Nishanta Rajakaruna

CURRICULUM VITAE

Biological Sciences Department
California Polytechnic State University
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Professional Preparation

Natural Sciences and Engineering Research Council of Canada Postdoctoral Fellow (2003-2004) – Evolutionary ecology
Department of Biological Sciences, Stanford University, USA
Major Advisor: Dr. David Ackerly

Ph.D. in Botany (2003) – Evolutionary ecology
'Evolution in the *Lasthenia californica* complex (Asteraceae)' The University of British Columbia, Vancouver, BC, Canada
Major Advisors: Dr. Jeannette Whitton, Dr. Bruce A. Bohm, Dr. Tony Glass

M.Sc. in Botany (1998) – Plant ecology
The University of British Columbia, Vancouver, BC, Canada
Major Advisor: Dr. Bruce A. Bohm

Postbaccalaureate Practical Training – Plant Ecophysiology (1994-1995)
Department of Organismic and Evolutionary Biology, Harvard University, USA
Major Advisor: Dr. Fakhri A. Bazzaz

B.A. in Human Ecology (1994)
College of the Atlantic, Bar Harbor, ME, USA
Major Advisor: Dr. Craig W. Greene

Professional Awards and Recognition

Charles Edwin Bessey Teaching Award, Botanical Society of America (2026)

Fulbright Specialist Program Grant: Spain (awarded; scheduled November 18–December 6, 2026)

Cal Poly Institutional Excellence Awards: Faculty Award for Advancing Culture, Equity, and Belonging (2026)

Fulbright Specialist Program Grant: South Africa (July 1-Aug 12, 2024)

Fulbright U.S. Scholar Alumni Ambassador (2024-2026)

Fulbright Specialist Program, Roster (12/2023-12/2026)

Fulbright Sub-Saharan Africa Regional Travel Program Grant (Madagascar, May 2-17, 2023)

Exceptional Contribution to Research Excellence, Unit for Environmental Sciences and Management, North-West University, Potchefstroom, South Africa (2022)

Cal Poly Nominee, Wang Family Excellence Award for Outstanding Faculty Scholarship, California State University (2022-2023)

Distinguished Scholarship Award, California Polytechnic State University, San Luis Obispo (2021-2022)

Distinguished Teaching Award, California Polytechnic State University, San Luis Obispo (2021-2022)

Fulbright U.S. Scholar Award (Teaching/Research), South Africa (2022-2023)

Distinguished Scholarship Award California Polytechnic State University, San Luis Obispo (Finalist: 2020-2021)

Outstanding Faculty Advisor Award (2019-2020), California Polytechnic State University, San Luis Obispo

Terrance Harris Excellence in Mentorship Award (2020), California Polytechnic State University, San Luis Obispo

Academic Partner of the Year (2018-2019), University Housing, California Polytechnic State University, San Luis Obispo

Faculty Partner of the Year (2018-2019), University Housing, California Polytechnic State University, San Luis Obispo

South and Central Asia Regional Travel Grant, The United States-India Educational Foundation (02/19-03/04, 2017)

Fulbright U.S. Scholar (Research), Sri Lanka (September 2016–May 2017)

National Geographic Explorer (2015, South Africa; 2017, Sri Lanka)

Honorable Mention, Merritt Lyndon Fernald Award, New England Botanical Club, Best Paper Published in *Rhodora* 2009 (111: 417-448)

Best Overall Botany-Related Oral Presentation, Northeast Natural History Conference X, Albany, NY; 2008

NSERC Doctoral Prize 2004 Nominee, Dept. of Botany, University of British Columbia

New Phytologist Trust Travel Grant, Plant Speciation Conference; 2003

NSERC Postdoctoral Fellowship, Natural Sciences and Engineering Research Council Canada; 2003-2005

Faculty of Science Graduate Teaching Award Nominee, Dept. Botany, University of British Columbia; 2001-2002

University Graduate Fellowships, University of British Columbia; 2001-2002, 1998-2000, 1995-1997

Garden Club of Mount Desert Memorial and Tribute Fund Scholarship; 1993

International Student Scholarship, College of the Atlantic; 1990-1994

Other Awards and Recognition

Three photos selected for the "*Impact of Exchange: Stories from U.S. Exchange Alumni*" Traveling Photo Exhibition organized by Bureau of Educational and Cultural Affairs, U.S. Department of State; 2023-2024

First Place, Macro-organism/Wildlife Photo Category, Professional Cameras. Photo Caption: *Blue Cranes in Namaqualand: South Africa's National Bird on a Carpet of Native Spring Wildflowers*. ENVIRA Photography Competition, Unit for Environmental Sciences and Management, North-West University, Potchefstroom, South Africa; 2022

Second Place, Funny Features and Creatures, Lower Quality Cameras. Photo Caption: *The Joy of Discovery – A Botanist Encounters a 'New' Plant*! ENVIRA Photography Competition, Unit for Environmental Sciences and Management, North-West University, Potchefstroom, South Africa; 2022

Professional Experience

Fulbright Specialist, Department of Biology, Universidad Rey Juan Carlos, Campus de Móstoles (Madrid), Spain (scheduled November 18–December 6, 2026)

Coordinator, National and International Fellowships and Scholarships (NIFS), Academic Affairs, California Polytechnic State University, San Luis Obispo, CA, USA (July 2024–present)

Fulbright Specialist, School of Biological Sciences, North-West University, Potchefstroom, South Africa (July 1-August 12, 2024)

Fulbright U.S. Scholar, School of Biological Sciences, North-West University, Potchefstroom, South Africa (August 2022-June 2023)

Professor of Plant Biology, Biological Sciences Department, California Polytechnic State University, San Luis Obispo, CA, USA (September 2021–present)

Extraordinary Professor, School of Environmental Sciences and Development, North-West University, Potchefstroom Campus, South Africa (2020-2023; 2023-2026)

Research Associate, College of the Atlantic, Maine, USA (Summer 2020–present)

Senior Editor, *Rhodora*, New England Botanical Club, MA, USA (Oct '19-Dec. '19)

Faculty-in-Residence, University Housing, California Polytechnic State University, San Luis Obispo, CA, USA (September 2018-June 2022)

Associate Professor of Plant Biology, Biological Sciences Department, California Polytechnic State University, San Luis Obispo, CA, USA (Sept. 2017-Sept. 2021)

Fulbright U.S. Scholar, Institute of Fundamental Studies, Kandy, Sri Lanka (September 2016-May 2017)

Editor-in-Chief, *Rhodora*, New England Botanical Club, MA, USA (September 2014-September 2019)

Professor of Botany, College of the Atlantic, Bar Harbor, ME, USA (September 2010-June 2016)

Director, College of the Atlantic Herbarium, Bar Harbor, ME, USA (January 2011-June 2016)

Adjunct Associate Professor in Plant Biology, Department of Biological Sciences, San José State University, San Jose, CA, USA (August 2010-Fall 2017)

Assistant Professor in Plant Biology, Department of Biological Sciences, San José State University, San Jose, CA, USA (August 2008-August 2010)

Director of the Carl W. Sharsmith Herbarium, Department of Biological Sciences, San José State University, San José, CA, USA (Fall 2008-September 2015)

Professor of Botany, College of the Atlantic, Bar Harbor, ME, USA (September 2004-June 2008)

Visiting Research and Teaching Appointments

Visiting Fulbright Scholar, Missouri Botanical Garden, Antananarivo, Madagascar (May 2-18, 2023)

Visiting Scientist, School of Environmental Sciences and Management, North-West University, Potchefstroom Campus, South Africa (April 22-May 10, 2020; Visit postponed because of the COVID-19 pandemic)

Visiting Researcher, Charles Darwin Foundation, Puerto Ayora, Galápagos, Ecuador (April 1-14, 2020; Visit postponed because of the COVID-19 pandemic)

Guest Lecturer and Visiting Scientist, Department of Botany, Institute of Natural Sciences, Ural Federal University, Lenin av. 51, 620000, Yekaterinburg, Russia (June 17-27, 2019)

Visiting Scientist, Department of Botany, Aligarh Muslim University, India (February 19–March 4, 2017)

Visiting Scientist, Laboratories of Dr. M. C. M. Iqbal & Dr. M. Vithanage, National Institute of Fundamental Studies, Kandy, Sri Lanka (September 2016–May 2017)

Visiting Scientist, Unit of Environmental Sciences and Management, North-West University, Potchefstroom Campus, South Africa (February 2016)

Guest Lecturer and Visiting Scientist, Department of Botany, Institute of Natural Sciences, Ural Federal University, Lenin av. 51, 620000, Yekaterinburg, Russia (October 16-25, 2014)

Extraordinary Associate Professor, School of Environmental Sciences and Management, North-West University, Potchefstroom Campus, South Africa (2014-2020)

Visiting Scientist, Laboratory of Dr. M. C. M. Iqbal, Institute of Fundamental Studies, Kandy, Sri Lanka (01/14-03/14)

Visiting Scientist, Materials Research Department, iThemba Laboratory for Accelerator Based Sciences, National Research Foundation, South Africa (Feb 15-23 2012)

Visiting Scientist, School of Environmental Sciences and Management, North-West University, Potchefstroom Campus, South Africa (January 21-February 15, 2012)

Adjunct Faculty member in Botany, College of the Atlantic, Bar Harbor, ME, USA (September 2008-August 2010)

Visiting Scientist, Laboratory of Dr. M. C. M. Iqbal, Institute of Fundamental Studies, Kandy, Sri Lanka (09/05-08/08)

Research and Teaching Grants

Teacher-Scholar Mini Grant Program: Discovery & Translation. California Polytechnic State University, San Luis Obispo (2025-2026). “Characterizing novel microorganisms in rhizosphere soils in a disturbed serpentine ecosystem.” Project PIs: Y. Pressler, A. Yep, N. Rajakaruna. **$11,000**

Advanced Research Projects Agency – Energy (ARPA-E) U.S. Department of Energy. Plant HYperaccumulators TO MIne Nickel-Enriched Soils (PHYTOMINES) Exploratory Topic (2024). “Systematic elemental screening of herbarium and field plants to create a comprehensive U.S. plant inventory for metal hyperaccumulators.” Babst-Kostecka, A. (PI – University of Arizona, Tucson), P. Kushwaha, C. Richardson, T. Wlodarczyk, N. Rajakaruna, A. Paul, A. van der Ent, and G. Echevarria. 2024. **$999,679**

Ministerio de Ciencia e Innovación, Gobierno de España (Spain) (2024) “Can patterns drive processes? How intrinsic properties of the plant community can drive assembly processes: a focus on PHYLOgenetic and FUNctional diversities and KEY species (PhyloFunKey).” Principal Investigator: Arantzazu López De Luzuriaga Gamboa with co-PIs from Spain, Mexico, South Africa, & USA. USA Co-PI: N. Rajakaruna. **$17,000**

Nicholas Institute for Energy, Environment & Sustainability, Duke University (2023) "Portending Pollution of Energy Transformation: Using X-Ray Fluorescence Ionomics on Historical Herbarium Collections to Develop an Ecological Biomonitoring Network." Project Investigators: N. Jayasundara (PI), K. M. Pryer, P. S. Manos, and N. Rajakaruna. **$19,870**

Bureau of Land Management, United States Department of the Interior (2017) "San Joaquin Woolly Threads, Seed Longevity and Climate Tolerance Study." Principal Investigator: N. Rajakaruna. **$30,000**

National Geographic Society, Research and Exploration Grant (2017) "Plant-manganese nutritional dynamics along a climatic gradient of disjunct serpentine ecosystems." Principal Investigator: Denise R. Fernando; Project Investigator: N. Rajakaruna. **$5,500**

National Geographic Society, Research and Exploration Grant (2015) "Examining the role of substrate chemistry and climate on the diversity of lichen species in South Africa." Principal Investigator: N. Rajakaruna; Project Investigators: A. M. Fryday, S. J. Siebert, I. D. Medeiros, R. B. Boneschans, and N. Pope. **$17,850**

Maine Sea Grant Program Development Fund (2014) "Investigating Metal Accumulation by Seaweeds at the Callahan Mine Superfund Site, Brooksville, Hancock Co., Maine, USA." Principal Investigators: I. D. Medeiros and N. Rajakaruna. **$2,050**

The Department of the Interior, National Park Service (2014) "Train Students in Herbarium Management and Catalog Herbarium Specimens for Public Education and Research" Principal Investigator: N. Rajakaruna. **$24,400**

Davis Educational Foundation (2013) "Transforming Ecology Education through Interdisciplinary Landscape Level Research" Principal Investigators J. Anderson, D. Cass, N. Rajakaruna, and S. Hall. **$146,032**

National Science Foundation (2012) "Macrofungi Collection Consortium: Unlocking a Biodiversity Resource for Understanding Biotic Interactions, Nutrient Cycling and Human Affairs" Principal Investigator for College of the Atlantic: N. Rajakaruna. **$12,477**

The Department of the Interior, National Park Service (2010) "Catalog Herbarium Specimens at College of the Atlantic to Provide Access for Research and Education" Principal Investigator: N. Rajakaruna. **$16,100**

National Science Foundation (2010) "Collaborative Research: Harnessing the power of herbaria to understand the changing flora of California: A biodiversity hotspot in peril" Principal Investigator for San José State University: N. Rajakaruna. **$55,490**

California Environmental Protection Agency (2009) "Race, ethnicity, and exposure to heavy metals by urban gardeners." Principal Investigator: O'Malley, R.; Research Assistant: J. Gorospe; Technical Advisors: N. Rajakaruna and M. McGowan. **$19,343**

Stanley Smith Horticultural Trust, California Academy of Sciences (2009) "California endemics in an urban garden: developing an internship program in using California native plants in horticulture." Principal Investigators: Lambrecht, S., Rajakaruna, N. and J. Cross. **$19,900**

Maine Space Grant Consortium Seed Research Grant (2009) "Effect of a catastrophic storm surge on the guano-tolerant plant community of Mt. Desert Rock" Principal Investigators: Anderson, J. and N. Rajakaruna. **$5,000**

National Science Foundation (2009) "Is postfire recruitment of chaparral shrubs constrained by local adaptation to soils (serpentine vs sandstone) or microclimates (north vs south slopes)?" Principal Investigator: Rajakaruna, N. **$30,000**

US Forest Service, Region 5 (2009) "Conservation Biology and Fire Ecology of Rare Serpentine Plants of Plumas National Forest, California." **$404,800**. Principal Investigators: Rajakaruna, N. and S. P. Harrison (University of California, Davis).

