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Assistant Professor of Applied Phycology

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EDUCATION

2012 Ph.D. in Marine-Estuarine-Environmental Sciences (MEES) Program

College of Computer, Mathematical, and Natural Sciences, University of Maryland, College Park, MD, USA

Dissertation: Studies on periphytic algae of Algal Turf Scrubbers™ along the Chesapeake Bay: composition, systematics, dynamics & influencing factors

2007 Bachelor of Science in Biological Sciences (with honors)

Universidade de Santa Cruz do Sul - UNISC, Santa Cruz do Sul, RS, Brazil

Thesis: Cytotoxic and Genotoxic effects of aqueous extracts of *Microcystis aeruginosa* (Chroococcales, Cyanobacteria)

POSTDOCTORAL EXPERIENCE

2016-2017. Postdoctoral Research Fellow

Institute for Bioscience & Biotechnology Research (IBBR), Rockville, MD USA

Project: Phylotastic! Making tree-of-life knowledge accessible, reusable, and convenient

2014-2016. Postdoctoral Research Fellow

Dept. of Arctic Biology, The University Centre in Svalbard, Longyearbyen, Svalbard, Norway

Project: Biodiversity & function of terrestrial and marine microbial eukaryotes in Svalbard (MicroFun)

2013-2014. Postdoctoral Research Fellow

Center for Genetics, Genomics & Evolution, Smith College, Northampton, MA USA

Project: Phylogenomic analyses of microorganisms across the Open Tree of Life

2012-2013. Postdoctoral Research Scientist

Lab of Bacterial Physiology & Genetics, Centre for Protein Engineering, Université de Liège, Liège, Belgium

Project: Molecular diversity and biogeography of cyanobacteria from Antarctica and the Arctic.

CURRENT EMPLOYMENT

2017-pres. **University of Florida / IFAS, Fort Lauderdale Research and Education Center, Department of Agronomy** (Davie, FL, USA)

Assistant Professor of Applied Phycology (Jan/2017- pres)

CURRENT ADJUNCT/AFFILIATE AFFILIATIONS

2019-pres. **University of Florida, Florida Sea Grant** (Gainesville, FL, USA)

Sea Grant Extension Specialist of Harmful Algal Blooms

2017-pres. **University of Florida, School of Natural Resources and Environment** (Gainesville, FL, USA)

Affiliate Faculty Appointment in Interdisciplinary Ecology

2017-pres. **University of Florida, Water Institute** (Gainesville, FL, USA)

Affiliate Faculty Appointment

2017-pres. University of Waterloo, Department of Biology (Waterloo, ON, Canada)

Adjunct Assistant Professor of Biology

2017-pres. Université de Liège (Liège, Belgium)

Collaborateur Scientifique (Research Associate)

2019-pres. National Museum of Natural History, Smithsonian Institution (Washington, DC, USA)

Research Associate in Botany

PUBLICATIONS

Journals

Authorship key: **bold** = self, ^G = Chair/co-Chair graduate student, ^S = other graduate student, ^P = Post-Doctoral Associate/Fellow, ^U = undergraduate

Submitted/In Review

97. Anunciação, RR; Paulino, JM; Moura, AN; **Laughinghouse IV, HD**; Gama, WA. Are classic taxonomic inventories still useful? A case study of terrestrial cyanobacteria from the Atlantic Rainforest in northeastern Brazil. *Fottea*.
96. Pokrzywinski, KL; Bishop, WM; Grasso, CR; Fernando, B; Sperry, BP; Berthold, DE^G; **Laughinghouse IV, HD**; VanGoethm, E; Volk, K; Heilman, M; and Getsinger, K. Evaluation of a peroxide-based algaecide product for cyanobacterial control in Lake Okeechobee, Florida (USA). *Harmful Algae*.
95. Barbosa, M^G; Berthold, DE^G; Lefler, FW^G; **Laughinghouse IV, HD**. La ecología de las algas carófitas (Charales). Electronic Data Information Source UF/IFAS Extensión.
94. Trapp, KC^U; Rodrigues, LS^U; Ferigolo, LF; Gindri, RV; Franco, FW; Ubessi, C; Sautter, CK; Nicoloso, FT; **Laughinghouse IV, HD**; Tedesco, SB. Antiproliferative capacity and phenolic compounds of *Pfaffia glomerata* cultivated under concentrations of zinc. *Archives of Agronomy and Soil Science*
93. Kuhn, AW^U; Freitas, JMB^U; Machado, RS; Boligon, AA; **Laughinghouse IV, HD**; Andriolo, J; Tedesco, SB. Antiproliferative potential of basil (*Ocimum basilicum* L. cultivar Basilicão) inflorescences. *Brazilian Journal of Pharmaceutical Sciences*
92. Kuhn, AW^U; Tedesco, M^U; Freitas, JMB; **Laughinghouse IV, HD**; Frescura, VDS; Canto-Dorow, TS; Silva, ACF; Tedesco, SB. Pollen viability of *Peltodon longipes* Kunth ex Benth. using distinct staining methods. *In Review*.

