Mentor Power to Success Program

Fall 2013

Mentored a incoming freshmen undergraduate and helped her navigate the University classes and schedules.

University of Washington ALVA GenOM Math and Chem Tutor

Summer 2013

Biweekly afternoon tutoring to incoming freshmen in calculus and general chemistry.

SYNERGISTIC ACTIVITIES

School of Integrative Plant Science Diversity Working Group

Fall 2018

Group of faculyt, staff, post-doc and students aimed to address and recommend in SIPS in regards to diversity, inclusion and gender.

Cornell Diversity Preview Weekend Application Reviewer

Fall 2018

Served as a application reviewer for three day long preview weekend for student interested in applying to graduate school in biological science.

Cornell Botanical Garden Judys Day - 'Plants have familites too'

Fall 2018

Outreach event, ran a booth "Make a Lily" to teach families about the Lily Flower

Oak Spring eFlower Summer School

Fall 2018

Ten day intensive course on the phylogenetic comparative methods to study flower evolution. Learned methods and collected data

Underline -Talks

- 1. <u>Martínez-Gómez, J.</u>, Specht D. C. Evolution of Monocot Reproductive Branches: An Evo-Devo approach to investigating the origin of the Amaryllidaceae umbel. Ecology and Evolugionary biology Graduate Symposium; December 6-7th. Ithaca, New York 2018
- 2. Martínez-Gómez, J., Specht D. C. Evolution of Monocot Reproductive Branches: An Evo-Devo approach to investigating the origin of the Amaryllidaceae umbel. Monocots VI 2018; October 7-12th. Natal, Brazil 2018
- 3. Martínez-Gómez, J., Specht D. C. Phylogenetic Comparative Method illuminates Macroevolutionary origin of the Amaryllidaceae Umbel. Botany 2018; ; July 21-15, Rochester, MN 2018.
- 4. Di Stilio V, Hartogs S, **Martínez-Gómez, J.**, Tank, D. Characterizing wind pollination syndrome, its tempo and mode of evolution in Thalictrum (Ranunculaceae). Botany 2018. July 21-15, Rochester, MN 2018.
- 5. Martínez-Gómez, J., Specht D. C. Early Inflorescence Development in Allium: Its Umbel-ievablly. Botany 2017; June 24-28, Fort Worth, TX 2017.
- 6. Martínez-Gómez, J., Galimba K, Di Stilio V, Galimba K. Divergence of Gene Function Following Gene Duplication and its effect on Flower Development; Society for Developmental Biology 75th Annual Meeting and International Society of Differentiation 19th International Conference; Aug 4-8; Boston, MA, 2016.
- *Second Place in Undergrad Poster Presentations
- 7. Swadener M, **Martínez-Gómez**, J., Di Stilio V,. Uncovering the Mechanism Underlying Polyploidy in Flowering Plants using Single Copy Gene Phylogenies; Emerging Research National Conference; Feb 25-27; Washington DC, 2017
- *Best Place in Poster Presentation in Environmental/Ecological Category
- 8. <u>Martínez-Gómez, J.</u>, Di Stilio V, Galimba K. Evolution of UFO: Testing the Conservation of Floral Gene Regulatory Networks; 19th Annual Undergraduate Research Symposium; May 20; Seattle, WA: University of Washington; 2016
- 9. Martínez-Gómez, J., Galimba K, Di Stilio V, Galimba K. Divergence of Gene Function Following Gene Duplication and its effect on Flower Development; 24th Annual National Ronald E. McNair Research Conference; Oct 31; Delavan, WI: University of Wisconsin-Milkaee; 2015
- 10. <u>Martínez-Gómez, J.</u>, Di Stilio V, Galimba K,. Divergence of protein-protein interactions following gene duplication and its effect on flower development. 18th Annual Undergraduate Research Symposium; May 15; Seattle, WA: University of Washington; 2015.
- 11. **Martínez-Gómez, J.**, Pekar O, Hubbard EJA. Potential link between TGFb signaling and notch signaling in C. elegans germ line development. Society for Developmental Biology 74th Annual Meeting; July 9-13; Snowbird, UT, 2015. p. 377.
- 12. Martínez-Gómez, J., Pekar O, Hubbard EJA. Potential link between TGFb signaling and notch signaling in C. elegans germ line development. The Leadership Alliance National Symposium; July 25-27; Stamford, CT, 2014.

- 13. Martínez-Gómez, J., Galimba K, Di Stilio V. The effect of gene duplication on protein interaction affecting flower development. Society for Developmental Biology 73rd Annual Meeting; July 17-21; Seattle, WA: Society for Developmental Biology; 2014.
- 14. <u>Martínez-Gómez, J.</u>, Di Stilio V, Galimba K. Evolution of genetic pathways affecting petal and stamen development. 17th Annual Undergraduate Research Symposium; May 16; Seattle, WA: University of Washington; 2014.
- 15. Galimba K, Martínez-Gómez, J., Di Stilio V. Gene duplication and neo-functionalization in the APETALA3 lineage of floral organ identity genes in a non-core eudicot. Society for Developmental Biology 73rd Annual Meeting; July 17-21; Seattle, WA: Society for Developmental Biology; 2014.
- 16. Martínez-Gómez, J., Di Stilio V. Characterizing flower organ identity genes in a homeotic mutant. Pacific Northwest LSAMP Conference; February 14; Portland, OR: University of Washington; 2014.
- *Best Poster Presentation
- 17. Martínez-Gómez, J., Di Stilio V. Characterizing flower organ identity genes in a homeotic mutant. 16th Annual Undergraduate Research Symposium; May 17; Seattle, WA: University of Washington; 2013.
- 18. Martínez-Gómez, J., Galimba K. Characterizing the role of the B-class gene APETALA3 in a rue-anemone mutant. Society for the Advancement of Chicanos and Native Americans in Science (SACNAS); October; Seattle, WA, 2012.

SOCIETY MEMBERSHIP

American Society of Plant Taxonomist Society of Systematic Biology Society for the Study of Evolution