Junior Faculty Career Development Grant, San José State University (2009) "Evolutionary ecology of *Lasthenia californica* (Asteraceae)." **$1,500**

California State University Research Fund Grant (2008) "Impacts of multiple nutrient element enrichment on native and alien plant species in California's serpentine grasslands: Implications for better management of a threatened habitat." **$7,500**

Maine Space Grant Consortium Research Fellowship (2006) "Geobotany of Maine: exploring plant-soil relations on extreme geoedaphic habitats." **$5,000**

Maine Space Grant Consortium Research Fellowship (2006) Grant to conduct a 2-day workshop on plants that grow on heavy metal-rich soils. **$2,500**

Maine Space Grant Consortium Research Fellowship (2006) "Screening for Metal Tolerance in Lichens and Higher Plants from Mine Spoil." **$5,000**

National Park Service: LL Bean Acadia Research Fellowship (2006) "Conservation Biology of Rare Plants of Acadia National Park: A proposal to conduct ecological and physiological studies to better inform rare plant monitoring and management protocols." **$5,000**

National Park Service (2006) "Assessment of natural resources and watershed conditions in and adjacent to Acadia National Park." Principal Investigators: P. Vaux (U of Maine), S. Nelson (U of Maine), N. Rajakaruna (College of the Atlantic), J. Peckenhem (U of Maine), K. Bell (U of Maine), G. Mittlehauser (Humboldt Field Research Institute), B. Kopp (USGS). **$49,987**

Maine Space Grant Consortium EPSCoR Collaborate Seed Grant Program (2005) "Extremophile Botany: Evolutionary and applied ecology of plants on heavy metal-rich, extreme soils of Hancock County, Maine." **$17,000**

Maine Sea Grant Program Development Fund (2005) "Metalliferous Plants of the Callahan Mine: Plant Diversity, Heavy Metal Tolerance, and Potential for Phytoremediation." **$5,600**

Maine Space Grant Consortium Research Fellowship (2005) "Physiology, Evolution and Applied Ecology of Plants on Metal-Rich Soils." **$2,500**

Maine Space Grant Consortium Research Fellowship (2005) "Geobotanical Explorations on Metal-Rich Extreme Soils." **$2,500**

National Science and Engineering Research Council (NSERC) Canada Postdoctoral Research Fellowship (2003-2004) "Community assembly on serpentine chaparral in California." **$70,000**

Additional Teaching Experience

Instructor: Summer Course, College of the Atlantic, Bar Harbor, Maine. Course: Field Botany: Plants of New England (Aug 2-15, 2020; course postponed to 2021 because of the COVID-19 pandemic)

Instructor: Summer Course, College of the Atlantic, Bar Harbor, Maine. Course: Field Botany: Plants of New England (July 27-Aug 10, 2019)

Instructor: Summer Courses for K-12 Teachers, College of the Atlantic, Bar Harbor, Maine. Course: Field Botany (July 01-05, 2013)

Instructor: Summer Courses for K-12 Teachers, College of the Atlantic, Bar Harbor, Maine. Course: Field Botany (July 13-26, 2008)

Instructor: Summer Courses for K-12 Teachers, College of the Atlantic, Bar Harbor, Maine. Course: Woody Plants of Mount Desert Island (July 9-22, 2006)

Instructor: From Cell to System, a Collaborative Science Learning Initiative for 6-12 Teachers, College of the Atlantic, Bar Harbor, Maine. Workshop title: Plants on metal-rich soils (August 23-25, 2005)

Instructor: Downeast Senior College, University College at Ellsworth. Course: Botanical Hikes, Trees in the Four Seasons. A field botany course aimed at teaching trees and shrubs of Maine to senior citizens (2004-2005, twice a month)

Teaching Assistant: Departments of Botany & Soil Science, University of British Columbia, Canada. Courses: Seed Plant Taxonomy, Introduction to Vascular Plants, Plants and People, Introduction to Soil Science. Supervisors: Shona Ellis (Botany), Maja Krzic (Soil Science) 1996-2002; 15 hrs. per week

Teaching Assistant in Geobotany: Siskiyou Field Institute, Cave Junction, Oregon, USA. Supervisors: A. R. Kruckeberg (Univ. of Washington), R. G. Coleman (Stanford University). 06/99; 1 week, full-time

Relevant Work Experience

Botanical Consultant: Pottinger & Gaherty Environmental Consultants Ltd., Vancouver, Canada. Risk assessment study of copper mine tailings. 02/00-04/00; part-time

Biodiversity Consultant: Sinharaja Village Trust, Sinharaja Rainforest, Sri Lanka. Conservation and ecodevelopment. Supervisor: Dr. Larry Simon, Brandeis University and Ms. Neela de Zoysa, University of Massachusetts, Amherst. 12/98-04/99; full-time

Research Assistant in Plant Eco-Physiology: Department of Organismic and Evolutionary Biology, Harvard University, MA, USA. Supervisor: Dr. Fakhri A. Bazzaz, Harvard University. 94-95; full-time

Botanist: Acadia National Park, Bar Harbor, ME, USA. Updated field information on rare and endangered plants of Mount Desert Island. Supervisors: Dr. Craig Greene, College of the Atlantic and Ms. Linda Gregory, Acadia National Park. 06-08/93; full-time

Assistant Field Coordinator: Sinharaja Rainforest, Sri Lanka. Established a 25-hectare forest dynamics plot for the Center for Tropical Forest Science, Smithsonian Tropical Research Institute (STRI). Supervisors: Dr. Peter Ashton, Harvard University and Drs. Nimal and Savitri Gunatilleke, University of Peradeniya, Sri Lanka. 08/93-01/94; full-time

Coordinator: *A Field Guide to the Common Trees and Shrubs of Sri Lanka*. Coordinated research and illustrations for the field guide published by Wild Life Heritage Trust, Sri Lanka. Supervisors: Ms. Neela de Zoysa, Harvard University/University of Massachusetts, Amherst and Dr. Mark Ashton, Yale University. 1991-1992; part-time

Peer Reviewed Publications

Humber, A., Pressler, Y., and Rajakaruna, N. 2026. Disturbance-driven shifts in soil microarthropod communities on serpentine outcrops in San Luis Obispo, CA, USA. *Ecological Research* 41(4): e70104. https://doi.org/10.1111/1440-1703.70104

Mulroy, M., Suhr, I., Dart, J., Balderas, E., Raposo, Z., and Rajakaruna, N. 2026. Slow succession: a comparison of the saxicolous lichens of a 50-year-old abandoned chromite mine and a nearby undisturbed ultramafic outcrop. *Ecological Research* 41(4): e70095. https://doi.org/10.1111/1440-1703.70095

Özbey, B. G., Rajakaruna, N., and Reeves, R. D. 2026. Plants of Turkish Ultramafic Areas: Past, Present & Future. *Ecological Research* 41(3): e70067. https://doi.org/10.1111/1440-1703.70067

Fryer, E. R., O'Dell, R., Grossenbacher, D. L., Shon, A., McKinnon, S., and Rajakaruna, N. 2026. Soil, competition, and niche shifts shape the floral mosaic of an annual plant diversity hotspot. *American Journal of Botany* 113(3): e70171. https://doi.org/10.1002/ajb2.70171

Waddington, M. E., Boyd, R. S., and Rajakaruna, N. 2026. Adaptive Significance of Nickel Hyperaccumulation by Plants. *Ecological Research* 41(2): e70053. https://doi.org/10.1111/1440-1703.70053

Hulshof, C. M., Tejero Ibarra, P., Rajakaruna, N., and Palacio, S. 2026. Extreme environments in a world of new extremes. *Ecosphere* 17(2): e70540. https://doi.org/10.1002/ecs2.70540

Mulroy, M., Dart, J., Williams, C. B., Næsborg, R. R., Fryday, A., Johnston, S., Kellman, K., and Rajakaruna, N. 2025. A comparative study of lichen and bryophyte communities on sandstone and ultramafic bedrocks along a maritime gradient in central California. *Journal of Vegetation Science* 36(5): e70072. https://doi.org/10.1111/jvs.70072

Balderas, E., Reese Næsborg, R., Dart, J., Williams, C. B., Mulroy, M., and Rajakaruna, N. 2025. Population assessment and conservation strategies for the Critically Endangered lichen *Sulcaria isidiifera*. *Endangered Species Research* 58: 103-121. https://doi.org/10.3354/esr01436

Fryer, E. R., Bales, N., Shon, A., Huntley, H., McKinnon, S. N., O'Dell, R., and Rajakaruna, N. 2025. Clay affinity and endemism in California's flora. *Madroño* 72(3): 126-156. https://doi.org/10.3120/0024-9637-250016

Ward, D. A., Adhikari, S., Struwig, M., Skikne, S., Fryday, A., Smith, D., and Rajakaruna, N. 2024. Lichen morphospecies diversity and community composition across the Tswalu Kalahari Reserve, South Africa. *South African Journal of Botany* 174: 978-987. https://doi.org/10.1016/j.sajb.2024.10.003

van der Ent, A., Sakaguchi, S., Boyd, R. S., Rajakaruna, N., Pollard, A. J., Mizuno, T., Isnard, S., Gonnelli, C., and Echevarria, G. 2024. Recent advances in the study of serpentine plants and ecosystems: Perspectives from the 10th International Conference on Serpentine Ecology, France. Part II. *Ecological Research* 39(6): 803-808. https://doi.org/10.1111/1440-1703.12530

van der Ent, A., Sakaguchi, S., Boyd, R. S., Rajakaruna, N., Pollard, A. J., Mizuno, T., Isnard, S., Gonnelli, C., and Echevarria, G. 2024. Recent advances in the study of serpentine plants and ecosystems: Perspectives from the 10th International Conference on Serpentine Ecology, France. *Ecological Research* 39(4): 411-415. https://doi.org/10.1111/1440-1703.12499

Botha, D., Barnard, S., Claassens, S., Rajakaruna, N., Venter, A., Ismail, A., Allam, M., and Siebert, S. J. 2024. Soil type and precipitation level have a greater influence on fungal than bacterial diversity in serpentine and non-serpentine biological soil crusts. *Ecological Research* 39(6): 862-878. https://doi.org/10.1111/1440-1703.12500

Fryer, E. R., Mulroy, M., Hodge, C., Eulensen-Wallace, J. E., Dart, J., and Rajakaruna, N. 2024. A preliminary exploration of an understudied lichen flora: Lichens of the basin of Carrizo Plain National Monument, California. *Evansia* 41(2): 35-46. https://doi.org/10.1639/0747-9859-41.2.35

Samojedny, T. J., Balkwill, K., Rajakaruna, N., and Siebert, S. J. 2023. Testing the suitability of portable X-Ray Fluorescence (pXRF) analysis of dried herbarium specimens to detect Ni hyperaccumulators in South Africa. *South African Journal of Botany* 158: 80-83. https://doi.org/10.1016/j.sajb.2023.05.005

Siebert, S. J., Palacio, S., Luzuriaga, A. L., Maggs-Kölling, G., Marais, E., Matesanz, S., Prieto, M., Pueyo, Y., Rajakaruna, N., Sánchez, A. M., and Claassens, S. 2023. GYPWORLD Africa: Setting an agenda for gypsum ecosystem research in southern Africa. *South African Journal of Science* 119(9/10): 15308. https://doi.org/10.17159/sajs.2023/15308

Garnica-Díaz, C., Berazaín Iturralde, R., Cabrera, B., Calderón Morales, E., Felipe Tamé, F. L., García, R., Gómez Hechavarría, J. L., Guimarães, A. F., Medina, E., Paul, A. L. D., Rajakaruna, N., Restrepo, C., Siebert, S. J., van den Berg, E., van der Ent, A., Velasquez, G., and Hulshof, C. M. 2023. Global plant ecology of tropical ultramafic ecosystems. *The Botanical Review* 89(2): 115-157. https://doi.org/10.1007/s12229-022-09278-2

Picó, F. X., Abbott, R. J., Llambi, L. D., Rajakaruna, N., Papadopulos, A. S. T., and Nagy, L. 2022. Introduction to Special Issue: The ecology and evolution of plants in extreme environments. *Plant Ecology & Diversity* 15(5-6): 179-182. https://doi.org/10.1080/17550874.2022.2164703

Samojedny, T. J., Garnica-Díaz, C., Grossenbacher, D. L., Adamidis, G. C., Dimitrakopoulos, P. G., Siebert, S. J., Spasojevic, M. J., Hulshof, C. M., and Rajakaruna, N. 2022. Specific leaf area is lower on ultramafic than on neighbouring non-ultramafic soils. *Plant Ecology & Diversity* 15(5-6): 243-252. https://doi.org/10.1080/17550874.2022.2160673

Salehi-Eskandari, B., Gahrouei, M. S., Boyd, R. S., Rajakaruna, N., and Ghasemi, R. 2022. Physiological responses to lead and PEG-simulated drought stress in metallicolous and non-metallicolous *Matthiola* (Brassicaceae) species from Iran. *South African Journal of Botany* 150: 1011-1021. https://doi.org/10.1016/j.sajb.2022.09.016

Mulroy, M., Fryday, A. M., Gersoff, A., Dart, J., Næsborg, R. R., and Rajakaruna, N. 2022. Lichens of Ultramafic Substrates in North America: A Review. *Botany* 100(8): 593-617. https://doi.org/10.1139/cjb-2021-0187

Fernando, D. R. M., van der Ent, A., Weerasinghe, A. S., Wijesundara, D. S. A., Fernando, G. W. A. R., Fernando, A. E., Iqbal, M. C. M., Miranda, C. H., Gosse, J. M., Samithri, S., and Rajakaruna, N. 2022. Assessment of plant diversity and foliar chemistry on the Sri Lankan ultramafics reveals inconsistencies in the metal hyperaccumulator trait. *Ecological Research* 37(2): 215-227. https://doi.org/10.1111/1440-1703.12282

Adhikari, S., Marcelo-Silva, J., Rajakaruna, N., and Siebert, S. J. 2022. Influence of land use and topography on distribution and bioaccumulation of potentially toxic metals in soil and plant leaves: A case study from Sekhukhuneland, South Africa. *Science of The Total Environment* 806: 150659. https://doi.org/10.1016/j.scitotenv.2021.150659

Naikoo, M. I., Khan, F. A., Noureldeen, A., Rinklebe, J., Sonne, C., Rajakaruna, N., and Ahmad, P. 2021. Biotransfer, Bioaccumulation and Detoxification of Nickel along the Soil-Faba Bean-Aphid-Ladybird Food Chain. *Science of The Total Environment* 785: 147226. https://doi.org/10.1016/j.scitotenv.2021.147226

Yu, A. C., Reinhart, M., Hunter, R., Lu, K., Maikawa, C. L., Rajakaruna, N., Acosta, J. D., Stubler, C., Appel, C., and Appel, E. A. 2021. Seasonal impact of phosphate-based fire retardants on soil chemistry following the prophylactic treatment of vegetation. *Environmental Science & Technology* 55(4): 2316-2323. https://doi.org/10.1021/acs.est.0c05472

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Other Articles

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Woolhouse, S. and N. Rajakaruna. 2009. The SJSU Botany Garden Makeover: Volunteers gather to help restore a native plant garden. *The Blazing Star*, California Native Plant Society, Santa Clara Valley Chapter Newsletter, March-April 2009.

Rajakaruna, N. 2003. The common goldfields (*Lasthenia californica* s.lat.) of California: A species complex for the study of adaptive differentiation and parallel speciation. *Botanical Electronic News* 313.

Rajakaruna, N. 2000. Goldfields in the world of serpentine. *Botanical Electronic News* 245.

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Invited Talks

2026

Fulbright U.S. Scholar and Student Programs: Insights from a former US Scholar Alumni Ambassador. A presentation at Botany 2026, Botanical Society of America Annual Conference, Tucson, AZ (Aug 4)

Fulbright U.S. Student Program: Open Study/Research & English Teaching Assistant Awards. A Botany360 webinar to the Botanical Society of America, Early Career Professional Development Program (June 16)

Fulbright U.S. Scholar & Specialist Programs: Insights from a former Alumni Ambassador. A Botany360 webinar to the Botanical Society of America, Early Career Professional Development Program (June 15)

Life on Harsh Soils: A World View. A presentation at the International Engagement Symposium, International Center, California Polytechnic State University, San Luis Obispo (May 6)

Fulbright Application: Tips & Best Practices. Strategies for Preparing a Successful U.S. Scholars Fulbright Application. Panel presentation at the UB Fulbright Faculty Seminar, University at Buffalo, NY (May 6)

Plants of Rock Outcrop Communities: Models for Ecological, Evolutionary, and Applied Research. College of Agriculture, Food, & Environmental Sciences (CAFES) Seminar Series, California Polytechnic State University, San Luis Obispo, CA (May 1)

Introduction to the Fulbright U.S. Scholar Program. Panel presentation at the UB Fulbright Faculty Seminar, University at Buffalo, NY (March 3)

Serpentine: Evolution and Ecology of a Model System. Invited presentation for California Botanic Garden's Botany Seminar Series, Claremont, CA (Feb 12)

2025

Serpentine: Evolution and Ecology of a Model System. Invited presentation at the International Conference on Natural Sciences & Biotechnology (Kliment's Days 2025), Faculty of Biology 'St. Kliment Ohridski,' Sofia University, Bulgaria (November 7)

Evolution on Harsh Soils: Factors & mechanisms contributing to the origin & maintenance of species & populations found on rock outcrops. Guest lecture for Geoecology Module (OMSE616), Unit for Environmental Sciences and Management, North-West University, Potchefstroom, South Africa (May 13)

Serpentine Ecology: Evolution of a Discipline. A keynote address at the 11th International Conference on Serpentine Ecology, Kyoto Institute, Library and Archives, Kyoto, Japan (June 14)

2024

Becoming a birder in South Africa. A presentation to the Morro Coast Audubon Society, San Luis Obispo, CA (Nov 18)

The hunt for plants that clean up soil and extract precious metals. A presentation at the One Health Symposium, California Polytechnic State University, San Luis Obispo, CA (Nov 3)

Why serpentine rocks: serpentine plant-soils relations in California and beyond. A presentation to the Master Gardeners of San Luis Obispo County, CA (October 9)