In revision

91. Talgatti, DM; Costa, CB; **Laughinghouse IV, HD**; Torgan, LC. Benthic diatom community structure from salt marshes of southern Brazil and the relationship to sediment granulometry. *Acta Limnologica Brasiliensis*

2021

90. **Laughinghouse IV, HD**; Lefler, FW^G; and Berthold, DE^G. 2021. Validation of the designation “*Neolyngbya regalis*”, nom. inval. (Oscillatoriaceae, Cyanobacteria). *Notulae Algarum* 182: 1.
89. Barbosa, M^G; Berthold, DE^G; Lefler, FW^G; **Laughinghouse IV, HD**. The ecology of charophyte algae (Charales). Electronic Data Information Source UF/IFAS Extension. (IFAS Publication Number SS-AGR-448). <https://edis.ifas.ufl.edu/ag448>
88. Berthold, DE^G; Lefler, FW^G; **Laughinghouse IV, HD**. 2021. Untangling filamentous marine cyanobacterial diversity from the coast of South Florida with the description of Vermifilaceae fam. nov. and three new genera: *Leptochromothrix* gen. nov., *Ophiophycus* gen. nov., and *Vermifilum* gen. nov. *Molecular Phylogenetics and Evolution*. doi: 10.1016/j.ympev.2020.107010.
87. Karimi, Z; **Laughinghouse IV, HD**; Davis, VA; and Blersch, DM. (2021). Substrate properties as controlling parameters in attached algal cultivation. *Applied Microbiology and Biotechnology*. <https://doi.org/10.1007/s00253-021-11127-y>.
86. Berthold, DE^G; Lefler, FW^G; Huang, I-S^P; Abdulla, HAN; Zimba, P; **Laughinghouse IV, HD**. (2021). *Inin-gainema tapete* sp. nov. (Scytonemataceae, Cyanobacteria) from greenhouses in central Florida (USA) produces two types of nodularin with biosynthetic potential for microcystin-LR and anabaenopeptins. *Harmful Algae* 101: 101969. doi: 10.1016/j.hal.2020.101969.

