

KARLA SOSA
Department of Biology – Duke University
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EDUCATION

- Duke University, The Graduate School, Durham, NC
PhD Candidate in Biology 2015 – present
Major Professor: Mark Rausher
- Columbia University, Columbia College, New York, NY
Bachelor of Arts, Environmental Biology, Dean's List 2013
Honors Thesis: Androecium Evolution in the Melastomeae (Melastomataceae).
Major Professor: Fabián A. Michelangeli. *Co-Advisor:* Matthew Palmer.

PUBLICATIONS

- Sosa, K., M. D. Windham, L. Huiet, G. A. Yatskievych, & K. M. Pryer. 2020. A case of mistaken identity revealed as a new species of *Cheilanthes* s.s. (Pteridaceae). *Systematic Botany*, in review.
- Guimarães, P. J. F., F. A. Michelangeli, K. Sosa & J. R. S. Gomez. 2019. Systematics of *Tibouchina* and allies (Melastomataceae: Melastomateae): A new taxonomic classification. *Taxon*, 65(5): 937–1002. [DOI](#)
- Robison, T. A., A. L. Grusz, P. G. Wolf, J. P. Mower, B. D. Fauskee, K. Sosa & E. Schuettpelz. 2018. Mobile elements shape plastome evolution in ferns. *Genome Biology and Evolution*, 10(10): 2558–2571. [DOI](#)
- Goldenberg, R., F. Almeda, K. Sosa, R. C. Ribeiro & F. A. Michelangeli. 2015. *Rupestrea*: A new Brazilian genus of Melastomataceae, with anomalous seeds and dry indehiscent fruits. *Systematic Botany*, 40(2): 561–571. [DOI](#)
- Michelangeli, F. A., W. Carmenate Reyes & K. Sosa. 2015. A revision of *Meriania* (Melastomataceae) in the Greater Antilles with emphasis on the status of the Cuban species. *Brittonia*, 67(2): 118–137. [DOI](#)
- Michelangeli, F. A., C. Ulloa Ulloa & K. Sosa. 2014. *Quipuanthus*, a New Genus of Melastomataceae from the Foothills of the Andes in Ecuador and Peru. *Systematic Botany*, 39(2): 533–540. [DOI](#)

PRESENTATIONS

- Sosa, K.* and B. Redelings. 2020. Modeling among-site rate variation improves alignment accuracy. Oral: Lightning talk. SSB 2020. Gainesville, FL. January 2020.
- Sosa, K.*, M. D. Windham, L. Huiet, G. A. Yatskievych, & K. M. Pryer. 2016. A case of mistaken identity revealed as a new species of *Cheilanthes* s.s. (Pteridaceae). Oral. Botany 2016. Savannah, GA. July 2016. Abstract #483.
- Michelangeli, F. A.*, C. Ulloa Ulloa & K. Sosa. 2014. *Quipuanthus*, a New Genus of Melastomataceae from the Foothills of the Andes in Ecuador and Peru. Oral. Botany 2014. Boise, ID. July 2014. Abstract #III.
- Sosa, K.*, R. Kriebel, F. A. Michelangeli & P. J. Guimaraes. 2013. Androecium Evolution in the Melastomeae (Melastomataceae). Oral. Botany 2013. New Orleans, LA. July 2013. Abstract # 648.
- Sosa, K.*, R. Kriebel, F. A. Michelangeli & P. J. Guimaraes. 2013. Androecium Evolution in the Melastomeae (Melastomataceae). Poster. Columbia University Ecology and Environmental Biology Research Symposium. New York, NY. April 2013.
- Sosa, K.*, R. Kriebel, F. A. Michelangeli & P. J. Guimaraes. 2013. Androecium Evolution in the Melastomeae (Melastomataceae). Poster. Columbia University Undergraduate Science Research Symposium. New York, NY. March 2013.

* Presented by indicated co-author

RESEARCH EXPERIENCE

International Potato Center (CIP), Genetic Resources Department, Lima, Peru <i>Research Assistant</i>	2014
The New York Botanical Garden, Institute of Systematic Botany, New York, NY <i>Research Assistant</i>	2012 – 2014
Mount Sinai Hospital, Children’s Environmental Health Center, New York, NY <i>Outreach Assistant</i>	2011
New York City Department of Parks and Recreation, Prospect Park, New York, NY <i>Natural Resources Assistant</i>	2011
Columbia University, Earth Institute, Center for Research on Environmental Decisions, New York, NY <i>Research Assistant</i>	2011