The Fulbright Program: opportunities for U.S. citizens. Co-Organizer and Presenter, Alumni Panel Discussion, Cuesta College, San Luis Obispo, CA (October 4)

Fulbright Opportunities for South African Students and Faculty. Presentation and workshop for the Unit for Environmental Sciences and Management, North-West University, Potchefstroom, South Africa (August 7, 8)

Serpentine: Evolution and Ecology of a Model System. Seminar for the students and faculty at the Unit for Environmental Sciences and Management, North-West University, Potchefstroom, South Africa (August 1)

Serpentine: Evolution and Ecology of a Model System. Seminar for the students and faculty at the School of Animal, Plant & Environmental Sciences, University of the Witwatersrand, Johannesburg, South Africa (July 24)

Evolution on Harsh Soils: Factors & mechanisms contributing to the origin & maintenance of species & populations found on rock outcrops. Guest lecture for Geoecology Module, Unit for Environmental Sciences and Management, North-West University, Potchefstroom, South Africa (July 17)

Systematic elemental screening of herbarium and field plants to create a comprehensive southern African plant inventory of 'metal' hyperaccumulators. A presentation for a workshop on "pXRF to discover plants for phytoremediation and phytomining in southern Africa." Unit for Environmental Sciences and Management, North-West University, Potchefstroom, South Africa (July 10)

Serpentine Ecology: Evolution of a Discipline. A presentation for a workshop on "pXRF to discover plants for phytoremediation and phytomining in southern Africa." Unit for Environmental Sciences and Management, North-West University, Potchefstroom, South Africa (July 8)

Fulbright U.S. Scholar Program: Insights from an Alumni Ambassador. A presentation and discussion session at Botany 2024, Botanical Society of America Annual Meeting, Grand Rapids, MI (June 18)

Serpentine soils and plants of San Luis Obispo. A presentation in the field for a nature journalism workshop organized by the Morro Coast Audubon Society, San Luis Obispo, CA (June 1)

Serpentine Soil-Plant Relations at Irish Hills, San Luis Obispo, California. A presentation in the field for Master Gardeners of San Luis Obispo County (May 17)

Fulbright U.S. Scholar Program: Insights from an Alumni Ambassador. A Botany360 webinar to the Botanical Society of America, Early Career Professional Development Program (April 29)

2023

Travels of an 'unrooted' Botanist: Seeing the world one Fulbright at a time. A presentation to faculty and staff on Fulbright opportunities. International Education Week, Cal Poly International Center, San Luis Obispo, CA (Nov 17)

Serpentine: a model habitat for ecological, evolutionary and applied research. A seminar to Master Gardeners of San Luis Obispo County, CA (Nov 9)

Serpentine: Evolution and Ecology of a Model System. A presentation to students, staff, and faculty at the Faculty of Natural Sciences, Department of Botany and Zoology, Stellenbosch University, South Africa (May 31)

Serpentine: Evolution and Ecology of a Model System. A presentation to students, staff, and faculty at the School of Life Sciences, Department of Biodiversity and Conservation Biology, The University of Western Cape, South Africa (May 29)

Serpentine: Evolution and Ecology of a Model System. A presentation to students, staff, and faculty at the School of Life Sciences, College of Agriculture, Engineering and Science, The University of KwaZulu-Natal, Pietermaritzburg Campus, South Africa (May 24)

Opportunities for undergraduate, graduate, and postdoctoral education in the United States. A presentation to the students and staff at the University of Antananarivo, Madagascar (May 8)

Opportunities for undergraduate and graduate studies in the United States. A presentation to high school, undergraduate, and graduate students. American Corner, Antananarivo, Madagascar (May 16)

Serpentine: Evolution and Ecology of a Model System. A presentation to students and staff at the Madagascar Biodiversity Center, Antananarivo, Madagascar (May 10)

Rock Outcrop Plant Communities: Model Habitats for Ecological, Evolutionary, & Applied Research. A presentation to the staff and students at the Missouri Botanical Garden of Madagascar, Antananarivo, Madagascar (May 5)

Life on the Rocks: What plants on 'harsh' soils can teach us about diversity, ecology, evolution, and conservation and restoration practices. A seminar for Biology students at the University of Antananarivo, Madagascar (May 4)

Travels of a Naturalist: Following my passion for natural history from Sri Lanka to North America and Beyond. A presentation to Birdlife Wesvaal, Bird Life South Africa, Elgro Hotel, Donderdag, Potchefstroom, South Africa (April 13)

Serpentine: Evolution and Ecology of a Model System. A presentation to the Faculty of Natural and Agricultural Sciences, North-West University, Mafikeng Campus, South Africa (April 4)

Serpentine: Evolution and Ecology of a Model System. A presentation to the Department of Biodiversity, University of Limpopo, South Africa (March 31)

Serpentine: Evolution and Ecology of a Model System. A presentation to the Department of Biological Sciences, University of Cape Town, South Africa (March 22)

Travels of a Botanist: Following a passion for plants from Sri Lanka to North America, South Africa, and beyond. A presentation to Environmental Botany (PLKS 211), North-West University, Potchefstroom, South Africa (March 16)

Serpentine: Evolution and Ecology of a Model System. A presentation to the Department of Plant and Soil Science, University of Pretoria, South Africa (Feb 28)

Serpentine: Evolution and Ecology of a Model System. A presentation to the South African National Biodiversity Institute (SANBI), National Botanical Garden, Pretoria, South Africa (Feb 27)

2022

In pursuit of fun: Following my passion for natural history from Sri Lanka to North America and Beyond. Keynote presentation on ENVIRA Day, Unit for Environmental Sciences and Management, North-West University, Potchefstroom, South Africa (Dec 1)

Life on the Rocks: What plants on harsh soils can teach us about diversity, ecology, evolution, and conservation and restoration practices. A Zoom presentation to Prof. María Prieto Álvaro's Plant Diversity class (Biodiversidad de plantas), Department of Biology and Geology, Universidad Rey Juan Carlos, Madrid, Spain (Nov 29)

Serpentine Geoecology: A World View. A presentation to 3rd and 4th year Geology students at the Unit for Environmental Sciences and Management, North-West University, Potchefstroom South Africa (Oct 13)

Life on the Rocks: Geoecological collaborations with Prof. Stefan Siebert and colleagues, North-West University, Potchefstroom, South Africa. A presentation at Gypworld Symposium, Gobabeb Desert Research Institute, Namibia (Aug 23)

Why Serpentine Rocks: Serpentine Plant-Soil Relations in California and Beyond. A Zoom presentation to the San Luis Obispo Botanical Garden, San Luis Obispo, CA (June 11)

Why Serpentine Rocks: Serpentine Plant-Soil Relations in California and Beyond. A Zoom presentation to the Five Cities Orchid Society, San Luis Obispo, CA (June 9)

The soil-plant relationship: How do soils influence the diversity and ecology of plants. Guest Lecture and Field Trip for BIO 326 (Plant Ecology), California Polytechnic State University, San Luis Obispo, CA (May 12, 13)

Life on the Rocks: Serpentine as a model habitat for ecological research. Guest Lecture for BIO 222 (Biodiversity of California), California Polytechnic State University, San Luis Obispo, CA (May 4)

2021

Opportunities for undergraduate, graduate and postdoctoral education in the United States. Virtual seminar to the Faculty of Allied Health Sciences, Ruhuna University, Sri Lanka (September 17)

Serpentine Plant-Soil Relations: A World View. A Zoom presentation for Love Where You Live Webinar Series: Why Serpentine Rocks Part 1. Klamath-Siskiyou Wildlands Center, Ashland, OR (July 15)

Serpentine Plant-Soil Relations: A World View. A Zoom presentation at the Spring Wildflower Show of the North Coast Chapter of the California Native Plant Society (April 25)

Life on the Rocks: What plants on harsh substrate 'islands' can teach us about diversity, ecology, evolution, and conservation and restoration practices. A Zoom presentation for the Department of Biological Sciences, Wichita State University, Kansas (April 5)

2020

Journey to the West: From Sri Lanka to Cal Poly. A Zoom presentation for parents of freshmen during the Mustang Family Week, California Polytechnic State University, San Luis Obispo, CA (October 24)

Life on the Rocks: What plants on harsh substrate 'islands' can teach us about diversity, ecology, evolution, and conservation and restoration practices. Keynote Presentation at the session on Plant life on atypical substrates in Mediterranean-Type Ecosystems, MEDECOS 2020 (International Society of Mediterranean Ecology), Langebaan, Western Cape, South Africa. September 7-12 (rescheduled for September 6-10, 2021 due to COVID-19 travel disruptions)

Agromining: a green technology to clean the environment and make money. A Zoom presentation to the Zero Waste Club, California Polytechnic State University, San Luis Obispo, CA (May 7)

2019

Evolutionary Ecology of Serpentine Plants. A seminar for the Department of Botany, Institute of Natural Sciences, Ural Federal University, Yekaterinburg, Russia (June 20)

Life on the Rocks: Plants on Serpentine and Other 'Harsh' Rock Outcrop Plant Communities. A presentation to the California Native Plant Society, Santa Clara Valley Chapter, San Jose, CA (May 17)

Serpentine: A model habitat for ecological, evolutionary and applied research. Central Coast Biological Society, Spring Meeting. 7 Sisters Brewing Company, San Luis Obispo (May 14)

The Soil-Plant Relationship: How do soils influence the ecology of plants and their communities. A guest lecture for the *Plant Ecology* course (BOT 326) at California Polytechnic State University, San Luis Obispo, CA (Jan 22)

2018

Travels of a Naturalist: Close encounters with plants and animals from Sri Lanka to North America and beyond. A seminar to students and staff of Cerro Vista Dormitory, California Polytechnic State University Housing, San Luis Obispo, CA (May 14)

Travels of a Botanist: Following a passion for plants from Sri Lanka to North America and beyond. A seminar to the Horticultural Club, Department of Horticulture and Crop Science, California Polytechnic State University, San Luis Obispo, CA (May 9)

Plants on Harsh Soils: Model for Evolutionary Studies. Guest lecture for Bio 414 (*Evolution*), Biological Sciences Department, California Polytechnic State University, San Luis Obispo, CA (Apr 2)

Soil and Biota of Serpentine: A World View. A Presentation to California Native Plant Society, Channel Islands Chapter Meeting at Sedgwick Preserve, University of California, Santa Barbara (May 12)

The Ecology of Rock Outcrop Plant Communities. A guest lecture for the *Ecology* course (NR 306) at California Polytechnic State University, San Luis Obispo, CA (Feb 14)

Travels of a Botanist: Following my passion for plants from Sri Lanka to North America and beyond. A guest lecture for the *Environmental Science Club* at California Polytechnic State University, San Luis Obispo, CA (Feb 8)

The Ecology of Plants of Serpentine and Other Harsh Soils. A guest lecture for the *Plant Ecology* course (BOT 326) at California Polytechnic State University, San Luis Obispo, CA (Jan 23)

2017

Travels with a geobotanist: Plant life on serpentine and other harsh soils. California Native Plant Society, San Luis Obispo Chapter Meeting (December 07)

Flowers. A guest lecture for the *Biology of Sex* course at California Polytechnic State University, CA, USA (August 17)

Rock Outcrop Plant Communities: Model Habitats for Ecological, Evolutionary, and Applied Research. Seminar to Department of Botany, University of Peradeniya, Sri Lanka (May 19)

Serpentine: A model habitat for ecological, evolutionary, and applied research. A seminar to the Department of Plant Sciences, University of Colombo. Seminar organized by Plant Sciences Special students as part of a Mini Symposium on Serpentine Ecology (May 16)

Travels of a Botanist: Following my passion for plants from Sri Lanka to North America and Beyond. Asian and Pacific American Heritage Month Speaker Program, American Corner, Kandy, Sri Lanka (May 12)

Geobotany: Interdisciplinary Studies on the Geology-Plant Relationship. Public lecture for the Geological Society of Sri Lanka. Department of Geology, University of Peradeniya, Sri Lanka (May 4)

Phytoremediation and Phytomining: Green technologies for cleaning contaminated soils and mining precious metals. Guest lecture for the Department of Chemistry, Faculty of Science, University of Ruhuna, Sri Lanka (April 25)

Close Encounters with the Floral Kind: Following my passion for plants from Sri Lanka to North America. Seminar for first year botany students, Department of Botany, Faculty of Science, University of Ruhuna, Sri Lanka (April 24)

Opportunities for Undergraduate, Graduate, and Postdoctoral Education in the United States. Seminar for students and staff, Faculty of Science, University of Ruhuna, Sri Lanka (April 24)

Plants of 'harsh' soils: Model systems for ecological, evolutionary & applied research. Seminar for students and faculty, Faculty of Applied Sciences, Rajarata University, Sri Lanka (March 30)

Opportunities for Undergraduate, Graduate, and Postdoctoral Education in the United States. Seminar for students at the Faculty of Applied Sciences, Rajarata University, Sri Lanka (March 30)

Plants of 'extreme' soils: Models for ecological, evolutionary & applied research. Special seminar at the National Institute of Fundamental Studies, Kandy, Sri Lanka (March 28)

My life as a biologist: Following my passion for nature from Sri Lanka to North America and Beyond. A presentation for students (Life Sciences) Aligarh Muslim University, Aligarh, India (March 2)

Geoecology: Interdisciplinary studies on the substrate-plant relationship. Guest lecture for the Department of Geography, Aligarh Muslim University, Aligarh, India (March 2)

Phytoremediation and Phytomining: Green technologies for cleaning contaminated soils and mining precious metals. Guest lecture for the Department of Civil Engineering, Aligarh Muslim University, Aligarh, India (March 1)

Opportunities for Undergraduate, Graduate, and Postdoctoral Education in the United States. Presentation for students, Aligarh Muslim University, Aligarh, India (February 27)

Serpentine: Evolutionary ecology of a model system. Guest lecture for the Department of Plant Protection, Aligarh Muslim University, Aligarh, India (February 25)

My life as a biologist: Following my passion for nature from Sri Lanka to North America. A presentation for students (ages 13-16) at the Blossoms School, Aligarh, India (February 25)

Plants of rock outcrop communities: Models for ecological, evolutionary, and applied research. Guest lecture for the Department of Wildlife Sciences, Aligarh Muslim University, Aligarh, India (February 23)

The importance of botanical collections for education and research. Seminar for the Department of Museology, Aligarh Muslim University, Aligarh, India (February 22)

Plants of 'harsh' soils: Models for ecological, evolutionary & applied research. University extension lecture at the Department of Botany, Aligarh Muslim University, Aligarh, India (February 21)

Life as a botanist in the United States. Presentation to the students and staff at the Department of Botany, Aligarh Muslim University, Aligarh, India (February 20)

Geoecology: Ecological, Evolutionary, and Applied Studies on Plants of 'Harsh' Soils. Guest lecture for the Department of Geography, Faculty of Arts, University of Peradeniya, Sri Lanka (February 02)

Plants of 'extreme' soils: Model systems for ecological, evolutionary, and applied research. Guest lecture at the 4th Ruhuna International Science and Technology Conference, University of Ruhuna, Matara, Sri Lanka (January 26)

Close encounters with the non-human kinds: Life as a biologist during and after Trinity. A seminar for science students and faculty, Trinity College, Kandy, Sri Lanka (January 23)

2016

Opportunities for undergraduate and graduate education in the United States. Seminar for undergraduate students, faculty, and staff, Open University of Sri Lanka, Nawala, Colombo, Sri Lanka (November 25)

Phytoremediation and Phytomining: Green technologies for cleaning contaminated soils and mining precious metals. Seminar for the Botanical Society, Open University of Sri Lanka, Nawala, Colombo (November 9)

Life as a botany student and professor in the United States. Presentation to Faculty of Natural Sciences, Open University of Sri Lanka, Nawala, Colombo (November 9)

Plant speciation: Edaphic specialists as model systems for studies in evolution. Two guest lectures for the course on Evolution, College of the Atlantic, Bar Harbor, ME, USA (April 19, 20)

Plant adaptations to a Mediterranean climate. Seminar for the Biological Sciences Department, California Polytechnic State University, San Luis Obispo, CA, USA (January 22)

The edaphic factor in California's Plant Diversity: Species to Communities. Seminar for the Biological Sciences Department, California Polytechnic State University, San Luis Obispo, CA, USA (January 21)