85. Barbosa, M^G; Lefler, FW^G; Berthold, DE^G; **Laughinghouse IV, HD.** (2021) Uncovering the diversity of the genus *Brasilonema* (Nostocales, Cyanobacteria) in greenhouses of central Florida (USA) with the description of *B. fioreae* sp. nov., *B. santannae* sp. nov., and *B. wernerae* sp. nov. *Fottea* 21(1): 82-99. doi: 10.5507/fot.2020.019
 84. Lefler, FW^G; Berthold, DE^G; **Laughinghouse IV, HD.** (2021) The occurrence of *Affixifilum* gen. nov. and *Neolyngbya* (Oscillatoriaceae) in South Florida (USA) with the description of *A. floridanum* sp. nov. and *N. biscaynensis* sp. nov. *Journal of Phycology* 57(1): 92-110. doi: 10.1111/jpy.13065
 83. Berthold, DE^G; Elazar, A^U; Lefler, F^G; Marble, SC; **Laughinghouse IV, HD.** (2021) Control of algal growth on greenhouse surfaces using commercial algaecides. *Scientia Agricola* 78(1): e20180292. doi: 10.1590/1678-992X-2018-0292
 82. Kinley-Baird, C; Calomeni, A; Berthold, DE^G; Lefler, FW^G; Barbosa, M^G; Rodgers, JH; **Laughinghouse IV, HD.** (2021) Laboratory-scale evaluation of effectiveness for control of microcystin producing cyanobacteria from Lake Okeechobee, Florida (USA). *Ecotoxicology and Environmental Safety* 207: 111233. doi: 10.1016/j.ecoenv.2020.111233.
- 2020**
81. Lefler, FW^G; Barbosa, M^G; Berthold, DE^G; **Laughinghouse IV, HD.** (2020) Genome sequences of two *Microcystis aeruginosa* (Chroococcales, Cyanobacteria) strains from Florida (United States) with disparate toxicogenic potentials. *Microbiology Resource Announcements* 9: e00844-20. doi: 10.1128/MRA.00844-20.
 80. Frišták, V^P; **Laughinghouse IV, HD;** Bell, SM. (2020) The use of biochar and pyrolysis materials to improve water quality through microcystin sorption separation. *Water* 12(10): 2871. doi: 10.3390/w12102871.
 79. Jang, M; Berthold, DE^G; Yu, Z; Silva-Sanchez, C; **Laughinghouse IV, HD;** Denslow, N; Han, S. (2020) Atmospheric Progression of Microcystin-LR from Cyanobacterial Aerosol. *Environmental Science and Technology Letters* 7(10): 740-745. doi: 10.1021/acs.estlett.0c00464
 78. Berthold, DE^G; Lefler, FW^G; Werner, VR; **Laughinghouse IV, HD.** (2020) *Johannesbaptistia floridana* sp. nov. (Chroococcales, Cyanobacteria), a novel marine cyanobacterium from coastal South Florida (USA). *Fottea* 20(2): 152-159. doi: 10.5507/fot.2020.008.
 77. Trapp, KC^U; Hister, CAL^U; **Laughinghouse IV, HD;** Boligon, AA; Tedesco, SB. (2020) Determination of phenolic compounds and evaluation of cytotoxicity in *Plectranthus barbatus* using the *Allium cepa* test. *Caryologia* 73(2): 145-153. doi: 10.13128/caryolo-gia-947.
 76. Werner, VR; Tucci, A; Silva, LM^U; Yunes, JS; Berthold, DE^G; **Laughinghouse IV, HD** (2020) Morphological, ecological and toxicological aspects of *Raphidiopsis raciborskii* (Cyanobacteria) in a eutrophic urban subtropical lake in southern Brazil. *Iheringia, série Botânica* 75: e2020018. doi: 10.21826/2446-82312020v75e2020018
 75. Wood, SA; Kelly, L; Bouma-Gregson, K; Humbert, JF; **Laughinghouse IV, HD;** Lazorchak, J; McAllister, T; McQueen, A; Pokrzywinski, K; Puddick, J; Quibbler, C; Reitz, L; Ryan, K; Vadeboncoeur, Y; Zastepa, A; Davis, T. (2020) Toxic benthic freshwater cyanobacterial proliferations: challenges and solutions for enhancing knowledge and improving monitoring and mitigation. *Freshwater Biology* 65(10): 1824-1842. doi: 10.1111/fwb.13532
 74. Berthold, DE^G; Frankovich, T; Gaiser, E; **Laughinghouse IV, HD.** (2020) *Fistulifera alcalina* sp. nov. (Naviculales, Stauroneidaceae) a new alkaliphilic diatom species from Lake Okeechobee, Florida (USA). *Diatom Research* 35(3): 301-311. doi: 10.1080/0269249X.2020.1801517.
 73. **Laughinghouse IV, HD;** Berthold, DE^G; Bishop, W. (2020) Approaches to Managing Cyanobacterial Blooms and Altering Water Quality. *Aquatics* 42(1): 13-16.
 72. Berthold, DE^G; Rosa, N^S; Engene, N; Jayachandran, K; Gantar, M; **Laughinghouse IV, HD;** Shetty, KG. (2020) Omega-7 producing alkaliphilic diatom *Fistulifera* sp. (Bacillariophyceae) from Lake Okeechobee, Florida. *Algae* 35(1): 91-106. doi: 10.4490/algae.2020.35.12.16
 71. Nguyen, VD^S; Nguyen, TH^S; Tayeen, ASM^S; **Laughinghouse IV, HD;** Sánchez-Reyes, LL^P; Wiggins, J; Pontelli, E; Mozzherin, D; O'Meara, B; Stoltzfus, A. (2020) Phylotastic: improving access to tree-of-life knowledge with flexible, on-the-fly delivery of trees. *Evolutionary Bioinformatics* 16: 1-7. doi: 10.1177/1176934319899384
 70. Negrisoni, RM^S; Odero, DC; MacDonald, GE; Sellers, BA; **Laughinghouse IV, HD.** (2020). Sugarcane

response and fall panicum (*Panicum dichotomiflorum*) control with topramezone and triazine herbicides. *Weed Technology* 34: 241-249. doi:10.1017/wet.2019.95

69. **Laughinghouse IV, HD**; Lefler, FW^G; Berthold, DE^G; Bishop, WM. (2020) Sorption of microcystin using lanthanum-modified bentonite clay. *Journal of Aquatic Plant Management* 58: 72-75.

