~ Curriculum Vitae ~

Magalí P. Bazzano, M.S.

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EDUCATION

M.S. Environmental Science – Ecology Concentration, *August 2015* - GPA: 3.9/4.0
Graduate Certificate in Geographical Information Systems (GIS)
University of New Haven, West Haven, CT
Thesis Title: *Spartina alterniflora:* Silicon, stress indicators, and biotic stressors in a Connecticut salt marsh affected by Sudden Vegetation Dieback
Thesis Adviser: Dr. Wade Elmer, Emeritus Scientist, Former Head of the Department of Plant Pathology and Ecology at the Connecticut Agricultural Experiment Station

B.S. Environmental Science – Minor in Chemistry, *May 2013* - GPA: 3.9/4.0, summa cum laude
University of New Haven, West Haven, CT

A.S. Environmental Science & Toxicology, *May 2010*
Gateway Community College, New Haven, CT; GPA: 3.9/4.0, highest honors

B.S. English/Spanish Translation, *March 2006* - GPA: 3.9/4.0
Profesorado Superior de Lenguas Vivas, Salta Capital, Salta Province, Argentina

CURRENT ROLES

- **Project Manager**, full-time, (Yale University, Office of the Provost; Yale Center for Geospatial Solutions, New Haven, CT) – *August 2023 – present*
  I joined Yale University in 2023, initially supporting various initiatives established and managed by the Office of the Vice Provost for Research. Today, I am fully devoted to the Yale Center for Geospatial Solutions, supporting the center's continued development. I oversee and streamline a wide range of operations, ensuring that all activities within the center run efficiently by aligning team efforts with strategic objectives, and providing consistent support to ensure smooth day-to-day operations.
- **Certified Dance Instructor**, part-time, (Fred Astaire Dance Studios, Orange, CT) – *February 2023 – present*
  I teach students of all levels and create custom choreographies for wedding couples and showcases. I hold certifications in Social Foundations, Bronze Preliminary, and Bronze Intermediate levels, and continue advancing through the Fred Astaire syllabus to deepen my technical and teaching expertise. Dance styles include salsa, bachata, merengue, samba, West coast swing, paso doble, mambo, bolero, East coast swing, rumba, cha cha, waltz, tango (Argentinian & ballroom styles), foxtrot, and Viennese waltz.

RESEARCH & MANAGEMENT EXPERIENCE

PhenomeX (Merger of IsoPlexis & Berkeley Lights: 3/21/2023), Branford, CT

– Employed from March 2019 to May 2023 (Supervisor: Dr. Cynthia Turcotte)