2015

Phytoremediation and Phytomining: Green technologies for cleaning contaminated soils and mining precious metals. Seminar for the AP Chemistry Class, Mount Desert Island High School, Bar Harbor, ME, USA (June 18)

Serpentine: Evolutionary ecology of a model system. Seminar for the School of Biology and Ecology, University of Maine, Orono, ME, USA (February 13)

2014

Phytoremediation and Phytomining: Green technologies for cleaning contaminated soils and mining precious metals. Seminar for the Institute of Natural Sciences, Ural Federal University, Yekaterinburg, Russia (October 24)

Ecological Speciation: Case studies of edaphic differentiation from the California flora. Seminar for the Institute of Natural Sciences, Ural Federal University, Yekaterinburg, Russia (October 23)

Edible Botany: Exploring plant biology through plants we eat. Guest lecture for biology students at the Institute of Natural Sciences, Ural Federal University, Yekaterinburg, Russia (October 21)

Serpentine: A model for evolutionary studies. Invited keynote presentation at the 8th International Conference on Serpentine Ecology, Sabah, Malaysia (June 10)

Phytoremediation and Phytomining: Green technologies for cleaning contaminated soils and mining precious metals. Seminar for the Department of Agriculture, University of Peradeniya, Sri Lanka (March 04)

Phytoremediation: Using plants to clean metal-contaminated sites. Seminar for the Rotary Club of Kandy Metropolitan, Sri Lanka. The Queen's Hotel, Kandy, Sri Lanka (January 29)

2012

Parallel Speciation in the *Lasthenia californica* complex (Asteraceae). Seminar for Andrew Hendry's Laboratory, Department of Biology, McGill University, Montreal, Canada (June 26)

The 22nd V. M. Goldschmidt Conference 'Earth in Evolution.' Session on Critical Zone Processes: Their Role in Ecology and Evolution. Keynote Address titled 'The Influence of 'Extreme' Geologies and Substrates on Plant Life in North America,' 24-29 June in Montreal, Canada (June 25)

Ecological Speciation: Case Studies of Edaphic Differentiation from the California Flora. Seminar for the Materials Research Department, iThemba Laboratory for Accelerator Based Sciences, National Research Foundation, South Africa (February 20)

The edaphic factor in the origin of plant species: case studies of ecological speciation from the California flora. Seminar for the School of Environmental Sciences and Development, North-West University, Potchefstroom Campus, South Africa (February 07)

Edaphic Islands: Model Settings for Biodiversity Studies. Seminar for honors/graduate students of the School of Environmental Sciences and Development, North-West University, Potchefstroom Campus, South Africa (February 08)

2009

Plant reproduction and development. Two guest lectures in Biology 96A (Foundations of Biodiversity), San José State University, San José, CA, USA

Plant adaptations to land. Guest Lecture in Biology 96A (Foundations of Biodiversity), San José State University, San José, CA, USA

Plants with mettle: Lives of metallophytes. Lecture for San José State University Alumni Association's Classes without Quizzes Seminar Sessions. San José State University, San José, CA, USA

Edaphic differentiation in the *Lasthenia californica* (Asteraceae) complex: a model for the study of parallel speciation. Guest Lecture in Biology 218 (Evolution), San José State University, San José, CA, USA

Edaphic differentiation in California's flora: Case Studies. Seminar Series, Jasper Ridge Biological Preserve, Stanford University, Stanford, CA, USA

Adaptation below-ground: Key to plant diversity in California. Department of Biological Sciences, Graduate Seminar Series, San José State University, San José, CA, USA

Edaphic differentiation: species to communities. Department of Ecology and Evolutionary Biology. University of California, Santa Cruz, CA, USA

2008

The Plant-Soil Relationship: Ecology, Evolution, and Applied Ecology. Plant Biology (Bio 1) Guest Lecture. San José State University, San José, CA, USA

Edaphic Islands of California: Model settings for the study of plant ecology and evolution. California Native Plant Society, Shoup Garden House, Los Altos, CA, USA

The edaphic factor in plant diversity: species to communities. Department of Biological Sciences, San José State University, San José, CA, USA

Plant ecology of serpentine soils of North America. Humboldt Field Research Institute, Steuben, ME, USA

2007

Botanizing on kooky soils: encounters with plants with mettle. Human Ecology Forum, College of the Atlantic, Bar Harbor, ME, USA

2006

Plants on extreme soils: models for studies in evolutionary and applied ecology. Department of Biology Seminar Series, Colby College, ME, USA

2005

Plant-soil relations in the *Lasthenia californica* complex (Asteraceae): a model for studies in evolutionary ecology. Department of Biological Sciences Seminar Series, Auburn University, Auburn, AL, USA

Plants on extreme soils: evolution to remediation. Humboldt Field Research Institute, Steuben, ME, USA

Ecology of metal hyperaccumulation and the emerging field of phytoremediation. Postgraduate Institute of Science, Department of Botany, The University of Peradeniya, Sri Lanka

Plants on Extreme Soils: A Model for Studies in Plant Evolution. Department of Botany, The University of Peradeniya, Sri Lanka

From Cell to System, a Collaborative Science Learning Initiative for K-6 Teachers. Topic: Plants on Extreme Soils: A model for research from cell to ecosystem. College of the Atlantic, Bar Harbor, ME, USA

Parallel Speciation in *Lasthenia californica* (Asteraceae). The Department of Biological Sciences Seminar Series. University of Maine, Orono, ME, USA

2004

Edaphic races in the *Lasthenia californica* complex (Asteraceae): A case for parallel speciation. California Botanical Society Lecture Series. University of California, Berkeley, CA, USA

Plant Diversity: Speciation to Conservation. Keene State College, Keene, NH, USA

Edaphic differentiation in the *Lasthenia californica* complex (Asteraceae): A model for the study of adaptive evolution and parallel speciation. Ecology and Evolution Lunch Bunch Seminar Series. University of California, Riverside, CA, USA

Plant Diversity: Speciation to Conservation. College of the Atlantic, Bar Harbor, ME, USA

2003

Edaphic differentiation in the *Lasthenia californica* complex (Asteraceae): A model for the study of adaptive evolution and parallel speciation. The Department of Biological Sciences Seminar Series, University of Southern Mississippi, MS, USA

The edaphic factor in the origin of species. The Coleman Symposium "Serpentine and serpentinites: mineralogy, petrology, geochemistry, ecology, geophysics, and tectonics." Stanford University, CA, USA

Edaphic differentiation in the *Lasthenia californica* complex (Asteraceae): Building a case for parallel speciation. Ecology and Evolutionary Biology Seminar Series. University of California, Santa Cruz, CA, USA

Edaphic differentiation in the *Lasthenia californica* complex (Asteraceae): Building a case for parallel speciation. EcoEvo Seminar Series. Department of Biological Sciences, Stanford University, CA, USA

1997

A study on the possible edaphic influence on population differentiation of *Lasthenia californica*. Department of Soil Science, The University of British Columbia, Vancouver, BC, Canada

Conference Presentations

2026

Ward, D. A., **M. Struwig**, S. Adhikari, A. Fryday, P. Strauss, N. Rajakaruna. 2026. Lichen diversity, community composition, and habitat associations in Grootbos Private Nature Reserve, South Africa. Poster presented at the South African Association of Botanists (SAAB) Annual Conference, University of Mpumalanga, South Africa (July 6-10)

Sullivan, E., Peel, S., Humber, A., Rajakaruna, N. and Y. Pressler. 2026. Soil mesofauna as bioindicators in passively restored post-mining serpentine ecosystems. Poster presented at the California Society of Ecological Research (SERCAL) Conference, Fortuna, CA (May 18-20)

Sullivan, E., Peel, S., Humber, A., Rajakaruna, N. and Y. Pressler. 2026. Soil mesofauna as bioindicators in passively restored post-mining serpentine ecosystems. Poster presented at the College of Agriculture, Food, and Environmental Sciences (CAFES) Spring Research Symposium, California Polytechnic State University, San Luis Obispo, CA (May 13)

Galloway, J., K. Murawska-Wlodarczyk, T. Wlodarczyk, A. Paul, A. Koss, N. Rajakaruna, A. Babst-Kostecka. Smart Selection for Phytoextraction: Environmental Drivers of Plant Reproduction in *Streptanthus polygaloides* (Brassicaceae). A poster presentation at BOTANY 2026: Biodiversity at the Boundaries. Botanical Society of America Annual Meeting, Tucson, Arizona (Aug 1-5)

Nolos, R., A. Paul, J. Galloway, K. Murawska-Wlodarczyk, T. Wlodarczyk, N. Rajakaruna, R. O'Dell, A. Babst-Kostecka. Population-level variation in nickel tolerance and accumulation in *Streptanthus* species: Implications for phytomining strategies. An oral presentation at BOTANY 2026: Biodiversity at the Boundaries. Botanical Society of America Annual Meeting, Tucson, Arizona (Aug 1-5)

Paul, A., T. Wlodarczyk, K. Murawska-Wlodarczyk, T. Torrey, N. Rajakaruna and A. Babst-Kostecka. Transforming herbarium collections into a discovery engine for hyperaccumulator plants, with key implications for the Southwest U.S. An oral presentation at BOTANY 2026: Biodiversity at the Boundaries. Botanical Society of America Annual Meeting, Tucson, Arizona (Aug 1-5)

Paul, A., T. Wlodarczyk, K. Murawska-Wlodarczyk, T. Torrey, M. Silva, N. Rajakaruna and A. Babst-Kostecka. Developing a National Open-Access Database of Metal-Accumulating Plants for Phytomining, with Implications for Phytoremediation. An oral presentation at the 19th International Phytotechnologies Conference, Providence, RI (Oct 26-28)

Galloway, J., K. Murawska-Wlodarczyk, T. Wlodarczyk, A. Paul, A. Koss, N. Rajakaruna, A. Babst-Kostecka. Smart Selection for Phytoextraction: Environmental Drivers of Plant Reproduction in *Streptanthus polygaloides*. An oral presentation at the ENViSion Research Symposium, Department of Environmental Science at the University of Arizona, Tucson, AZ (March 26)

2025

Galloway, J., K. Murawska-Wlodarczyk, T. Wlodarczyk, A. Paul, A. Koss, N. Rajakaruna, A. Babst-Kostecka. Environmental Drivers of Nickel Hyperaccumulation and Reproduction in *Streptanthus polygaloides*. Poster presented at The Society for Mining, Metallurgy & Exploration (SME) Conference, Tucson, AZ (Dec 7-8). Third place award in poster category.

Paul, A., T. Wlodarczyk, A. Koss, R. Muir, N. Rajakaruna, A. Babst-Kostecka. Systematic Elemental Screening of Herbarium Specimens to Create a Comprehensive U.S. Inventory for Metal Hyperaccumulators. Poster presented at The Society for Mining, Metallurgy & Exploration (SME) Conference, Tucson, AZ (Dec 7-8)

Fryer, E. R., N. Bales, A. Shon, H. Huntley, McKinnon, S., R. E. O'Dell, and N. Rajakaruna. 2025. Clay Endemism and Affinity in California's Flora. California Botanical Society 30th Graduate Student Symposium, San Luis Obispo, California, USA (April 5)

Galloway, J., Murawska-Wlodarczyk, K., Wlodarczyk, T., Paul, A., Barefield, C., Koss, A., Rajakaruna, N., Babst-Kostecka, A. (2025) "Exploring nickel hyperaccumulation in serpentine soils: applications and approaches using *Streptanthus polygaloides*". ENViSion Symposium, University of Arizona, Tucson, USA (March 27)

Butler, M., K. Nelson, N. Rajakaruna. Modeling the effects of climate change on an endangered serpentine seep endemic from California's central coast. Poster presented at the 11th International Conference on Serpentine Ecology, Kyoto Institute, Library and Archives, Kyoto, Japan (June 13-17)

Paul, A., **T. Wlodarczyk**, C. Richardson, P. Kushwaha, N. Rajakaruna, A. Van der Ent, and A. Babst-Kostecka. Systematic elemental screening of herbarium and field plants: An overview of an ongoing U.S. inventory of metal hyperaccumulators. Paper presented at the 11th International Conference on Serpentine Ecology, Kyoto Institute, Library and Archives, Kyoto, Japan (June 13-17)

Suhr, I., **M. Mulroy**, and N. Rajakaruna. Lichen recolonization of a chromite mine after 80 years. Poster presented at the 11th International Conference on Serpentine Ecology, Kyoto, Japan (June 13-17)

Mulroy, M., and N. Rajakaruna. Cryptogam diversity on ultramafic outcrops in central California, USA: Insights from a quantitative, comparative sampling approach. Paper presented at the 11th International Conference on Serpentine Ecology, Kyoto Institute, Library and Archives, Kyoto, Japan (June 13-17)

Balderas, E., M. Mulroy, and N. Rajakaruna. Characterizing the lichen and bryophyte communities in the New Idria serpentinite mass, San Benito County, California, USA. Poster presented at the 11th International Conference on Serpentine Ecology, Kyoto Institute, Library and Archives, Kyoto, Japan (June 13-17)

Humber, A., Y. Pressler, and N. Rajakaruna. Microarthropods as indicators of soil functional diversity on and off disturbed serpentine outcrops in San Luis Obispo, California, U.S.A. Poster presented at the 11th International Conference on Serpentine Ecology, Kyoto Institute, Library and Archives, Kyoto, Japan (June 13-17)

Gervais-Bergeron, B. *et al*. (20+ authors, including, N. Rajakaruna). Refining the global inventory of hyperaccumulator plants: Phylogenetic, ecological, and geochemical insights. Paper presented at the 11th International Conference on Serpentine Ecology, Kyoto Institute, Library and Archives, Kyoto, Japan (June 13-17)

2024

van Staden, N., F. Siebert, G. van Zijl, N. Rajakaruna, H. van der Merw, S. J. Siebert. The hills are alive: Edaphic properties act as drivers of plant diversity in Griqualand West. Poster presented at the 19th Kimberley Biodiversity Research Symposium, South Africa (September 18)

Botha, D., Barnard, S., Claassens S., Rajakaruna, N., Venter, A., Ismail, A, Allam, M., and Siebert, S.J. Bacterial and fungal diversity of serpentine and non-serpentine biocrusts across two South African climatic regions. Poster presented at the 19th International Symposium on Microbial Ecology, Cape Town, South Africa (August 18-23).

Balderas, E., R. R. Næsborg, J. Dart, and N. Rajakaruna. *Sulcaria isidiifera*: Status and conservation methods for a critically endangered lichen on the central coast of California. California Lichen Society Annual Meeting, Sedgwick Field Station, UC Santa Barbara, CA (Jan 26-28)

2023

Adhikari, S., J. Marcelo-Silva, N. Rajakaruna, M. Struwig, and S. J. Siebert. Pollution from mines in South Africa: unveiling the magnitude of dust effects. Talk presented at the 12th Oppenheimer Research Conference, Midrand, South Africa (Oct 4-6)

Adhikari, S., J. Marcelo-Silva, N. Rajakaruna, and S. Siebert. Exclusion and Accumulation: Metallophytes Employ Both Mechanisms to Survive on Serpentine and Mining Habitats of Sekhukhuneland, South Africa. Poster presented at the 10th International Conference on Serpentine Ecology, Nancy, France (June 12-16)

Ward, D., A. Fryday, **M. Struwig**, S. Adhikari, P. Strauss, D. Smith, and N. Rajakaruna. Lichens, the hidden diversity at Grootbos and Tswalu Kalahari Reserve. Poster presented at the 12th Oppenheimer Research Conference, Midrand, South Africa (Oct 4-6)

Hulshof, C., M. Spasojevic, C. Garnica-Díaz, and N. Rajakaruna. Ultramafic ecosystems as a macroecological model. A paper presented at the 10th International Conference on Serpentine Ecology, Nancy, France (June 12-16)

Rajakaruna, N. Lessons on Ecology and Evolution from the Study of Edaphic Specialization. A keynote presented at the 10th International Conference on Serpentine Ecology, Nancy, France (June 12-16)

Siebert, S. J., S. Palacio, A. Luzuriaga, G. Maggs-Kölling, E. Marais, S. Matesanz, M. Prieto, Y. Pueyo, N. Rajakaruna, A. Sánchez, and S. Claassens. Setting an agenda for gypsum ecosystem research in southern Africa. A paper presented at the 10th International Conference on Serpentine Ecology, Nancy, France (June 12-16)

Oosthuizen. L., F. Siebert, D. I. Thompson, N. Rajakaruna, and S. J. Siebert. Exploring the drought tolerance hypothesis of nickel hyperaccumulation using *Berkheya* species of South Africa. Poster scheduled for the 10th International Conference on Serpentine Ecology, Nancy, France (June 12-16); abstract accepted, presenter unable to attend conference

Raposo, Z., C. Howington, A. Pena, L. Negoita, A. Ferrero, P. Walsh, D. Stephens, C. Appel, and N. Rajakaruna. The influence of fire and fire retardant (Phos-Chek®) on plant diversity and non-native species abundance in California's serpentine chaparral. Poster presented at the 10th International Conference on Serpentine Ecology, Nancy, France (June 12-16)

Botha, D., A., Venter, S. Barnard, S. Claassens, **N. Rajakaruna**, and **S. J. Siebert**. Bacterial and fungal diversity found in serpentine and non-serpentine soil crusts from two different climatic regions in South Africa. Poster presented at the 10th International Conference on Serpentine Ecology, Nancy, France (June 12-16)

Fryer, E. R., R. E. O'Dell, and N. Rajakaruna. Niche, competition, and soils shape a floral mosaic on vertic clay soils in California's San Joaquin Desert. Paper presented at the California Botanical Society 29th Graduate Student Symposium, Arcata, California (April 1-3). Best Oral Presentation Award (Emma Fryer).