2019

68. Lefler, FW^G; Berthold, DE^G; Barbosa, M^G; **Laughinghouse IV, HD**. (2019) Cyanobacterial blooms in Florida's fresh waters. *Aquatics* 41(3): 14-15.
67. Barbosa, M^G; Lefler, F^G; Berthold, DE^G; **Laughinghouse IV, HD**. (2019) What are Charales? A Look at the Ecology of Charales. *Aquatics* 41(2): 29-30.
66. Hentschke, GS^P; Rigonato, J^P; Genuário, DB^E; **Laughinghouse IV, HD**; Sant'Anna, CL. (2019) Morphological and molecular characterization of *Stigonema jurei* sp. nov. (Nostocales, Cyanobacteria) from the Atlantic Rainforest, São Paulo, Brazil. *Fottea* 19(2): 185-191.
65. Katona, S^E; Horváth, N^E; Berthold, DE^G; Molnár, Z; Bálint, P; Ördög, V; Pap, B; Maróti, G; Bánáti, F; Szenthe, K; Vörös, L; Kilgore, C; **Laughinghouse IV, HD**. (2019) Phylogenetic re-evaluation of previously identified *Chlamydomonas* (Chlorophyta, Chlamydomonadaceae) strains from the Mosonmagyaróvár Algal Culture Collection (Hungary) using molecular data. *South African J of Botany* 125: 16-23. doi: 10.1016/j.sajb.2019.06.028
64. **Laughinghouse IV, HD**; Berthold, DE^G; Marble, C; Saha, D^E. (2019). Biología y Manejo de *Nostoc* (Cyanobacteria) en viveros e invernaderos. Gainesville, FL: Institute of Food and Agricultural Sciences, Florida Cooperative Extension Service, University of Florida, Electronic Data Information Source SS-AGR-431-Span. <https://edis.ifas.ufl.edu/pdf/AG/AG43200.pdf>
63. **Laughinghouse IV, HD**; Berthold, DE^G; Marble, C; Saha, D^E. (2019). Biology and Management of *Nostoc* (Cyanobacteria) in nurseries and greenhouses. Gainesville, FL: Institute of Food and Agricultural Sciences, Florida Cooperative Extension Service, University of Florida, Electronic Data Information Source SS-AGR-431. <http://edis.ifas.ufl.edu/ag430>
62. Horváth, N^E; Katona, S^E; Berthold, DE^G; Molnár, Z; Bálint, P; Ördög, V; Pap, B; Maróti, G; Bánáti, F; Szenthe, K; Vörös, L; Kilgore, C; **Laughinghouse IV, HD**. (2019) The reclassification of 37 strains from *The Mosonmagyaróvár Algal Culture Collection*, Hungary, which were previously identified as *Anabaena* (Cyanobacteria, Nostocaceae). *South African J of Botany* 123: 333-340. doi: 10.1016/j.sajb.2019.03.014
61. Berthold, DE^G; Shetty, KG; Jayachandran, K; **Laughinghouse IV, HD**; Gantar, M. (2019) Enhancing algal biomass and lipid production through bacterial co-culture. *Biomass and Bioenergy* 122: 280-289. doi: 10.1016/j.biombioe.2019.01.033
60. Frišták, V; **Laughinghouse IV, HD**; Packová, A; Graser, M; Soja, G. (2019) Risk assessment of methylated naphthalene in sludge-derived pyrogenic carbonaceous materials. *Chemosphere* 217: 456-462. doi: 10.1016/j.chemosphere.2018.11.030
59. Almanza, V^P; Pedreros, P; **Laughinghouse IV, HD**; Félez, J; Parra, O; Azocar, M; Urrutia, R. (2019) Association between trophic state, watershed use and blooms of cyanobacteria in south-central Chile. *Limnologia* 75: 30-41. doi: 10.1016/j.limno.2018.11.004