TEACHING EXPERIENCE

Duke University, Department of Biology, Durham, NC <i>Teaching Assistant</i>	
Genetics and Evolution (Bio202L): Dr. John Willis	2020, 2018, 2017
Behavioral Ecology (Bio267D): Dr. Susan Alberts	2018
Plants and Human Use (Bio158): Drs. Kathleen Pryer & Michael Windham	2017
Biodiversity Science and Application (Bio565L): Dr. Justin Wright	2016
<i>Invited Lecturer</i>	
Speciation and Biogeography—Behavioral Ecology (Bio267D)	2018
Columbia University, Department of Biological Sciences, New York, NY <i>Teaching Assistant</i>	
Genetics (W3031/W4031): Dr. Ava E. Brent	2013
Columbia University, Earth Institute, New York, NY <i>Teaching Assistant</i>	
GIS for Sustainable Development (W3390): Dr. Mark G. Becker	2012

FELLOWSHIPS AND HONORS

Duke University – Ray J. Tysor Graduate Fellowship	2019, 2018, 2016
Duke University – Lamb Family Graduate Fellowship	2017
Duke University – BioCoRE Graduate Scholar	2015 – present
Duke University – James B. Duke Fellowship	2015 – 2019
Duke University – Biology Department First Year Fellowship	2015 – 2016
Columbia University, Office of Multicultural Affairs – Graduation Cord	2013
Columbia University – Stanley A. and Barbara B. Rabin Scholarship	2012 – 2013
Columbia University – Lillian and Trygve H. Tonnessen Scholarship	2011 – 2012

AWARDS

Duke University, Biology Department – Keever Research Grant-in-Aid (\$1000)	2020, 2019, 2018
Smithsonian Institution – Global Genome Initiative Peer-Review Award (\$29,988) Co-PI, with Kathryn Picard as Lead PI	2019
Botanical Society of America – Bill Dahl Graduate Student Research Award (\$1500)	2019
Duke University, The Graduate School – Professional Development Grant (Co-PIs: Lauren Carley & Jacob Harrison) (\$1000)	2019
American Society of Plant Taxonomists – Shirley and Alan Graham Graduate Student Research Award (\$996)	2018
International Association for Plant Taxonomy – Research Grant (\$1996)	2018
Sigma Xi – Grants-in-Aid of Research (\$981)	2018
National Geographic Society – Young Explorer’s Grant (\$4991)	2017
Society for Systematic Biologists – Graduate Student Research Award (\$1500)	2016
American Society of Plant Taxonomists – Travel Grant for Botany 2016 (\$335)	2016
American Society of Plant Taxonomists – Travel Grant for Botany 2013 (\$335)	2013

OUTREACH AND MENTORING

Duke SciPol , Durham, NC Policy brief writer, disentangling scientific research relevant to new policy	2019 – present
Duke Research Blog , Durham, NC Blog writer, reporting on biological research being conducted at Duke	2019 – present
Letters to a Pre-Scientist Scientist pen pal to middle school student in under-resourced community	2016 – present
Emily Krzyzewski Center, Durham, NC Subject Tutor for biology and environmental science, Scholars to College program	2016 – 2019
Columbia College Women, Columbia University, New York, NY Mentor focused on basic sciences and sustainable development	2013 – 2016

TRAINING WORKSHOPS

Organization of Tropical Studies, Tropical Plant Systematics <i>Statement of Accomplishment with Distinction</i>	2016
Eagle Hill Institute, Taxonomy and Biology of Ferns and Lycophytes <i>Statement of Accomplishment</i>	2015
Stanford University, Writing in the Sciences <i>Statement of Accomplishment with Distinction</i>	2014
SciFund Challenge, Outreach for Scientists <i>Statement of Accomplishment</i>	2014

FIELDWORK

Queensland, Australia – James Cook University <i>Cheilanthes botanical collection</i>	2019
La Selva, Heredia, Costa Rica – Organization of Tropical Studies <i>Survey of local flora</i>	2016
Sacred Valley, Cuzco, Peru – The New York Botanical Garden <i>Melastomataceae botanical collection</i>	2012
Casma, Ancash, Peru – Markham College <i>Tillandsia ecological collection</i>	2008

PROFESSIONAL SERVICE

Duke University Biology Graduate Diversity, Equity and Inclusion Committee <i>Founder and Chair</i>	2016 – present
Coordinate initiatives to address DEI issues and increase representation	
Organise yearly seminar and workshop mini-series on DEI issues	
Write grants, reports, and educational materials for stakeholders	
Communicate and receive feedback from stakeholders	
Molecular Phylogenetics and Evolution <i>Reviewer</i>	2018
American Fern Journal <i>Reviewer</i>	2016
Duke University Biology Graduate Steering Committee <i>Co-chair</i>	2016 – 2017
Served as liaison between graduate students, the chair of the department, and the director of graduate studies; directed assignment of leadership positions for student committees	
Duke University Biology Graduate Review and Discussion Group (BLeRG) <i>Chair</i>	2015 – 2019
Guided manuscript and grant review discussions for graduate students	

AFFILIATIONS

Society of Systematic Biologists (SSB)	2016 – present
American Society of Plant Taxonomists (ASPT)	2016 – present
American Fern Society (AFS)	2016 – present