Mulroy, M.D., J.D. Dart, C. Williams, R. Reese Næsborg, A.F. Fryday, S. Johnston, and **N. Rajakaruna**. Ultramafic lichens: an ecological investigation of an understudied organism in a well-studied system. Poster presented at the 10th International Conference on Serpentine Ecology, Nancy, France (June 12-16)

Fryer, E. R., A. Shon, H. Huntley, R. E. O'Dell, and **N. Rajakaruna**. Clay Endemism and Affinity in the California Floristic Province. Poster presented at the 10th International Conference on Serpentine Ecology, Nancy, France (June 12-16)

Fryer, E. R., R. E. O'Dell, and **N. Rajakaruna**. The Vertic Clay Flora of the San Joaquin Desert: Niche, Competition & Floral Mosaics on a Novel Substrate. Poster presented at the 10th International Conference on Serpentine Ecology, Nancy, France (June 12-16)

Rajakaruna, N. and S. J. Siebert. Serpentine Geoecology: A World View. Paper presented at the 48th Annual South African Association of Botanists Conference, Polokwane, Limpopo, South Africa (Jan 19)

Siebert, S. J., Palacio, S., Rajakaruna, N., and S. Claassens. Gypsum ecosystem research in Africa: Past, present, and future. Paper presented at the 48th Annual South African Association of Botanists Conference, Polokwane, Limpopo, South Africa (Jan 19)

2022

Fryer, E. R., R. E. O'Dell, and N. Rajakaruna. The Role of Competition and Soil Chemistry in the Community Assembly of the Vertic Clay Endemic Annual Plant Communities of the San Joaquin Desert. California Native Plant Society Conference, San Jose, California (Oct 20-22)

Mulroy, M. and N. Rajakaruna. Serpentine lichens: regional and local patterns of assembly, and the challenge of context. Paper presented at the California Native Plant Society's 2022 Conference: Rooting Together, Restoring Connections to Plants, Places, & People. San Jose, CA (Oct 20-22)

Rajakaruna, N. Life on the Rocks: What plants on harsh substrate 'islands' teach us about diversity, ecology, evolution, and conservation and restoration practices. Keynote for symposium on Plant Life on Atypical Substrates in Mediterranean Type Ecosystems, MEDECOS 2022, Langebaan, Western Cape, South Africa (Sep 5)

Hodge, C., Eulensen-Wallace, J., Fryer, E. R., Mulroy, M. and N. Rajakaruna. 2022. Lichens of Carrizo Plain. Biological Sciences Frost Research Symposium, California Polytechnic State University, San Luis Obispo, California (Aug 25)

Fryer, E. R., Rajakaruna, N., and R. E. O'Dell. The Role of Invasive Species and Soil Chemistry in the Community Assembly of the Vertic Clay Endemic Annual Plant Communities of the San Joaquin Desert. Botanical Society of America 117th Annual Meeting, Anchorage, AK (24-27 July)

Fryer, E. R., Rajakaruna, N., Shon, A., McKinnon, S. Community Assembly of Vertic Clay Endemic Annual Plants of the San Joaquin Desert. College of Science and Mathematics Student Research Conference, San Luis Obispo, CA (12-13 May)

2021

Shon, A., Fryer, E. R., Rajakaruna, N. Determining Edaphic Factors of Vertic Clay Communities. Biological Sciences Frost Research Symposium, California Polytechnic State University, San Luis Obispo, CA (26-27 August)

McKinnon, S., Fryer, E. R., Rajakaruna, N. Effects of edaphic factors and competition on flowering phenology and reproductive output of native California desert annuals. Biological Sciences Frost Research Symposium, California Polytechnic State University, San Luis Obispo, CA (26-27 August)

Fryer, E. R., R. E. O'Dell, and N. Rajakaruna. 2021. Community Assembly of Vertic Clay Endemic Annual Plants of the San Joaquin Desert. Paper presented via Zoom at the Botanical Society of America 2021 Meeting (July 19-23)

Mulroy, M., J. Dart, S. Johnson, R. R. Naesborg, A. Gersoff, and N. Rajakaruna. 2021. Lichen biotas of ultramafic and sandstone outcrops along a maritime gradient. Paper presented via Zoom at the California Botanical Society's 28th Graduate Student Symposium (May 1)

Fryer, E. R., R. E. O'Dell, and N. Rajakaruna. 2021. Community Assembly of Vertic Clay Endemic Annual Plants of the San Joaquin Desert. Paper presented via Zoom at the California Botanical Society's 28th Graduate Student Symposium (April 30)

Deak, R., Grossenbacher, D., Molinari, N., and Rajakaruna, N. 2021. Fire Influences in Montane Meadows. Paper presented via Zoom at the California Botanical Society's 28th Graduate Student Symposium (April 30)

Balderas, E., J. Dart, R. R. Naesborg, and N. Rajakaruna. 2021. An ecological assessment of a rare and endangered lichen from central California: *Sulcaria isidiifera*, the splitting yarn lichen. Paper presented via Zoom at the California Botanical Society's 28th Graduate Student Symposium (May 1)

2020

Samojedny, T. J., N. Rajakaruna. Discovering the peculiarities of serpentine environments through three summer experiences. Presented at the Biological Sciences Frost Summer Research Symposium, California Polytechnic State University, San Luis Obispo, CA (August 27)

Gersoff, A., M. Mulroy, and N. Rajakaruna. Lichen Communities of Ultramafic Substrates in North America. Paper presented at the Biological Sciences Frost Summer Research Symposium, California Polytechnic State University, San Luis Obispo, CA (August 27)

Pena, A., R. O'Dell, N. Rajakaruna. Investigating the evolutionary mechanisms driving speciation in the *Layia glandulosa* - *Layia discoidea* (Asteraceae) complex. Paper presented at the 2020 CSU Student Research Competition, California Polytechnic State University, San Luis Obispo, CA (Feb 22)

The following abstracts were accepted for the 10th International Conference on Serpentine Ecology, originally scheduled in Yekaterinburg, Russia, June 21–30, 2020. The meeting was postponed because of the COVID-19 pandemic; these entries document accepted abstracts.

Devlin, M. C., Stephens, D., Negoita, L., and N. Rajakaruna. 2020. Impacts of Multiple Nutrient Element Enrichment on Native and Alien Plant Species in California's Serpentine Grasslands. Oral presentation at the 10th International Conference on Serpentine Ecology, Ekaterinburg, Russia. June 21-30.

Fryday, A. M., Medeiros, I. D., **Siebert, S. J**., Pope, N., and **N. Rajakaruna**. 2020. Lichen species discovery from ultramafic rocks in Mpumalanga, South Africa —problems and consequences. Poster presentation at the 10th International Conference on Serpentine Ecology, Ekaterinburg, Russia. June 21-30.

Mulroy, M., Dart, J., Fryday, A.M., and N. Rajakaruna. 2020. An investigation of lichen biotas of ultramafic and sandstone outcrops along a maritime gradient in Central California. Poster presentation at the 10th International Conference on Serpentine Ecology, Ekaterinburg, Russia. June 21-30.

Mulroy, M., Dart, J., Fryday, A.M., and N. Rajakaruna. 2020. A review of the state of knowledge of lichens of ultramafic substrates in North America. Oral presentation at the 10th International Conference on Serpentine Ecology, Ekaterinburg, Russia. June 21-30.

Stephens, D., K. Nelson, L. Negoita, and N. Rajakaruna. Evolutionary Ecology of Two Rare *Chorizanthe* (Polygonaceae) Species from central California, U.S.A. Poster presentation at the 10th International Conference on Serpentine Ecology, Ekaterinburg, Russia. June 21-30.

Walsh, P., A. Ferrero, T. Cataldo, C. Knight, and N. Rajakaruna. Work in Progress: Competitive inhibition of Ni uptake by other divalent cations in California hyperaccumulator *Streptanthus polygaloides* (Brassicaceae). Poster presentation at the 10th International Conference on Serpentine Ecology, Ekaterinburg, Russia. June 21-30.

Rajakaruna, N. Life on the Rocks: What plants on harsh substrate 'islands' can teach us about diversity, ecology, evolution, and conservation and restoration practices. Oral presentation at the 10th International Conference on Serpentine Ecology, Ekaterinburg, Russia. June 21-30.

Fernando, D. R., H. A. S. Weerasinghe, D. S. A. Wijesundera, G. W. A. R. Fernando, A. E. Fernando, M. C.M. Iqbal, C. H. Miranda, J. M. Gosse, Y. A. S. Samithri, and **N. Rajakaruna**. Plant-Soil Relations of Ultramafic Outcrops in Sri Lanka: A Reassessment. Poster presentation at the 10th International Conference on Serpentine Ecology, Ekaterinburg, Russia. June 21-30.

Pena, A. J., O'Dell, R., Rajakaruna, N. 2020. Investigating the evolutionary mechanisms driving speciation in the *Layia glandulosa* - *L. discoidea* [Asteraceae] complex. Oral Presentation at the 10th International Conference on Serpentine Ecology, Ekaterinburg, Russia. June 21 - 30.

Ferrero, A. and N. Rajakaruna. Work in Progress: Isolation and characterization of Nickel-tolerant bacteria from disturbed and undisturbed serpentine outcrops at Irish Hills Open Space Preserve in San Luis Obispo, CA, U.S.A. Poster presentation at the 10th International Conference on Serpentine Ecology, Ekaterinburg, Russia. June 21-30.

Raposo, A., L. Negoita, C. Howington, A. Pena, A. Ferrero, P. Walsh, D. Stephens and N. Rajakaruna. The influence of fire and fire retardant (Phos-chek®) on plant diversity and non-native species abundance in California's serpentine chaparral. Oral Presentation at the 10th International Conference on Serpentine Ecology, Ekaterinburg, Russia. June 21 - 30.

Dawley, R., D. Stephens, and N. Rajakaruna. Work in Progress: The Use of California Native Plants in Chromite Mine Restoration. Poster presentation at the 10th International Conference on Serpentine Ecology, Ekaterinburg, Russia. June 21-30.

Siebert, S. J. and N. Rajakaruna. An overview of ultramafic geoecology in sub-Saharan Africa and the way forward. Oral Presentation at the 10th International Conference on Serpentine Ecology, Ekaterinburg, Russia. June 21 - 30.

Siebert. S. **J.**, F. Siebert, S. Adhikari, R. Boneschans, N. Rajakaruna. Foliar elemental profiles of forbs on metal-rich pyroxenite-derived soils of Sekhukhuneland, South Africa. Poster presentation at the 10th International Conference on Serpentine Ecology, Ekaterinburg, Russia. June 21-30.

Venter, A., **S. J. Siebert**, A. Levanets, **N. Rajakaruna**, S. Barnard. Microbial diversity of biological soil crusts on serpentine soils in Mpumalanga, South Africa. Poster presentation at the 10th International Conference on Serpentine Ecology, Ekaterinburg, Russia. June 21-30.

2019

Pena, A., R. O'Dell, N. Rajakaruna. Investigating the evolutionary mechanisms driving speciation in the *Layia glandulosa* - *Layia discoidea* (Asteraceae) complex. Paper presented at the Biological Sciences Frost Summer Research Symposium, California Polytechnic State University, San Luis Obispo, CA (August 23)

Stephens, D., K. Nelson, N. Rajakaruna. Ecological Genetics of Two Rare *Chorizanthe* (Polygonaceae) species. Paper presented at the Biological Sciences Frost Summer Research Symposium, California Polytechnic State University, San Luis Obispo, CA (August 23)

Tran, K., P. Excoffier, N. Rajakaruna. Ecological adaptations of three California endemics to harsh environments. Paper presented at the Biological Sciences Frost Summer Research Symposium, California Polytechnic State University, San Luis Obispo, CA (August 23)

Reinhart, M., R. Hunter, C. Appel, N. Rajakaruna, D. Keil, J. Acosta, C. Stubler, E. Appel, E. Yao. Do Fire Retardants Have an Effect on Soil Chemistry and Plant Diversity? Poster presented at The College of Agriculture, Food and Environmental Sciences (CAFES) Student Research Symposium, Chumash Auditorium, California Polytechnic State University, San Luis Obispo, CA 93407 (May 12)

Tran, K., Argueta, P. N., and N. Rajakaruna. Plants and People: Creating an Ethnobotany Garden in the yakʔitʸutʸu Housing Complex Landscape. Poster presented at the College of Science and Mathematics 2019 Research Conference, California Polytechnic State University, San Luis Obispo, CA 93407 (May 16-17)

Devlin, M., D. Stephens, A. Williams, M. Morris, S. Parr, L. Negoita, and N. Rajakaruna. Impacts of Multiple Nutrient Element Enrichment on Native and Non-Native Plant Species in Serpentine Soils. Poster presented at the College of Science and Mathematics 2019 Research Conference, California Polytechnic State University, San Luis Obispo, CA 93407 (May 16-17)

Ferrero, A. P. Walsh, T. Cataldo, and N. Rajakaruna. Work in Progress: Can drought conditions induce enhanced Nickel hyperaccumulation in *Streptanthus polygaloides* (Brassicaceae)? Poster presented at the College of Science and Mathematics 2019 Research Conference, California Polytechnic State University, San Luis Obispo, CA 93407 (May 16-17)

Pena, A. J., S. Farrow, and N. Rajakaruna. Greenhouse Studies to Explore the Factors and Mechanisms Driving Speciation in the *Layia glandulosa-L. discoidea* Complex. Poster presented at the College of Science and Mathematics 2019 Research Conference, California Polytechnic State University, San Luis Obispo, CA 93407 (May 16-17)

Raposo, Z., C. Howington, P. Walsh, A. Ferrero, L. Negoita, and N. Rajakaruna. Post-fire Plant Diversity across Serpentinite and Metavolcanic Substrates under the Influence of Fire Retardant. Poster presented at the College of Science and Mathematics 2019 Research Conference, California Polytechnic State University, San Luis Obispo, CA 93407 (May 16-17)

Excoffier, P., R. E. O'Dell, and N. Rajakaruna. 2019. Seed longevity and climatic tolerance of San Joaquin Woollythreads (*Monolopia congdonii*; Asteraceae). Paper presented at the California Botanical Society's 27th Graduate Student Symposium, California Polytechnic State University, San Luis Obispo, CA 93407 (April 6)

Hunter, R., M. Reinhart, C. Appel, N. Rajakaruna, J. Acosta, and C. Stubler. 2019. Do fire retardants have an effect on soil chemistry and plant diversity? Poster presented at the California Botanical Society's 27th Graduate Student Symposium, California Polytechnic State University, San Luis Obispo, CA 93407 (April 6)

Devlin, M., D. Stephens, A. Williams, M. Morris, S. Parr, L. Negoita, and N. Rajakaruna. 2019. Impacts of Multiple Nutrient Element Enrichment on Native and Non-Native Plant Species in Serpentine Soils. Poster presented at the California Botanical Society's 27th Graduate Student Symposium, California Polytechnic State University, San Luis Obispo, CA 93407 (April 6)

Ferrero, A. P. Walsh, T. Cataldo, and N. Rajakaruna. 2019. Work in Progress: Can drought conditions induce enhanced Nickel hyperaccumulation in *Streptanthus polygaloides* (Brassicaceae)? Poster presented at the California Botanical Society's 27th Graduate Student Symposium, California Polytechnic State University, San Luis Obispo, CA 93407 (April 6)

Pena, A. J., S. Farrow, and N. Rajakaruna. 2019. Greenhouse Studies to Explore the Factors and Mechanisms Driving Speciation in the *Layia glandulosa-L. discoidea* Complex. Poster presented at the California Botanical Society's 27th Graduate Student Symposium, California Polytechnic State University, San Luis Obispo, CA 93407 (April 6)

Raposo, Z., C. Howington, P. Walsh, A. Ferrero, L. Negoita, and N. Rajakaruna. 2019. Post-fire Plant Diversity across Serpentinite and Metavolcanic Substrates under the Influence of Fire Retardant. Poster presented at the California Botanical Society's 27th Graduate Student Symposium, California Polytechnic State University, San Luis Obispo, CA 93407 (April 6)

Williams, A., Devlin, M., and N. Rajakaruna. Impacts of Nutrient Enrichment on Native and Non-Native Plants in Serpentine Soil. Poster presented at the STAR (STEM Teacher and Researcher) Program Conference, San Diego, CA. January 18.