- **Senior Scientist**, [PhenomeX (formerly IsoPlexis), Branford, CT]. *March 2023 - May 2023.* In addition to my previous responsibilities as Scientist II, I participated more actively in R&D application, research, experiments, and execution.
- **Scientist II**, [PhenomeX (formerly IsoPlexis), Branford, CT]. *November 2022 - March 2023.* Continued to oversee the planning process of a large-scale collaboration project; analyzed datasets, prepared reports, and effectively communicated findings to key stakeholders in the company; prioritized and coordinated work within a team; ensured a safe workplace by following safety protocols and best practices; organized, maintained, and ordered laboratory supplies.
- **Manager of Internal Demos**, [PhenomeX (formerly IsoPlexis), Branford, CT]. *May 2021 - November 2022.* Oversaw, implemented, and coordinated the planning process of various collaboration projects; led and guided a team of biologists who carried out weekly experiments (demos) for customers and/or internal validations; tracked project progress and ensured accountability and timeliness of execution; analyzed datasets, prepared reports, and effectively communicated findings to key stakeholders in the company; conducted research and contributed to projects and protocols; proofread and edited reports and manuscripts; prioritized and coordinated work within a team, maintaining detailed record keeping and required documentation; ensured a safe workplace by following safety protocols and best practices; collaborated with other scientists and cross-functional teams; demonstrated ability in inventory management, problem solving, and analysis; planned and carried out experiments and investigations in a range of topics - including human, murine, and non-human primate immunology; conducted research and contributed to technology, projects, and publications; designed, conducted, and interpreted experiments; solved problems that required the application of scientific principles to the design and interpretation of laboratory experiments; designed and analyzed the results of a variety of experiments independently; demonstrated a sustained high level of technical skill and achievement; exploited new developments from scientific literature to aid in problem solving; participated in the hiring process of both senior research associates and research associates; in this position, I learned the art of delegation, while at the same time juggling the competing demands of administrative responsibilities and continued laboratory work; during this period, when needed, I also traveled to conduct demos in the field, assisting the FAS Team.
- **Scientist I**, [PhenomeX (formerly IsoPlexis), Branford, CT]. *June 2020 - May 2021.* Collaborated with other scientists and cross-functional teams; planned and carried out experiments and investigations in human and murine immonology; conducted research and contributed to technology, projects, and publications; designed, conducted, and interpreted experiments; solved problems that required the application of scientific principles to the design and interpretation of laboratory experiments; designed and analyzed the results of a variety of experiments independently; demonstrated a sustained high level of technical skill and achievement; exploited new developments from scientific literature to aid in problem solving; participated in the hiring process of both senior research associates and research associates.
- **Senior Research Associate**, [PhenomeX (formerly IsoPlexis), Branford, CT]. *March 2019 - June 2020.* Successfully researched and executed pilot study experiments to be conducted either individually or as part of a team; assisted with the investigation, creation, and development of methods and experiments; recommended the design and implementation of procedures for protocols; worked with human, murine, and non-human primate cells; completed study reports in a high-pressure deadline driven start-up environment; worked with confidential and technical information in a fast-

paced and time-sensitive environment; conducted statistical analyses for manuscripts using GraphPad Prism statistical software; traveled to assist customers in the field (PA, FL, TX, MA); directly discussed with customers future experiments; troubleshot new validation procedures.

National Oceanic and Atmospheric Administration (NOAA), Milford, CT

– Employed from July 2018 to March 2019 (Hired by Integrated Statistics: Contractor Agency) (Supervisor: Dr. Gary Wikfors)

- **Flow Cytometry & Biological Laboratory Technician.** Analyzed metabolic rate of hemocytes to compare diploid, triploid, and tetraploid oysters in Virginia field sites; assisted with the operation of a sorting flow cytometer to accomplish single-cell isolations of kelp spores and blue mussel hemocytes; collected oyster hemocyte samples; prepared oyster cell samples for reading on an analytical flow cytometer; prepared oyster hemocytes for tissue fixation with cacodylate buffer and paraformaldehyde; notched and bled oysters for analysis; collected cytogram data from crab hemocytes utilizing the Accuri C6 plus software, wrote SOP's for the utilization of flow cytometer; assisted in statistical analyses of results using Statgraphics software; wrote methods and results for manuscripts.

Connecticut Agricultural Experiment Station, New Haven, CT

– Employed from September 2015 to August 2016. (Volunteered prior to September 2015).