2018

58. Gioeli, KT; **Laughinghouse IV, HD**; Krinsky, LS; Skvarch, EA. (2018). Harmful algal bloom extension program for the Indian River Lagoon. *Proc. Fla. State Hort. Soc.* 131: 259-261.
57. Hamburger, S; Gioeli, KT; Berthold, DE^G; **Laughinghouse IV, HD**. (2018). Volunteer Algae Monitoring Program (VAMP) in the Indian River Lagoon. *Marine Technology Society Journal* 52(4): 88-93. doi: 10.4031/MTSJ.52.4.7
56. Santos, KRS^P; Hentschke, GS^P; Andreote, APD^P; **Laughinghouse IV, HD**; Ballot, A; Novelo, E; Fiore, MF; Sant'Anna, CL. (2018) Polyphasic characterization of newly isolated *Anabaenopsis* (Cyanobacteria) strains from tropical Brazil and Mexico. *Phytotaxa* 367(1): 1-12. doi: 10.11646/phytotaxa.367.1.1
55. Kleinteich, J^P; Puddick, J; Wood, SA; Hildebrand, F; **Laughinghouse IV, HD**; Pearce, D; Dietrich, DR; Willemotte, A. 2018. Toxic cyanobacteria in Svalbard: Chemical diversity of microcystins detected using a liquid chromatography tandem mass spectrometry precursor screening method. *Toxins* 10:147

doi:10.3390/toxins10040147.

54. Frescura, VD-S^U; Boligon, AA; Barbosa, FM; Souza, JM; Lerner, MA **Laughinghouse IV, HD**; Silva, CB; Andriolo, JL; Lopes, SJ; Tedesco, SB. 2018. Nutrient solution concentration and collection time in phyto-mass production, content, yield and chemical composition of essential oil of rosemary. *J Plant Nutrition* 41(10): 1293-1302. doi: 10.1080/01904167.2018.1450420
53. Vader, A; **Laughinghouse IV, HD**; Griffiths, C; Jakobsen, KS; Gabrielsen, TM. (2018) Expression of proton-pumping rhodopsins by microbial eukaryotes in a high-Arctic Fjord. *Environmental Microbiology* 20(2): 890-902. doi: 10.1111/1462-2920.14035

2017

52. Marble, C; Frank, MS; **Laughinghouse IV, HD**; Steed, S; Boyd, N. 2017. Biology and Management of Liverwort (*Marchantia polymorpha*) in Ornamental Crop Production. Gainesville, FL: Institute of Food and Agricultural Sciences, Florida Cooperative Extension Service, University of Florida, Electronic Data Information Source ENH278. <http://edis.ifas.ufl.edu/pdf/EP/EP54200.pdf>
51. Hister, CAL^U; Boligon, AA; **Laughinghouse IV, HD**; Tedesco, SB. 2017. Determination of phenolic compounds and assessment of the genotoxic and proliferative potential of *Psidium cattleianum* Sabin (Myrtaceae) fruits. *Caryologia* 70(4): 350-356. doi: 10.1080/00087114.2017.1360571.
50. Kangas, PC; Mulbry, W; Klavon, P; **Laughinghouse IV, HD**; Adey, WH. 2017. High diversity within the periphyton community of an algal turf scrubber on the Susquehanna River. *Ecol Eng.* 108: 564-572. doi: 10.1016/j.ecoleng.2017.05.010
49. Wilmotte, A; **Laughinghouse IV, HD**; Capelli, C; Rippka, R; Salmaso, N. 2017. Taxonomic identification of Cyanobacteria by a polyphasic approach. In: Kurmayer, R; Sivonen, K; Wilmotte, A; Salmaso, N. *A Handbook on Molecular Tools for the Detection and Quantification of Toxigenic Cyanobacteria*. Hoboken, NJ (USA): Wiley ISBN: 978-1-118-33210-7, 79-119 p.
48. Coelho, APD^U; **Laughinghouse IV, HD**; Kuhn, AW; Boligon, AA; Athayde, ML; Canto-Dorow, TS; Silva, ACF; Tedesco, SB. 2017. Genotoxic and Antiproliferative potential of extracts of *Echinodorus grandiflorus* and *Sagittaria montevidensis* (Alismataceae). *Caryologia* 70(1): 82-91.