2018

Ferrero, A., Walsh, P., and N. Rajakaruna. Does Nickel Influence Drought Tolerance in *Streptanthus polygaloides* (Brassicaceae)?. Paper presented at the Biological Sciences Frost Summer Research Symposium, California Polytechnic State University, San Luis Obispo, CA. August 20.

Raposo, Z., **Howington, C.,** and N. Rajakaruna. A study of post-fire plant diversity across serpentinite and metavolcanic substrates on Poly Ridge, Cal Poly San Luis Obispo. Paper presented at the Biological Sciences Frost Summer Research Symposium, California Polytechnic State University, San Luis Obispo, CA. August 20.

Farrow, S. and N. Rajakaruna. Work in Progress: How do harsh soils contribute to speciation in two California endemic soil specialist plant species? Poster presented at College of Science and Mathematics Student Research Symposium, California Polytechnic State University, San Luis Obispo, CA. May 17-18.

Ferrero, A., P. Walsh, and N. Rajakaruna. Work in progress: Does Nickel Influence Drought Tolerance in *Streptanthus polygaloides* (Brassicaceae)? Poster presented at College of Science and Mathematics Student Research Symposium, California Polytechnic State University, San Luis Obispo, CA. May 17-18.

Devlin, M., A. Williams, and N. Rajakaruna. Work in progress: Impacts of Multiple Nutrient Element Enrichment on Native and Alien Plant Species in California's Serpentine Grasslands. Poster presented at College of Science and Mathematics Student Research Symposium, California Polytechnic State University, San Luis Obispo, CA. May 17-18.

Bridgeman, M., S. Farrow, and N. Rajakaruna. Work in progress: the effects of herbivory on the capsaicin content in chili peppers. Poster presented at College of Science and Mathematics Student Research Symposium, California Polytechnic State University, San Luis Obispo, CA. May 17-18.

Raposo, Z., C. Howington, P. Walsh, A. Ferrero, S. Whitlock, C. Bishop, M. Morris, C. Miranda, G. Orta, M. Mayer, and Dr. N. Rajakaruna. Fire and *Phos-Chek* (fire retardant) influence on plant and microbial diversity on distinct soils and slope aspects on Poly Canyon—San Luis Obispo, California. Poster presented at College of Science and Mathematics Student Research Symposium, California Polytechnic State University, San Luis Obispo, CA. May 17-18.

Rajakaruna, N. Serpentine geoecology of eastern North America: Information gaps and future directions. Paper presented at the Northeast Natural History Conference, Burlington, VT. April 13-15.

Burgess, J. L., W. B. Hilgartner, N. Rajakaruna. Forest expansion on serpentine grassland communities: the impact of atmospheric N and land use. Paper presented at the European Congress of Conservation Biology, Jyväskylä, Finland. June 12-15.

von Wettberg. E. J. B., J. Wang, N. Rajakaruna, M. Kang. Plant Life on Harsh Soils: Contrasts in edaphic endemism and adaptation to Serpentine, Karst, Gypsum, Dolomite and other high pH soils, with examples from mid-Atlantic serpentines, *Primulina* species in China, and agro-ecosystems. Paper presented at the Northeast Natural History Conference, Burlington, VT. April 13-15.

2017

Gunarathne, V., N. Rajakaruna and M. Vithanage. Influence of water content, ligands and protons on metal release in heavy metal rich soils. Poster presented at the 10th Annual International Research Conference of General Sir John Kothalawala Defense University, Ratmalana, Sri Lanka. August 3-4.

Krell, N. T., Negoita, L., and **N. Rajakaruna**. Little evidence for local adaptation to soil type by *Achillea millefolium* and *Hypericum perforatum* from Deer Isles, Maine, USA. Poster presented at the 9th International Conference on Serpentine Ecology, Tirana + Pogradec, Albania. June 4-9.

Ntloko, B., S. J. Siebert, **N. Rajakaruna**, and P. Ayres. Establishing *Merxmuellera disticha* (Poaceae) on kimberlite tailings in the afro-alpine zone of Lesotho. Poster presented at the 9th International Conference on Serpentine Ecology, Tirana + Pogradec, Albania. June 4-9.

Jayalal, U., **N. Rajakaruna**, M.C.M. Iqbal, and S. Wijesundara. A preliminary survey of lichens associated with serpentinite rocks in Ussangoda, Sri Lanka. Poster presented at the 9th International Conference on Serpentine Ecology, Tirana + Pogradec, Albania. June 4-9.

Gunarathne, V., **N. Rajakaruna** and M. Vithanage. Influence of soil water content on metal release in serpentine soil. Paper presented at the 9th International Conference on Serpentine Ecology, Tirana + Pogradec, Albania. June 4-9.

Medeiros, I. D. and N. Rajakaruna. Exceptions to the serpentine syndrome in eastern North America. Paper presented at the 9th International Conference on Serpentine Ecology, Tirana + Pogradec, Albania. June 4-9.

Rajakaruna, N. Evolutionary Ecology of Serpentine Plants. Paper presented at the 9th International Conference on Serpentine Ecology, Tirana + Pogradec, Albania. June 4-9.

Venter, A., Siebert, S. J., **Rajakaruna, N.,** Barnard, S., Levanets, A., Ismail, A., and Allam, M. Biological crusts of ultramafic and non-ultramafic soils from the Barberton Greenstone Belt of South Africa. Poster presented at the 9th International Conference on Serpentine Ecology, Tirana + Pogradec, Albania. June 4-9.

Medeiros, I. D., A. M. Fryday, N. Pope, M. Coetzee, A. Frisby, S. J. Siebert, and N. Rajakaruna. Work in progress: Lichen substrate ecology of the Barberton Greenstone Belt, South Africa. Poster presented at the 9th International Conference on Serpentine Ecology, Tirana + Pogradec, Albania. June 4-9.

Siebert, S. J., P. Beukes, P. van Zyl, **N. Rajakaruna**, and F. Siebert. Chromium uptake by forbs: evidence from chromite outcrops in the Rustenburg Layered Suite, South Africa. Poster presented at the 9th International Conference on Serpentine Ecology, Tirana + Pogradec, Albania. June 4-9.

Siebert S. J., **N. Rajakaruna**, N. Schutte, D. Komape, and Pieter Bester. A new nickel hyperaccumulator in the Asteraceae on serpentinite in the Barberton Greenstone Belt, South Africa. Poster presented at the 9th International Conference on Serpentine Ecology, Tirana + Pogradec, Albania. June 4-9.

Rajakaruna, N. Evolutionary Ecology of Serpentine Plants. Paper presented at the 64th Annual Meeting of the Ecological Society of Japan, Tokyo, Japan. March 14-18.

Rajakaruna, N. Serpentine Flora of Sri Lanka. Paper presented at the South and Central Asia Fulbright Conference, Kolkata, West Bengal, India (March 7)

Erasmus, A., Venter, A. Levanets A., Siebert, S., Rajakaruna, N. Common terrestrial algae and cyanobacteria of Southern Africa. Poster presented 30th Congress of the Phycological Society of Southern Africa (PSSA2017), De Hoop Nature Reserve, Overburg, South Africa. Jan 12-17.

2016

Medeiros, I. D. and N. Rajakaruna**.** 2016. Serpentinite Outcrops Do Not Support a (Particularly) Distinctive Biota in Western Massachusetts. Paper presented at the Botanical Society of America Meeting. Savannah, GA, USA. July 30-August 3.

Medeiros, I. D. and N. Rajakaruna. 2016. Serpentinite Outcrops in Massachusetts: A Botanical and Ecological Overview. Paper presented at the 2016 Northeast Natural History Conference. Springfield, Massachusetts, USA. April 22-24.

Medeiros, I. D. and N. Rajakaruna**.** 2016. Documenting the Rocks, Soils, and Biota of Serpentinite Outcrops in Western Massachusetts. Poster presented at the Geological Society of Maine 2016 Spring Meeting. University of Maine, Orono, ME, USA. April 1. *Honorable Mention*.

Medeiros, I. D. and N. Rajakaruna. 2016. Documenting the rocks, soils, and biota of serpentinite outcrops in western Massachusetts. Poster presented at the Northeastern Section - 51st Annual Meeting of the Geological Society of America. Albany, NY, USA. March 21-23.

2015

Samuel, E. M., Porter, D., Munson, T., and N. Rajakaruna. 2015. Mycoremediation in the face of anthropogenic environmental damage. Poster presented at the 2015 New England Botanical Club Conference. Northampton, Massachusetts, USA. June 5-7.

Samuel, E. M., Porter, D. and N. Rajakaruna. 2015. Mycoremediation in the face of anthropogenic environmental damage. Poster presented at the 2015 Mycological Society of America Meeting. Edmonton, Alberta, Canada. July 25-29.

Medeiros, I.D. and N. Rajakaruna. 2015. Research in Progress: Documenting the Serpentine Biota of Massachusetts. Poster presented at the NEBC 120th Anniversary Research Conference. Smith College, Northampton, Massachusetts, USA. June 5-7

Krell, N. T., Dawson, H. R., and N. Rajakaruna. 2015. Are yarrow and St. John's wort locally adapted to serpentine and granite outcrops on Deer Isles, ME? Poster presented at the NEBC 120th Anniversary Research Conference. Smith College, Northampton, Massachusetts, USA. June 5-7

Excoffier, P., Olday, F. C., and N. Rajakaruna. 2015. Vernal Pool Bryophytes of Acadia National Park, Maine. Poster presented at the 2015 Northeast Natural History Conference. Springfield, Massachusetts, USA. April 18-20

Medeiros, I.D. and N. Rajakaruna. 2015. Research in Progress: Documenting the Serpentine Biota of Massachusetts. Poster presented at the 2015 Northeast Natural History Conference. Springfield, Massachusetts, USA. April 18-20

Rajakaruna, N. 2015. Serpentine geoecology of eastern North America: Current knowledge and information gaps. Paper presented at the 2015 Northeast Natural History Conference. Springfield, Massachusetts, USA. April 18-20

Krell, N. T., Dawson, H. R., and N. Rajakaruna. 2015. Are yarrow and St. John's wort locally adapted to serpentine and granite outcrops on Deer Isles, Maine? Poster presented at the 2015 Northeast Natural History Conference. Springfield, Massachusetts, USA. April 18-20

Knudsen, K., A. Fryday, N. Rajakaruna, F. Olday, **R. E. O'Dell**, N. Pope, and S. Woolhouse. 2015. Lichens of the New Idria serpentine mass, San Benito County, California: a preliminary study of the lichen-substrate relationship. Poster presented at California Native Plant Society's 2015 Conservation Conference: Celebrating 50 years of Progress and Promise, San José, CA, USA. January 13-17.

2014

Hall, S., Anderson, J., Rajakaruna, N. and Cass, D. 2014. Watershed Landscape Ecology: Interdisciplinary and field-based learning in the Northeast Creek Watershed, Mount Desert Island, Maine. Poster presented at the AGU Fall Meeting, San Francisco, CA, USA. December 16.

Medeiros, I. D. and N. Rajakaruna. 2014. A Biodiverse Polluted Site in Coastal Maine: Opportunity and Dilemma. Poster presented at XX International Conference of the Society for Human Ecology (Ecological Responsibility and Human Imagination: Saving the Past~Shaping the Future), College of the Atlantic, Bar Harbor, ME, USA. October 22-25.

Barton, J., N. Rajakaruna, and B. Connery. 2014. Lichens of selected vernal pools in Acadia National Park, Maine. Poster presented at the Acadia National Park Science Symposium, Schoodic Education Research Center, Winter Harbor, Maine, USA. April 16.

Iqbal, M.C.M and N. Rajakaruna. 2014. Serpentine Ecology in Sri Lanka: current knowledge, information gaps, and future directions. Paper presented at the 8th International Conference on Serpentine Ecology, Sabah, Malaysia. June 9-13.

Siebert, S. J., N. Rajakaruna, and P Beukes. 2014. Chromium uptake by plants: evidence from naturally occurring chromititite outcrops of the Rustenburg Layered Suite, South Africa. Poster presented at the 8th International Conference on Serpentine Ecology, Sabah, Malaysia. June 9-13.

Medeiros, I. D. Fryday, A. M. and N. Rajakaruna. 2014. Diversity and Conservation of Lichens at Two Metal-Enriched Sites in Coastal Maine, USA. Paper presented at the 8th International Conference on Serpentine Ecology, Sabah, Malaysia. June 9-13.

Wijethunga, W.M.K.T., K.B. Wijesekara, R. Weerasooriya, and **N. Rajakaruna**. 2014. Chromium phytoextraction potential of *Brassica juncea* (L.) Czern. (Indian Mustard) genotypes from Sri Lanka. Poster presented at the 8th International Conference on Serpentine Ecology, Sabah, Malaysia. June 9-13.

Burgess, J. L., Szlavecz, K., **Rajakaruna, N**., Lev, S. and C. M. Swan. 2014. Serpentine Forest Succession and Mesophication in Response to Conifer Encroachment. Poster presented at the 8th International Conference on Serpentine Ecology, Sabah, Malaysia. June 9-13.

Venter, A., Levanets, A., **Siebert, S**., and N. Rajakaruna. 2014. Soil algae and cyanoprokaryotes of mafic and ultramafic substrates in Mpumalanga, South Africa. Poster presented at the 8th International Conference on Serpentine Ecology, Sabah, Malaysia. June 9-13.

Herath, I., Wickremasinghe, S., **Rajakaruna, N**., Nawaratne, A. and M. Vithanage. 2014. The addition of biochar to serpentine soils reduces metal ion release and phytotoxicity in tomato plants. Poster presented at the 8th International Conference on Serpentine Ecology, Sabah, Malaysia. June 9-13.

Chaturanga, P. K. D., **M. C.M. Iqbal**, S. K. A. T. Dharmasena, and N. Rajakaruna 2014. Nickel tolerance of and uptake by serpentine and non-serpentine ecotypes of *Fimbristylis ovata* (Cyperaceae) from Sri Lanka. Poster presented at the 8th International Conference on Serpentine Ecology, Sabah, Malaysia. June 9-13.

Herath, I., Wickremasinghe, S., Rajakaruna, N., Nawaratne, A. and M. Vithanage. 2014. Beneficial effects of biochar application on metal ion release and phytotoxicity reduction in serpentine soil. Paper presented at Peradeniya University International Research Sessions, University of Peradeniya, Sri Lanka. July 4-5.

2013

Georgaklis, E., Rajakaruna, N. 2013. Environmental Influences on Chemical Variation and Growth of Four Asian Botanicals. Poster presented at Northeast Undergraduate Research and Development Symposium, University of New England, Biddeford, ME, March 2.

2012

Hurter B, Van Dyk R, Siebert SJ, Coetsee M, **Rajakaruna N.** 2012. Nickel accumulation by *Berkheya* and *Senecio* species (Afrikaans Title: Akkumulering van nikkel deur *Berkheya*- en *Senecio*-spesies). Poster presented at the Annual Conference of the Biology Section, South African Academy for Science and Arts, North-West University, Potchefstroom, South Africa, October 5.