- **Environmental Protection Seasonal Resource Assistant** (Connecticut Agricultural Experiment Station, Department of Entomology – Center for Vector Biology & Zoonotic Diseases, New Haven, CT). (Supervisor: Dr. Goudarz Molaei). *April 2016 - August 2016.* Conducted day-to-day activities at the Tick Testing Laboratory; conducted morphological identification of tick vectors (mainly *Ixodes scapularis, Amblyomma americanum, Dermacentor variabilis,* and *Rhipicephalus sanguineus*) of human diseases (Lyme disease, anaplasmosis, and babesiosis)*;* performed tick testing protocols for genomic DNA isolation, Polymerase Chain Reaction (PCR), and agarose gel electrophoresis; practised patient confidentiality in accordance with lab policies; worked with confidential and technical information in a fast-paced and time-sensitive environment; entered patient information for reports in the lab database; ensured that all supplies and equipment were available and stocked for necessary day-to-day procedures; replied to patients' inquiries via phone and/or in person.
- **Salt March Research Assistant** (Connecticut Agricultural Experiment Station – Department of Plant Pathology & Ecology, New Haven, CT). (Supervisor: Wade Elmer). *November 2015 - March 2016 (employed) & April 2014 - August 2015 (volunteered).* Used GC-MS instrumentation to measure the concentration of dimethylsulfoniopropionate (DMSP) in leaves of *Spartina alterniflora* plants experimentally treated with various levels of Si and limestone, inoculated with the fungus *Fusarium palustre;* designed greenhouse and field experiments with Si-treated and *Fusarium*-inoculated *Spartina alterniflora* plants; collected *Spartina alterniflora* samples in Connecticut salt marshes, focusing on DMSP as a potential physiological indicator of stress and metal levels in plant tissue; used compound light microscope and hemocytometer for *Fusarium* spore counting.
- **Tree Physiology Research Assistant** (Connecticut Agricultural Experiment Station – Department of Forestry & Horticulture, New Haven, CT). [Supervisor: Dr. Adriana (Arango-Velez) Puralewski]. *September 2015 - November 2015.* Prepared specimens for light microscopy: Fixed tissue with paraformaldehyde and glutaraldehyde, followed by dehydration, infiltration, paraffin embedding, section preparation, and staining; harvested ash trees and fringe trees experimentally infested with emerald ash borer; harvested pitch pines in Long Island, NY, affected by Southern pine beetle; collected xylem and phloem tissue samples to determine the level of phenolic compounds present in affected vs. healthy trees; ground frozen samples with liquid nitrogen using both techniques: mortar and pestle & cryogenic mixer mill; prepared agar culture media for fungal growth (blue-stain fungus).

Connecticut Department of Energy and Environmental Protection (CT DEEP), Hartford, CT
– Internship from June 2015 to August 2015 (Supervisor: Kelly Streich)

- **GIS Intern** [Connecticut Department of Energy and Environmental Protection (CT DEEP), Hartford, CT]. *June 2015 - August 2015.* Assessed and quantified the nitrogen load from on-site wastewater treatment systems (OWTS) to coastal waters of Connecticut. Used ArcGIS to delineate areas of the state where public sewer service was not available. Conducted literature review of online and in-house sources of information.

Housatonic Wastewater Pollution Control Facility, Milford, CT
– Internship from May 2009 to September 2009 (Supervisor: Dr. William Bowie)

- **Wastewater Laboratory Intern** (Housatonic Wastewater Pollution Control Facility, Milford, CT). *May 2009 - September 2009*. Carried out weekly analyses of biochemical oxygen demand (BOD), chemical oxygen demand (COD), alkalinity, coliform tests, and total, dissolved, fixed and volatile solids; examined the microbial ecology in aeration tanks (wastewater microbiology).

LANGUAGES & ENGLISH/SPANISH TRANSLATION EXPERIENCE

- Fluent in English & Spanish (read, speak, write, translate)
- Translator [Center for Analytics (formerly Institute for the Study of Violent Groups, ISVG), University of New Haven, West Haven, CT] – *February 2012 - September 2012.* Translated news articles and videos from Spanish into English; rendered translation into the most concise manner possible while remaining true to the original article and type of translation.
- Basic Italian & Portuguese

TEACHING EXPERIENCE

- **Adjunct Lecturer (University of New Haven – Department of Biology & Environmental Science, West Haven, CT & Prato, Italy) -** *August 2016 – May 2018. Biology for Majors II with Lab; Human and General Biology II with Lab; Ecology with Lab.* Prepared weekly lectures, exams, and quizzes; planned weekly laboratory experiments; conducted corresponding dissections; organized field trips to the Botanical Garden and the Anatomical Museum in Florence, Italy; planned and taught weekly laboratory and field classes for undergraduate ecology students; graded assigned written reports and oral presentations; assessed grades for students based on participation, performance in class, and assignments; collaborated with colleagues on course curriculum; ensured field materials were available before departing on planned ecology field trips.
- **Nature Instructor's Clinic (Camp Pemigewassett, NH). Nature Instructor Clinic Certificate.** *June 2012.* Underwent training on teaching techniques, lesson planning, nature field trips, experiential learning, natural history, and environmental awareness; trained to teach single-session lessons, day-long lessons, week-long courses, summer-long experiences, and nature experiences for large groups.
- **Tutor (University of New Haven – Center for Learning Resources, West Haven, CT). International Tutor Program Certification, 2012.** *August 2011 – March 2012.* Tutored undergraduate English-speaking students in Spanish and General Chemistry.
- **Au Pair (Au Pair in America, Stamford, CT).** *March 2006 - December 2007.* Taught Spanish to children while under my care (ages: 1 to 12 years old).
- **English Language Teacher (Camelot Institute, Salta Capital, Argentina).** *March 2004 - December 2005.* Taught English to Spanish-speaking students (ages 10 to 18 years old); prepared daily classes and activities.