2016

47. Rodrigues, LGF^U; Frescura, VDS^{Ug}; **Laughinghouse IV, HD**; Pastori, T^g; Dalla Nora, G; Perez, NB; Lopes, SJ; Canto-Dorow, TS; Tedesco, SB. 2016. Allelopathic effect of gorse and myo-myo on the germination of lovegrass. *Int. J. Curr. Res.* 8 (11): 42112-42114.
46. Jensen, L^U; Grant, J; **Laughinghouse IV, HD**; Katz, LA. 2016. Assessing the effects of a sequestered germline on interdomain lateral gene transfer into Metazoa. *Evolution.* 70: 1322-1333.
45. Lavín, P; Atala, C; Gallardo-Cerda, J; González-Aravena, M; Iglesia, R; Osés, R; Torres-Díaz, C; Trefault, N; Molina-Montenegro, M; **Laughinghouse IV, HD**. 2016. Isolation and characterization of an Antarctic *Flavobacterium* strain with agarase and alginate lyase activities. *Pol Polar Res.* 37(3): 403-419.
44. Pessi, IS^G; Maalouf, PC^g; **Laughinghouse IV, HD**; Baurain, D; Wilmotte, A. 2016. On the use of high-throughput sequencing for the study of cyanobacterial diversity in Antarctic aquatic mats. *J. Phycol.* 52: 356-368.

2015

43. Hinchliff, C^P; Smith, SA; Allman, JF; Burleigh, G; Chaudary, R^P; Crandall, K; Deng, J^g; Drew, BH^P; Gazis, R^P; Gude, K; Hibbet, DS; Katz, LA; **Laughinghouse IV, HD**; McTavish, EJ^P; Midford, PE; Owen, C^P; Ree, R; Rees, JA; Soltis, D; Williams, T; Cranston, K. 2015. Synthesis of phylogeny and taxonomy into a comprehensive tree of life. *Proc. Natl. Acad. Sci.* 112(41): 12764-12769.
42. Kuhn AW^U; Tedesco, M^U; Boligon, AA; Athayde, ML; **Laughinghouse IV, HD**; Tedesco, SB. 2015. Chromatographic analysis and antiproliferative potential of aqueous extracts of *Punica granatum* fruit peels using the *Allium cepa* test. *Braz J Pharm Sci* 51(1): 241-248.
41. Kuhn AW^U; Tedesco, M^U; **Laughinghouse IV, HD**; Silva, CB; Canto-Dorow, TS; Tedesco, SB. 2015. Mutagenic and antimutagenic effects of *Eugenia uniflora* L. by the *Allium cepa* L. test. *Caryologia.* 68(1): 25-30.
40. **Laughinghouse IV, HD**; Müller, KM; Adey, WH; Lara, Y^g; Johnson, G; Young, R^g. 2015. Evolution of the

northern rockweed *Fucus distichus* in a regime of glacial cycling: implications for benthic algal phylogenetics. *PLoS One* 10(12): e0143795.

39. Luz, LV^U; Silva, ACF; **Laughinghouse IV, HD**; Tedesco, SB; Coelho, APD. 2015. Cytogenetic characterization of *Schinus terebinthifolius* Raddi (Anacardiaceae) accessions from Rio Grande do Sul, Brazil. *Caryologia* 68(2): 132-137.
38. Malone, CF^E; Rigonato, J^P; **Laughinghouse IV, HD**; Schmith, E; Bouzon, ZL; Wilmotte, A; Fiore, MF; Sant'Anna, CL. 2015. *Cephalothrix* gen. nov. (Cyanobacteria): towards an intraspecific phylogenetic evaluation by multi-locus analyses. *Int J System Evol Microbiol.* 65: 2993-3007.
37. Tedesco, M^U; Kuhn AW^U; Boligon, AA; **Laughinghouse IV, HD**; Athayde, ML; Silva, ACF; Tedesco, SB. 2015. Chromatographic analysis, antiproliferative effect and genotoxicity of aqueous extracts of *Citrus sinensis* (L.) Osbeck on the *Allium cepa* L. test system. *Biosci J* 31(4): 1213-1221.

2014

36. Dalla Nora, G^U; Tedesco, SB; Pastori, T; Frescura, VDS; Ribeiro, ND; **Laughinghouse IV, HD**; Lopes, SJ; Schifino-Wittmann, MT. 2014. Meiotic behavior and pollen viability in bean cultivars. *Biocell* 38(1-3): 33-38.
35. Gama Jr, WA^E; **Laughinghouse IV, HD**; Sant'Anna, CL. 2014. How diverse are coccoid cyanobacteria? A case study of terrestrial habitats from the Atlantic Rainforest (São Paulo, Brazil). *Phytotaxa* 178(2): 61-97.
34. Lahr, DLG; **Laughinghouse IV, HD**; Oliverio, A^U; Gao, F^E; Katz, LA. 2014. How discordant morphological and molecular evolution among microorganisms can revise our notions of biodiversity on earth. *BioEssays* 36: 950-959.
33. Sandefur, HN^U; Johnston, RZ^U; Matlock, MD; Costello, TA; Adey, WH; **Laughinghouse IV, HD**. 2014. Hydrodynamic regime considerations for the cultivation of periphytic biofilms in two tertiary treatment systems. *Ecol Eng* 71: 527-532.