Jumper, K. Porter, D. and Rajakaruna, N. 2012. Diversity and Heavy Metal Uptake of Macrofungi found on Serpentine and Granite Outcrops on the Deer Isles, Maine, USA. Poster presented at the Conference of the Mycological Society of America, Yale University, New Haven, Connecticut, USA, July 15-19.

Jumper, K., Porter, D., Rajakaruna, N., and Stern, M. 2012. Biodiversity and Heavy Metal Uptake of Macrofungi found on Serpentine and Granite Outcrops on the Deer Isles, Maine, USA. Poster presented at the Northeast Natural History Conference, OnCenter Convention Center, Syracuse, New York, USA, April 15-19.

Barton, J., Olday, F., and N. Rajakaruna. 2012. A Study of Lichens of Vernal Pools of Acadia National Park, Maine, U.S.A. Poster presented at the Northeast Natural History Conference, OnCenter Convention Center, Syracuse, New York, USA, April 15-19.

Negoita, L., Dickinson, M., Rajakaruna, N., Mittelhauser, G., and Pope, N. 2012. Herbivory and Soil Features: A Case Study of Coastal Maine Island Plant Communities. Paper presented at the Northeast Natural History Conference, OnCenter Convention Center, Syracuse, New York, USA, April 15-19.

Stern, M. and N. Rajakaruna. 2012. Plant Soil Relations of the Rockland/Thomaston Limestone Quarry. Poster presented at the Northeast Natural History Conference, OnCenter Convention Center, Syracuse, New York, USA, April 15-19.

Rajakaruna, N. Harris, T. B., S. J. Nelson, and P. D. Vaux. 2012. Stressors and Threats to the Flora of Acadia National Park, Maine: Current Knowledge, Information Gaps, and Future Directions. Poster presented at the Northeast Natural History Conference, OnCenter Convention Center, Syracuse, New York, USA, April 15-19.

Rajakaruna, N. 2012. The Influence of Geology and Substrate on Plant Life in Northeastern North America. Paper presented at the Northeast Natural History Conference, OnCenter Convention Center, Syracuse, New York, USA, April 15-19.

Yost, J. M., Barry, T., Kay, K. M., and N. Rajakaruna. 2012. Edaphic Adaptations and Speciation in California Goldfields. Paper presented at the California Native Plant Society Conservation Conference, San Diego, CA, USA, January 10-14.

Woolhouse, S. and Rajakaruna, N. 2012. Ecology and Reproductive Biology of two serpentine endemic *Monardella* species from the Northern Sierra Nevada. Paper presented at the California Native Plant Society Conservation Conference, San Diego, CA, USA, January 10-14.

2011

Yost, J., Barry, T., K. Kay, and N. Rajakaruna. 2011. Local adaptation and speciation in cryptic species of *Lasthenia* (Asteraceae). Poster presented at the Botany 2011, St. Louis, MO, USA, July 9-13.

Stark, H. Z. and N. Rajakaruna. 2011. Plants and people of New England: our contemporary reliance on traditional knowledge. Paper presented at the Northeast Natural History Conference, Albany, NY, April 6-9, 2011.

M. Mansfield and N. Rajakaruna. 2011. Plant diversity and soil-tissue relations of Callahan Mine, Brooksville, Maine. Poster presented at the Northeast Natural History Conference, Albany, NY, April 6-9, 2011.

J. E. Gall, Kirven-Dows, L. A., C. Graham and N. Rajakaruna. 2011. Diversity and metal content of insects on adjacent serpentine and granite outcrops on the Deer Isles, ME, USA. Poster presented at the Northeast Natural History Conference, Albany, NY, April 6-9, 2011.

Yost, J., Barry, T., K. Kay, and **N. Rajakaruna**. 2011. Fine Scale local adaptation maintained by selection across subtle edaphic gradients. Poster presented at the 7th International Conference on Serpentine Ecology, Coimbra, Portugal, June 12-16.

Pope, N., Fong, M., Boyd, R., and **N. Rajakaruna**. 2011. Variation in metal accumulation among wild morphotypes of *Streptanthus polygaloides*, a Californian Ni hyperaccumulator. Poster presented at the 7th International Conference on Serpentine Ecology, Coimbra, Portugal, June 12-16.

J. E. Gall, Kirven-Dows, L. A., C. Graham and N. Rajakaruna. 2011. Diversity and metal content of insects on adjacent serpentine and granite outcrops on the Deer Isles, ME, USA. Poster presented at the 7th International Conference on Serpentine Ecology, Coimbra, Portugal, June 12-16.

Knudsen, K., Fryday, A., **Rajakaruna, N.**, Olday, F. C., O'Dell, R. E., and S. Woolhouse. 2011. Lichens of the New Idria Serpentine Mass, San Benito County, California, USA: A Preliminary Study of the Lichen-Substrate Relationship. Poster presented at the 7th International Conference on Serpentine Ecology, Coimbra, Portugal, June 12-16.

Woolhouse, S. and N. Rajakaruna. 2011. Variation in the rare bodenvag *Lewisia cantelovii* J. T. Howell (Montiaceae): Local adaptation or phenotypic plasticity? Paper presented at the 7th International Conference on Serpentine Ecology, Coimbra, Portugal, June 12-16.

Bieger, A., Rajakaruna, N. and S. Harrison. 2011. Ecotypic adaptation to soil-type and micro-climate of three common chaparral shrubs of California. Paper presented at the 7th International Conference on Serpentine Ecology, Coimbra, Portugal, June 12-16.

Woolhouse, S. and N. Rajakaruna. 2011. Ecology and Reproductive Biology of two serpentine endemic *Monardella* species from Plumas National Forest. Poster presented at the Northern California Botanist Symposium, California State University, Chico, CA, January 10-11.

2010

Celis, J., N. Rajakaruna, and M. C. Vasey. 2010. Ecological speciation in the *Lasthenia minor-L. maritima* complex (Asteraceae). Poster presented at the California Botanical Society Graduate Student Symposium, San José State University in San José, CA February 13.

Woolhouse, S. and N. Rajakaruna. 2010. Biology and ecology of three rare serpentine plants from Plumas National Forest in the Northern Sierra Nevada, California. Paper presented at the California Botanical Society Graduate Student Symposium, San José State University in San José, CA, February 13.

Fong, M. G., R. S. Boyd, and N. Rajakaruna. 2010. Are morphotypes of *Streptanthus polygaloides* (Brassicaceae) distinct genotypes worthy of taxonomic subdivision and conservation? Poster presented at the California Botanical Society Graduate Student Symposium, San José State University in San José, CA February 13.

Barry, T., Rajakaruna, N., and K. M. Kay. 2010. Local adaptation and seasonal distribution of edaphic races of *Lasthenia californica-L. gracilis* complex in two distinct regions of a serpentine outcrop. Poster presented at the California Botanical Society Graduate Student Symposium, San José State University in San José, CA February 13.

2009

Davoodian, N. and N. Rajakaruna. Arbuscular mycorrhizal colonization of St. John's Wort (*Hypericum perforatum*) on adjacent serpentine and granite outcrops. Poster presented at Botany and Mycology 2009, Snowbird, Utah, July 25-29.

Rajakaruna, N. and N. Jenson. Endemism and rarity in California's flora: are most endemic and rare species edaphic specialists? Poster presented at California Native Plant Society 2009 Conservation Conference: Strategies and Solutions. Sacramento Convention Center and Sheraton Grand Hotel, Sacramento, CA, January 17-19.

Fong, M. G., R. S. Boyd, and N. Rajakaruna. Are morphotypes of *Streptanthus polygaloides* (Brassicaceae) distinct genotypes worthy of taxonomic subdivision and conservation? Poster presented at California Native Plant Society 2009 Conservation Conference: Strategies and Solutions. Sacramento Convention Center and Sheraton Grand Hotel, Sacramento, CA, January 17-19.

2008

Rajakaruna, N., T. B. Harris, and E. B. Alexander. 2008. Serpentine Outcrops of Eastern North America: Model Habitats for Geoecological Studies. Paper presented at Northeast Natural History Conference X, Empire State Plaza in Albany, NY, April 17 – 18

Ciccotelli, B. and N. Rajakaruna. 2008. A Study to Characterize the Flora of Vernal Pools, Acadia National Park. Poster presented at the Northeast Natural History Conference X, Empire State Plaza in Albany, NY, April 17 - 18

Rajakaruna, N., **T. B. Harris**, and E. B. Alexander. 2008. Geoecology of serpentine in eastern North America: Critical information gaps and future directions. Paper presented at the Sixth International Conference on Serpentine Ecology, College of the Atlantic, Bar Harbor, ME, June 16 - 23

Davoodian, N., **N. Rajakaruna**, and D. D. Ackerly. 2008. Evolution of serpentine endemism in fire-prone habitats: a preliminary model from California's chaparral. Poster presented at the Sixth International Conference on Serpentine Ecology, College of the Atlantic, Bar Harbor, ME, June 16 - 23

Briscoe, L. R., F. C. Olday, and N. Rajakaruna. 2008. A floristic survey of bryophytes on a peridotite and a granitic outcrop in Deer Isle, Maine, USA. Poster presented at the Sixth International Conference on Serpentine Ecology, College of the Atlantic, Bar Harbor, ME, June 16 - 23

Harris, T. B. and N. Rajakaruna. 2008. *Adiantum viridimontanum*, *Aspidotis densa*, and *Minuartia marcescens*, additional serpentine endemics from eastern North America? Poster presented at the Sixth International Conference on Serpentine Ecology, College of the Atlantic, Bar Harbor, ME, June 16 - 23

Pope, N. and **N. Rajakaruna**. 2008. Vascular plants of serpentine and granite in the Deer Isle complex, Maine, USA. Poster presented at the Sixth International Conference on Serpentine Ecology, College of the Atlantic, Bar Harbor, ME, June 16 – 23

2007

Harris, T. B., Dannenberg, E., Pope, N., Briscoe, L. Thrall, A., Olday, F. C., and N. Rajakaruna. 2007. Plant life on metal-enriched soils in Maine: involving undergraduate students in ecological research. Poster presented at Maine Space Grant Consortium Annual Meeting, The University of Southern Maine, Portland, ME, April 20

Thrall, A., Pope, N., Dannenberg, E., Tompkins, K., Pavicevic, P., Harris, T. B. and N. Rajakaruna. 2007. Plant-Soil Relations on Serpentine Outcrops of Deer Isle, Maine in Northeastern United States. Poster presented at Maine Space Grant Consortium Annual Meeting, The University of Southern Maine, Portland, ME, April 20

2006

Rajakaruna, N. and D. D. Ackerly. Understanding Community Assembly on Serpentine: A Study of Functional Traits Relating to Serpentine Tolerance. Paper presented at the V International Conference on Serpentine Ecology, Siena, Italy May 09-13

Harris, T. B., Olday, F. C., and **N. Rajakaruna**. Saxicolous and Terricolous Lichens of a peridotite outcrop in the Northeastern United States: A baseline study exploring the lichen-substrate relationship. Poster presented at the V International Conference on Serpentine Ecology, Siena, Italy May 09-13

Thrall, A., Pope, N., Dannenberg, E., Tompkins, K., Pavicevic, P., Harris, T. B. and **N. Rajakaruna**. Plant-Soil Relations on Serpentine Outcrops of Deer Isle, Maine in Northeastern United States. Poster presented at the V International Conference on Serpentine Ecology, Siena, Italy May 09-13

Iqbal, M. C. M., Kulasekara, L., Rajakaruna, N. and S. S. Iqbal. Plant-Soil Relations of a Serpentine Site in the Southern Coast of Sri Lanka. Paper presented at the V International Conference on Serpentine Ecology, Siena, Italy May 09-13

Harris, T. B., Olday, F. C., and N. Rajakaruna. Lichens of a Peridotite Outcrop in Eastern North America: An Investigation into the Lichen-Serpentine Relation. Paper presented at the Botany 2006 Meeting, Chico, California, USA July 28 - August 03

2003

Whitton, J. and N. Rajakaruna. The ecology of plant speciation. Paper presented at the Plant Speciation Conference, Plant Canada Meeting, St. Xavier University, Antagonish, Nova Scotia, Canada June 26-28

Rajakaruna, N. and J. Whitton. Parallel Evolution in the *Lasthenia californica* complex (Asteraceae). Poster presented at the Plant Speciation Conference, Plant Canada Meeting, St. Xavier University, Antagonish, Nova Scotia, Canada. June 26-28

Rajakaruna, N. Edaphic differentiation in *Lasthenia* (Asteraceae): A model for the study of parallel speciation. Paper presented at the Fourth International Conference on Serpentine Ecology, Jardin Botanico Nacional, Havana, Cuba. April 21-26

Rajakaruna, N. Serpentine plants of Sri Lanka: A preliminary study. Poster presented at the Fourth International Conference on Serpentine Ecology, Jardin Botanico Nacional, Havana, Cuba. April 21-26

Rajakaruna, N. Edaphic differentiation in the *Lasthenia californica* complex (Asteraceae: Heliantheae): a case for parallel speciation. Paper presented at the California Botanical Society Graduate Student Meeting, University of California, San Diego, CA. February 15

2002

Rajakaruna, N. and J. Whitton. Building a case for the parallel evolution of edaphic races in the *Lasthenia californica* complex (Asteraceae:Heliantheae). Paper presented at the symposium on Molecular Genetics and Ecology of Plant Adaptation, Botanical Garden and Centre for Plant Research, University of British Columbia, Canada. December 11-13

Whitton, J. and N. Rajakaruna. Adaptation Underground: Incorporating edaphic influences in plant evolutionary studies. Paper presented at the symposium on Molecular Genetics and Ecology of Plant Adaptation, Botanical Garden and Centre for Plant Research, University of British Columbia, Canada. December 11-13

Rajakaruna, N. Edaphic differentiation in *Lasthenia*: Building a case for the parallel evolution of edaphic races in the *L. californica* complex. Talk presented in the Department of Botany Seminar Series, University of British Columbia. November 05

Whitton, J. and N. Rajakaruna. Adaptive divergence in response to water stress in *Lasthenia californica* (Asteraceae). Poster presented at the Annual Meeting of The Society for the Study of Evolution. Urbana-Champaigne, IL, USA. June 28-July 02

1999

Rajakaruna, N. and B. A. Bohm. The edaphic factor and patterns of variation in *Lasthenia californica* (Asteraceae). Paper presented at the Third International Conference on Serpentine Ecology. Kruger National Park, South Africa. March 22-28

1998

Rajakaruna, N. Are edaphic factors influencing incipient speciation in *Lasthenia californica* (Asteraceae)? Paper presented at the Annual Meeting of The Society for the Study of Evolution.Vancouver, B.C., Canada. June 20-24

1997

Rajakaruna, N. Getting the dirt on *Lasthenia*. Presentation at the Department of Botany Seminar Series, University of British Columbia

Professional Service

Manuscript Review 2004 to Present

Areas: plant-soil relations, evolutionary ecology, serpentine ecology, geoecology, heavy metals and ecosystem health

American Journal of Botany (8 papers); Annals of Botany (13 papers); International Journal of Plant Sciences (5 papers)

Madrono: A West American Journal of Botany (9 papers); New Phytologist (7 papers); Journal of Ecology (3 papers)

Ecology (1 paper); Annual Review of Ecology, Evolution, Systematics (1 paper); Oecologia (4 papers)

Molecular Ecology (8 papers); Functional Ecology (1 paper); Belgian Journal of Botany (1 paper)

Environmental Pollution (4 papers); Evolutionary Ecology (1 paper); Fresenius Environmental Bulletin (1 paper)

Plant Ecology (5 papers); Northeastern Naturalist (3 papers); Estuaries and Coasts (1 paper)

Biological Journal of the Linnaean Society (4 papers); The Journal of the Torrey Botanical Society (6 papers); Ceylon Journal of Science (Biological Sciences) (2 papers)

Plant Biosystems (1 paper); Journal of Geology and Mining Research (1 paper); Botany (formerly Canadian Journal of Botany; 2 papers)

International Journal of Phytoremediation (2 papers); Central European Journal of Biology (3 papers); African Journal of Biotechnology (1 paper)

Journal of Medicinal Plant Research (5 papers); Plant and Soil (29 papers); Research in Pharmaceutical Biotechnology (1 paper)

Biotropica (2 papers); Journal of Geography and Regional Planning (1 paper); Ecology Letters (1 paper)

BMC Evolutionary Biology (3 papers); Journal of Hydrology (1 paper); African Journal of Agricultural Research (2 papers)