CONFERENCE/SEMINAR PRESENTATIONS

- **Connecticut Conference on Natural Resources (CCNR), University of Connecticut, Storrs, CT.** *March 2016.* Title: *Silicon and dimethylsulfoniopropionate in Spartina alterniflora.*
- **New England Estuarine Research Society (NEERS) - DeWolf Tavern, Briston, RI.** *April 2015.* Title: *Dimethylsulfoniopropionate (DMSP) in Spartina alterniflora at a salt marsh affected by Sudden Vegetation Dieback in Connecticut.*
- **Connecticut Conference on Natural Resources (CCNR), University of Connecticut, Storrs, CT.** *March 2015.* Title: *Using DMSP as an indicator for stress in salt marshes affected by Sudden Vegetation Dieback.*
- **Henry Voegeli Seminar Series, University of New Haven (Department of Biology and Environmental Science, West Haven, CT).** *February 2015.* Graduate Student Research Symposium. Title: *Dimethylsulfoniopropionate in Spartina alterniflora at a salt marsh affected by Sudden Vegetation Dieback in Connecticut.*

PUBLICATIONS

- Combinatorial Cytokine Secretion Signature of Donor-Derived T Cells Infused with the Graft: A New Potential Biomarker of Acute Graft-Versus-Host Disease in Aβt-Cell/CD19 B-Cell Depleted Hematopoietic Stem Cell Transplant Recipients. Montiel-Esparza et al. (2021). *Blood*. https://www.sciencedirect.com/science/article/pii/S0006497121036491
- CAR T cells with dual targeting of CD19 and CD22 in adult patients with recurrent or refractory B cell malignancies: a phase 1 trial. Spiegel et al. (2021). *Nature Medicine*. https://www.nature.com/articles/s41591-021-01436-0
- Use of natural trophic resources by Eastern oysters and Pacific oysters of different ploidy. Mizuta et al. (2021). *Aquaculture and Fisheries.* https://www.sciencedirect.com/science/article/pii/S2468550X20300411
- Interactions and consequences of silicon, nitrogen, and *Fusarium palustre* on herbivory and DMSP levels of *Spartina alterniflora.* Bazzano, Magalí; Elmer, Wade. (2017). *Estuarine, Coastal and Shelf Science. https://www.sciencedirect.com/science/article/abs/pii/S0272771417303980*

COMPUTER SKILLS

- **ArcGIS**: Certificate in Geographical Information Systems (GIS) (issued in 2015)
- **Statistical programs**: SPSS, NCSS, PAST, Prism GraphPad, Statgraphics
- **Office Productivity Tools**: Word, Excel, PowerPoint
- **Others:** Smartsheet, Salesforce, SharePoint, Teams, Zoom, AMP (Astaire Management Program)

VOLUNTEER WORK

- **Clean-up Volunteer**, Milford Oyster Festival, Milford, CT. *March 2018*. Assisted with clean-up of gear for the Milford Oyster Festival.
- **High School Teacher**, Liceo Scientifico Statale Niccoló Copernico, Prato, Italy. *January 2018 - March 2018.* Taught Macroevolution in English at the Copernico High School in Prato, Italy.
- **Adopt-a-Park Volunteer**, Connecticut Department of Energy and Environmental Protection, Hamden, CT. Sleeping Giant State Park. *Summer 2013.* Assisted with trail maintenance and clean-up.