2013

32. Adey, WH; **Laughinghouse IV, HD**; Miller, JB; Hayek, LAC; Thompson, JG; Bertman, S; Hampel, K; Puvanendran, S. 2013. Algal Turf Scrubber flowways on the Great Wicomico River, a mesohaline inlet on the Chesapeake Bay: productivity, algal community structure, substrate and chemistry. *J. Phycol.* 49: 489-501.
31. Frescura, VDS^U; Kuhn, AW^U; **Laughinghouse IV, HD**; Nicoloso, FT; Lopes, S; Tedesco, SB. 2013. Evaluation of the allelopathic, genotoxic, and antiproliferative effects of the medicinal species *Psychotria umbellata* and *Psychotria birotula* (Rubiaceae) on the germination of *Eruca sativa* (Brassicaceae). *Caryologia* 66(2): 138-144.
30. Frescura, VDS^U; Kuhn, AW^U; **Laughinghouse IV, HD**; Paranhos, JT; Tedesco, SB. 2013. Post-treatment with plant extracts used in Brazilian folk medicine caused a partial reversal of the antiproliferative effect of glyphosate in the *Allium cepa* test. *Biocell* 37(2): 23-28.

2012

29. Coelho, APD^U; Morais, K^U; **Laughinghouse IV, HD**; Giacomini, SJ; Tedesco, SB. 2012. Pollen grain viability in accessions of *Crotalaria juncea* L. (Fabaceae). *Agrociencia* 46(5): 481-487.
28. Frescura, VDS^U; **Laughinghouse IV, HD**; Tedesco, SB. 2012. Antiproliferative effect of the arboreal and medicinal species *Luehea divaricata* on the *Allium cepa* cell cycle. *Caryologia* 65(1): 27-33.
27. Frescura, VDS^U; **Laughinghouse IV, HD**; Canto-Dorow, TS; Tedesco, SB. 2012. Pollen viability of *Polygala paniculata* L. (Polygalaceae) using different methods of staining. *Biocell* 36(3): 143-145.
26. Kling, H; **Laughinghouse IV, HD**; Šmarda, J; Komárek, J; Acreman, J; Bruun, K; Watson, SB; Chen, F. 2012. A new red colonial *Pseudanabaena* (Cyanoprokaryota, Oscillatoriales) from North American large lakes. *Fottea* 12(2): 327-339.
25. **Laughinghouse IV, HD**; Prá, D; Silva-Stenico, ME; Rieger, A; Frescura, VDS^U; Fiore, MF; Tedesco, SB. 2012. Biomonitoring genotoxicity and cytotoxicity of *Microcystis aeruginosa* (Chroococcales, Cyanobacteria) using the *Allium cepa* test. *Sci Total Environ* 432: 180-188.
24. Piccini, F^U; Frescura, VDS^U; **Laughinghouse IV, HD**; Perez, NB; Machado, OB; Tedesco, SB. 2012. Pollen viability of genotypes of *Eragrostis plana* from different geographic populations in Rio Grande do Sul, Brazil. *Enciclopédia Biosfera* 8(15): 1316-1324.

23. Sherwood, AR; Necchi Jr, O; Carlile, AL^P; **Laughinghouse IV, HD**; Fredericq, S; Sheath, RG. 2012. Characterization of a novel freshwater gigartinales red alga from Belize, with description of *Sterrocladia belizeana* sp. nov. *Phycologia* 51(6): 627-635.
22. Wang, H^g; **Laughinghouse IV, HD**; Anderson, MA; Chen, F; Williams, E; Place, AR; Zmora, O; Zohar, Y; Zheng, T; Hill, RT. 2012. Novel Bacterial Isolate from Permian Groundwater, Capable of Aggregating Potential Biofuel-Producing Microalga *Nannochloropsis oceanica* IMET1. *Appl. Environ. Microbiol.* 78(5): 1445-1453.
21. Werner, VR; **Laughinghouse IV, HD**; Fiore, MF; Sant'Anna, CL; Hoff, C^g; Santos, KRS^g; Neuhaus, EB^g; Molica, RJR; Honda, RY^P; Echenique, R. 2012. Morphological and molecular studies of *Sphaerospermopsis torques-reginae* comb. nov. (Nostocales, Cyanobacteria) from South American water blooms. *Phycologia* 51(2): 228-238.

