

JESÚS MARTÍNEZ-GÓMEZ

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EDUCATION

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| 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)** Summer 2014
Investigated the environmental influence on stem cell signaling in *C. elegans* germline.
Advisor: E. Jane Albert Hubbard, PhD

ACADEMIC PUBLICATIONS

- 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.
- 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*, 123.2 (2018): 289-301.
- 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*.
- textbfMartínez-Gómez, J., Sullivan, F. A., Galimba, Coté E., Di Stilio, V. S., Natural homeotic mutants and genetic control of floral organ identity in a ranunculid. *Planned submission to New Phytologist*.

RESEARCH FUNDING, FELLOWSHIPS AND SCHOLARSHIPS

- Graduate Fellowships
NSF Graduate Research Fellowship Program Fall 2018
(3 years of Graduate Stipend + Tuition)

Cornell University Diversity Fellowship (1 semester of Graduate Stipend + Tuition)	Spring 2019
UC Berkeley Hellman Fellowship (2 Semester Stipend)	Spring 2017, 2018
UC Berkeley Chancellor Fellowship (2 years of Graduate Stipend + Tuition)	2016-2018

Research and Travel Funding

Cornell Graduate Travel Award ((\$600 Travel)	2018
UC Berkeley Graduate Travel Award ((\$900 Travel)	2018
UC Berkeley Graduate Assembly Travel Grant ((\$300 Travel)	2018
American Society of Plant Taxonomy Graduate Funding ((\$1000 Research)	2018
Pacific Bulb Society Mary Sue Ittner Grant ((\$500- Research)	2017
UC Berkeley Graduate Travel Award ((\$900 Travel)	2017
UC Berkeley: Integrative Biology Travel Award ((\$250 Travel)	2017
University of Washington Ronald E. McNair Research Funding ((\$2,000 - Research Funding: received twice)	2015 & 2016
NSF Research Experience for Undergraduate (REU) Research Funding ((\$3,300 - Research)	Summer 2015
Frye-Hotson-Rigg Department of Biology Research Scholarship ((\$1,200 - Research)	Fall 2014

Undergraduate Scholarships/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 ((\$1,600 UW Tuition)	2012-2013
University of Washington Costco Diversity Scholar ((\$40,000 UW Tuition)	2012
Society for Developmental Biology: Choose Development! Internship Funding for three summers (\$4000 each) to work in a developmental Biology lab	Summers 2013-2015
University of Washington ALVA GenOM Internship Research experience for incoming freshmen the summer before Fall Semester.	Summer 2012

RESEARCH AWARDS/ DISTINCTIONS

Hispanic Scholarship Fellow	2017
Society for Developmental Biology 75th Annual Meeting *Second Place in Undergrad Poster Presentations	2016
UW Cultivating Discovery Undergraduate Research Video	2016
UW Ronald E. McNair Research Fellow	2014 - 2016
LSAMP Annual Conference *Best Poster Presentation	2014

TEACHING AND MENTORSHIP

Teaching

UC Berkeley Graduate Student Instructor: PMB107 Plant Morphology Fall 2017
UW Undergraduate TA: BIO355 Foundations in Cellular & Molecular Biology Fall 2015
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 an 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 faculty, 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 families 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

CONFERENCE PRESENTATION

Underline –Talks

*** –Presenting Author**

1. **Martínez-Gómez, J***, Galimba K., Sullivan A., Coté E., Di Stilio V. Natural homeotic mutants and genetic control of floral organ identity in a ranunculid. Botany 2019; July 27-31, Tucson, AZ 2019.
2. Howard, C. C., Tribble C., **Martínez-Gómez, J***, Males J., Sosa V., Sessa E., Specht C. D., Cellinese N. Ontologies as a framework to clarify Geophyte Terminology. Botany 2019; July 27-31, Tucson, AZ 2019.
3. **Martínez-Gómez, J.**, Song, M*, Tribble, C., Freyman, W., Hohna, S., Rothfels, R., Specht, C.D. Diversification rates across lineages: how does biological meaning differ across model-based approaches? Botany 2019; July 27-31, Tucson, AZ 2019.
4. Tribble, C*, Rothfels, R., **Martínez-Gómez, J.** Alzate, F., Specht, C.D. Differential gene expression in tuberous vs. non-tuberous roots of the tropical monocotyledonous geophyte *Bomarea multiflora* (Alstroemeriaceae). Botany 2019; July 27-31, Tucson, AZ 2019.
5. **Martínez-Gómez, J***, Rose, I. J., Specht, C. D. Incorporating prior information of developmental genetics in trait evolution with the Threshold Model: The Umbellifera *Amaryllis Umbel* as a case study. Evolution 2019; July 27-31, Providence, RI 2019.
6. **Martínez-Gómez, J.**, Specht C. D. Evolution of Monocot Reproductive Branches: An Evo-Devo approach to investigating the origin of the Amaryllidaceae umbel. Ecology and Evolutionary biology Graduate Symposium; December 6-7th. Ithaca, New York 2018
7. **Martínez-Gómez, J.**, Specht C. D. 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
8. **Martínez-Gómez, J.**, Specht C. D. Phylogenetic Comparative Method illuminates Macroevolutionary origin of the Amaryllidaceae Umbel. Botany 2018; ; July 21-15, Rochester, MN 2018.
9. 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.
10. **Martínez-Gómez, J.**, Specht D. C. Early Inflorescence Development in *Allium*: Its Umbellifera. Botany 2017; June 24-28, Fort Worth, TX 2017.
11. **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*

12. 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*

13. **Martínez-Gómez, J.**, 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
14. **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-Milwaukee; 2015
15. **Martínez-Gómez, J.**, 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.
16. **Martínez-Gómez, J.**, Pekar O, Hubbard EJA. Potential link between TGF β 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.
17. **Martínez-Gómez, J.**, Pekar O, Hubbard EJA. Potential link between TGF β signaling and notch signaling in *C. elegans* germ line development. The Leadership Alliance National Symposium; July 25-27; Stamford, CT, 2014.
18. **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.
19. **Martínez-Gómez, J.**, 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.
20. 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.
21. **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*
22. **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.
23. **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