Journal of Plant Nutrition and Soil Science (3 papers); Plant Ecology and Diversity (13 papers); South African Journal of Botany (7 papers)

Rhodora (1 paper); Plant Biology (1 paper); Web Ecology (2 papers)

PLOS One (2 papers); Plant Ecology and Evolution (1 paper); Revue d Ecologie (1 paper)

Frontiers in Plant Physiology (2 papers); Scientific World Journal: Botany (2 papers); Catena (1 paper)

ISRN Botany (4 papers); American Journal of Ecology and Ecosystems (1 paper); Plant Science (1 paper)

Journal of Biogeography (2 papers); Human Ecology Review (1 paper); Journal of Plant Ecology (2 papers)

Forest Ecology and Management (2 papers); International Scholarly Research Notices (2 papers); The American Naturalist (1 paper)

Ecological Engineering (1 paper); Australian Journal of Botany (15 papers); Proceedings of the Royal Society B: Biological Sciences (1 paper)

Environmental Science and Technology (1 paper); Diversity (1 paper); Ecotoxicology and Environmental Safety (6 papers)

International Journal of Molecular Sciences (2 papers); Geoderma (2 papers); Science of the Total Environment (7 papers)

Journal of Food and Drug Analysis (1 paper); Environmental Entomology (1 paper); Arid Land Research and Management (1 paper)

Environment, Development, and Sustainability (2 papers); Environmental Monitoring and Assessment (2 papers); Science Asia (1 paper)

International Journal of Environmental Research and Public Health (2 papers); Ruhuna Journal of Science (6 papers); Environments (2 papers)

Sustainability (1 paper); Current Analytical Chemistry (1 paper); Egyptian Journal of Aquatic Research (2 papers)

Limnology (4 papers); Ecological Research (9 papers); Applied Soil Ecology (3 papers)

Botanical Studies (1 paper); Haseltonia (1 paper); Journal of Geochemical Exploration (1 paper)

Brazilian Journal of Microbiology (1 paper); Food Webs (1 paper); Trends in Ecology & Evolution (1 paper)

Bothalia (1 paper); Castanea (1 paper); Euro-Mediterranean Journal for Environmental Integration (1 paper)

Frontiers in Plant Science (2 papers); Soil Systems (1 paper); Physiologia Plantarum (2 papers)

Botany Letters (1 paper); Arabian Journal of Geosciences (2 papers); Environmental and Experimental Botany (1 paper)

American Fern Journal (1 paper); The Botanical Review (1 paper)

Review of Books Book Chapters and Proposed Publications

Cheplick, G. P. 2015. *Approaches to Plant Evolutionary Ecology*. Oxford University Press (reviewed chapter 6: Abiotic agents of selection)

Lang, M., ed. 2013. *Brassica*: *Characterization, Functional Genomics and Health Benefits*, Nova Science Publishers, Inc., NY, USA. (reviewed chapter on Health Benefits of *Brassica* Species).

Mittelhauser, G.H., L.L. Gregory, S.C. Rooney, J.E. Weber, M. Lovit, and D. Kausen. 2010. *Field Guide to the Plants of Acadia National Park*. University of Maine Press, Orono, ME (reviewed glossary for botanical accuracy).

Schlising, R. A. and D. G. Alexander. 2011. *Vernal Pool Landscapes*. Proceedings of the 2010 conference on "Vernal Pool Conservation: Research, Progress, and Problems. Is Recovery Possible?" Studies from the Herbarium, California State University, Chico, CA.

E. B. Alexander. *Soils in Natural Landscapes*. Proposed Publication via UC Press, Berkeley, CA. Subsequently published by CRC Press 2013.

External Examination and Review of Grants Research and Researchers 2004 to Present

External Examiner, M.Sc. Theses on the 'conservation ecology of an endangered sandstone outcrop plant species,' 'herbaceous plant diversity responses to various treatments of fire and herbivory in sodic patches of a semi-arid riparian ecosystem,' 'forb and soil microbe diversity of ultramafic tailings facilities,' 'conservation ecology of an endangered succulent of sandstone outcrops in Mpumalanga, South Africa,' and 'Redefining the Griqualand West Centre of Endemism': Faculty of Natural Sciences, North-West University, Potchefstroom Campus, South Africa

Ph.D. Dissertation on Phytoremediation: University of the Punjab, Lahore, Pakistan

M.Phil. Thesis on plant-soil relations on serpentine soils: University of Peradeniya, Sri Lanka

Ph.D. Dissertation on serpentine soil-plant relations: The University of Queensland, Australia

Ph.D. Thesis on biotransfer of heavy metals: Department of Botany, Aligarh Muslim University, India

undergraduate honors thesis on manganese hyperaccumulation, Faculty of Natural Sciences, North-West University, Potchefstroom Campus, South Africa

Ph.D. Dissertation on Herbarium Science: Aligarh Muslim University, India

Ph.D. Dissertation on the geobotany of mountain ecosystems of Griqualand West, South Africa, Faculty of Natural Sciences, North-West University, Potchefstroom Campus, South Africa

Ph.D. Dissertation on plant-soil (heavy metal) relations: Aligarh Muslim University, India

2 Ph.D. Dissertations on plant-mycorrhizae-soil (heavy metal) relations: Aligarh Muslim University, India

Ph.D. Dissertation on plant ecology of gypsum soils: Instituto Pirenaico de Ecología (IPE-CSIC), Spain

Ph.D. Dissertation on the Effects of climate variability, land-use change and transformation on grassland plant diversity in South Africa, Faculty of Natural Sciences, North-West University, Potchefstroom Campus, South Africa

Legislative-Citizen Commission on Minnesota Resources (area: soil metals, remediation, ecosystem health)

National Science Foundation of Sri Lanka, Competitive Research Grant Scheme (area: phytoremediation)

United States-Israel Binational Science Foundation, Jerusalem, Israel (area: heavy metals and ecosystem health)

Charles University Grants Agency, Prague: research proposal on ecological genomics of serpentine adaptation for a doctoral student dissertation at the Department of Botany, Faculty of Science, Charles University, Prague, Czech Republic (2019, 2020)

Living Earth Scientific Evaluation Committee, the French National Research Agency (ANR): research proposal review (plant speciation)

NASA EPSCoR Research Infrastructure Development (RID) proposal: Geochemistry

National Geographic Society: Areas: plant-soil relations (3 proposals); other (1 proposal)

Retention, Tenure and Promotion Evaluations: Stanford University; Humboldt State University; University of Sharjah, UAE; North-West University, South Africa; University of Maine, Orono; University of Tabuk, Saudi Arabia; University of Rhode Island; University of Arizona, Tucson

United States Civilian Research and Development Foundation: Cooperative Grants Program. Area: plant-soil relations

United States Civilian Research and Development Foundation: Cooperative Grants Program. Area: phytoremediation

National Science Foundation. Area: Plant evolutionary ecology, geochemistry, plants & climate change (6 proposals)

National Research Foundation, International Science Cooperation Grants, South Africa. Area: plant-soil relations

National Research Foundation, South Africa. Area: Plant-soil-insect relations, geobotany (4 researcher reviews)

North-West University, Potchefstroom Campus, South Africa. Area: Plant Ecology, Ecology (3 faculty reviews)

USGS Maine Water Resources Institute Program Grants. Area: Geochemistry of serpentinites

Editorial Boards

Associate Editor, *Frontiers in Plant Science* (specialty section Functional Plant Ecology; Feb 2022-October 2023)

External Editor, *Journal of University of Ruhuna* (Sri Lanka; October 2021- 2024)

Section Editor, *Plant and Soil* (September 2021- October 2023)

Associate Editor, *Plant Ecology and Diversity* – subject area: evolution and systematics (July 2020–present)

Associate Editor, *AoB PLANTS* (April 2020-August 2025)

Editorial Board Member, *Ecological Research*, Ecological Society of Japan (May 2018–present)

Advisory Board Member, *Open University of Sri Lanka (OUSL) Journal* (Feb 2017-2024)

Editorial Board Member (Biological Sciences), *Ruhuna Journal of Science* (Jan 2017-2024)

Guest Associate Editor, *AoB PLANTS* (1 manuscript on plant-soil relations; March 2020)

Guest Editor, *Ecological Research* (Springer), Special Issue on the Proceedings of the 9th International Conference on Serpentine Ecology (2017-2018)

Editorial Board Member, International Scholarly Research Network Journals [*ISRN Botany; International Scholarly Research Notices*] (2012-2017)

Guest Editor, *Northeastern Naturalist* (2008-2009); *Plant Ecology and Diversity* (2011-2012); *Australian Journal of Botany* (2014-2015)

Other Professional Service 2004 to Present

Member, Scientific Advisory Committee, International Conference on Serpentine Ecology (ICSE 2027), Belgrade, Serbia (2026–2027; conference preparation underway in 2026).

Member of the Scientific Advisory Committee for the 11th International Conference on Serpentine Ecology (ICSE 2025), Kyoto, Japan, June 13-17 2025

Selection Committee, Editor-in-Chief, *Madroño*, California Botanical Society (Fall 2024)

Fulbright U.S. Scholar Alumni Panelist, African Studies Association Annual Meeting 2023, San Francisco, CA (Dec 1)

Faculty Advisor, California Polytechnic State University: Plants, Peaks, and Pals Club (2018–present); Camellia 'Tea' Club (2018-2022); Bursa (Burmese Student Association) (2019-2022); Cricket Club (2021-2022)

Member, Retention, Promotion, Tenure Committee, Biological Sciences Department, Cal Poly (2021–present) – served on 2-4 evaluations per year for both tenure track faculty and lecturers, including as sub-committee chair

Member, Undergraduate Coordinating Committee, Biological Sciences Department, Cal Poly (2023–present)

Member, Search Committee for the Associate Provost for Student Success, California Polytechnic State University, San Luis Obispo, CA (Fall 2023)

Member of the Scientific Advisory Committee for the 10th International Conference on Serpentine Ecology, Nancy, France, June 12-16 2023

Co-Chair, Session on Plants of Other Harsh Substrates, 10th International Conference on Serpentine Ecology, Nancy, France, June 12-16 2023

Member, Research, Evaluation and Learning (REL) Unit's Focus Group for Fulbright's US Scholar Award Peer Review Process (Jan 2022)

Selection Committee, Faculty-in-Residence, University Housing, Cal Poly, San Luis Obispo, CA (2020, 2021)

Selection Committee, Outstanding Faculty Advisor Award, Cal Poly, San Luis Obispo, CA (2021)

Internal Review Committee, Environmental Earth and Soil Sciences Program, College of Agriculture, Food, and Environmental Sciences, Cal Poly, San Luis Obispo, CA (Feb 2021)

Selection Committee, Fulbright Student Program, Cal Poly, San Luis Obispo, CA (2020, 2021, 2023, 2024, 2025)

Board Member, College of the Atlantic Alumni Association, Bar Harbor, ME (June-August 2020)

ScholarX Mentor (mentoring support to a selected pool of high-potential undergraduate students based in Sri Lanka; https://sefglobal.org/scholarx/2020/; 2020, 2021)

Member-at-Large, Council of the California Botanical Society (May-Dec 2020)

Member of the group reviewing plant status for the California Native Plant Society (CNPS) Inventory and the California Natural Diversity Database (CNDDB) in the Central West Review Group (May 2019)

Member, Ph.D. Thesis Committees: University of California, Santa Cruz; MSc Thesis Committees: San Jose State University, California, California Polytechnic State University, San Luis Obispo

Member, Selection Committee, The Joan K. Hunt and Rachel M. Hunt Summer Scholarship in Field Botany, The Garden Club of America (2019)

Member of the Scientific Advisory and Organizing Committees for the 10th International Conference on Serpentine Ecology, Yekaterinburg, Russia (June 2020)

Committee Member, Fulbright U.S. Scholar Discipline Peer Review – Ecology, Evolution, & Conservation Biology (2018, 2020, 2023)

Member, Board of Directors, California Native Plant Society, San Luis Obispo Chapter, CA (2018–present)

Co-Chair, Geoecology: Life on Harsh Substrates, Northeast Natural History Conference, Burlington, VT (April 13-15, 2018)

Co-Chair, Session on Plant Science, CNPS Conservation Conference, Los Angeles, CA (Feb 1-3, 2018)

Co-Chair, Session on Ecology and Evolution, 9th International Conference on Serpentine Ecology, Tirana, Albania, June 5-7, 2017

Moderator, Session on Science and Technology, South and Central Asia Fulbright Conference, Kolkata, West Bengal, India (March 6-8)

Member of the Scientific Advisory Committee for the 9th International Conference on Serpentine Ecology, Tirana, Albania, June 2017

Senior Personnel/Advisor, National Science Foundation (2015) grant "Collaborative Proposal GEOPATH-EXTRA: Field based professional development for ESTEM undergraduates." PIs: Dr. Calla Schmidt (University of San Francisco), Rebecca Walker (Mount San Antonio Community College), Dr. Sarah Hall (College of the Atlantic), and Dr. Carol Ormand (Science Education Research Center). **$340,733**

Council Member, New England Botanical Club (2015–present)

Organizer and Moderator, Session on 'Landforms and Vegetation,' Northeast Natural History Conference, Sheraton Springfield Hotel, Springfield, MA, USA, April 18-20, 2015

Working Group Member, Characterizing landscape genomics and reconstructing pathways to plant ecological specialization and speciation, project funded by the John Wesley Powell Center for Analysis and Synthesis, US Geological Survey, 2015-2016

Co-Chair, Session on Physiology and Evolution, 8th International Conference on Serpentine Ecology, Sabah, Malaysia, June 2014

Member of the Scientific Advisory Committee for the 8th International Conference on Serpentine Ecology, Sabah, Malaysia, June 2014

Organizer and Moderator, Session on 'Plant Ecology,' Northeast Natural History Conference, OnCenter Convention Center, Syracuse, New York, USA, April 15-19, 2012

Member, Board of Directors, International Serpentine Ecology Society (http://ultramafic-ecology.org/), (2011-)

Organizer and Moderator, Session on 'Botany,' Northeast Natural History Conference, New York State Museum, Albany, New York, USA, April 6-11 2011

Member of the Scientific Advisory Committee for the 7th International Conference on Serpentine Ecology, Coimbra, Portugal, June 2011

Faculty Advisor, California Botanical Society Graduate Student Meeting, San Jose State University, CA, USA (Feb 13 2010)

Faculty Member, Sustainable Campus Environment and Food Systems Coalition (SCEFS), San José State University, CA, USA (2009-2010)

Faculty Advisor, Beta Beta Beta National Biological Honor Society, San José State University, San José, CA, USA (Spring 2009-August 2010)

Advisory Board, Veggielution Urban Farming Project, San José, CA, USA (www.veggielution.org) (2009-2010)

Recording Secretary, California Botanical Society, Berkeley, CA (2009-2010)

Organizer and student intern supervisor, Department of Biological Science, Botany Garden Restoration Project, San José State University, San José, CA, USA (Dec 2008-August 2010)

Chief-Organizer, 6th International Conference on Serpentine Ecology, Bar Harbor, Maine, USA, June 16-23 2008

Member of the Scientific Advisory Committee for the 6th International Conference on Serpentine Ecology, Bar Harbor, Maine, USA June 16-23 2008

Organizer and Moderator, Plant Ecology/Geobotany Session, Northeast Natural History Conference X, New York State Museum, Albany, New York, USA, April 17-18, 2008

Member of the Scientific Committee for the 5th International Conference on Serpentine Ecology, Siena, Italy, May 09-13, 2006

Member of Technical Assistance Grant (TAG) Steering Committee to facilitate community participation in decision making regarding the Callahan Mine Superfund Site, Brooksville, Maine

Conduct workshops on rainforest ecology, bog ecology, and edible botany for high school students at Mount Desert Island High School, Bar Harbor, Maine; lead botanical field trips for summer field studies and other outdoor education programs and for prospective and admitted students of College of the Atlantic, Maine.

Professional Memberships 1998 to 2026

New England Botanical Society; California Botanical Society; California Native Plant Society; African Studies Association; American Society of Plant Taxonomists; Botanical Society of America (current); The Society for Herbarium Curators, Inc.; Sigma Xi, The Scientific Research Society; Pacific Regional Society of Soil Science; Canadian Botanical Association; Canadian Society of Soil Science; Central Coast Biological Society