2011

20. Costa, RCL^U; Lobato, AKS^U; Silveira, JAG; **Laughinghouse IV, HD**. 2011. ABA-mediated proline synthesis in cowpea leaves exposed to water deficiency and rehydration. *Turk J Agric For.* 35: 309-317.
19. Sandefur, HN^U; Matlock, MD; Costello, TA; Adey, WH; **Laughinghouse IV, HD**. 2011. Seasonal productivity of a periphytic algal community for biofuel feedstock generation and nutrient treatment. *Ecol Eng* 37: 1476-1480.

2010

18. Dalla Nora, G^U; Pastori, T^U; **Laughinghouse IV, HD**; Canto-Dorow, TS; Tedesco, SB. 2010. Antiproliferative and genotoxic effects of *Mikania glomerata* (Asteraceae). *Biocell* 34(3): 95-101.
17. Neto, MAM^U; Lobato, AKS^U; Alves, JD; Goulart, PFP; **Laughinghouse IV, HD**. 2010. Seed and Seedling Anatomy in *Euterpe oleraceae* Mart. during the Germination Process. *J Food Agric Environ* 8(2): 1147-1152.
16. Rossato, LV^U; Tedesco, SB; **Laughinghouse IV, HD**; Nicoloso, FT. 2010. Alterations in the mitotic index of *Allium cepa* induced by infusions of *Pluchea sagittalis* submitted to three different cultivation systems. *An. Acad. Bras. Cienc.* 82(4): 857-860.
15. Souza, LFB^U; **Laughinghouse IV, HD**; Pastori, T^U; Tedesco, M^U; Kuhn AW^U; Canto-Dorow, TS; Tedesco, SB. 2010. Genotoxic potential of aqueous extracts of *Artemisia verlotorum* on the cell cycle of *Allium cepa*. *Int J Environ Stud* 67(6): 871-877.

2009

14. Bagatini, MD^U; Vasconcelos, TG; **Laughinghouse IV, HD**; Martins, AF; Tedesco, SB. 2009. Biomonitoring Hospital Effluents by the *Allium cepa* L. Test. *B Environ Contam Tox* 82: 590-592.
13. Hister, CAL^U; **Laughinghouse IV, HD**; Silva, CB; Canto-Dorow, TS; Tedesco, SB. 2009. Evaluation of the antiproliferative effects of infusions and essential oil of *Aloysia gratissima*. *Pak J Biol Sci* 12(24): 1581-1584.
12. Lobato, AKS^U; Luz, LM; Costa, RCL; Santos Filho, BG; Meirelles, ACS; Oliveira Neto, CF; **Laughinghouse IV, HD**; Neto, MAM; Alves, GAR; Lopes, MJS; Neves, HKB. 2009. Silicon exercises influence on nitrogen compounds in pepper subjected to water deficit. *Res J Biol Sci* 4(9): 1048-1055.
11. Werner, VR; **Laughinghouse IV, HD**. 2009. Bloom-forming and other planktonic *Anabaena* (Cyanobacteria) morphospecies with twisted trichomes from Rio Grande do Sul State, Brazil. *Nova Hedwigia* 89 (1-2): 17-47.

2008

10. Carvalho, LR; Pipole, F; Werner, VR; **Laughinghouse IV, HD**; Rangel, M; Konno, K; Camargo, ACM; Sant'Anna, CL. 2008. A Toxic Cyanobacterial Bloom in an Urban Coastal Lake, Rio Grande do Sul, Southern Brazil. *Braz J Microbiol* 39(4): 761-769.
9. Costa, RCL^U; Lobato, AKS^U; Oliveira Neto, CF; Maia, PSP; Alves, GAR; **Laughinghouse IV, HD**. 2008. Biochemical and Physiological Responses in Two *Vigna unguiculata* (L.) Walp. Cultivars Under Water Stress. *J Agronomy* 7(1): 98-101.
8. Fachinetto, JM^U; **Laughinghouse IV, HD**; Silva, ACF; Tedesco, SB. 2008. Variability of the chromosomal number and meiotic behavior in populations of *Bidens pilosa* L. (Asteraceae) from southern Brazil.

Caryologia 61(2): 164-169.

7. Lobato, AKS^U; Oliveira Neto, CF; Costa, RCL^U; Santos Filho, BG; Silva, FKS; Cruz, FJR; Abboud, ACS; **Laughinghouse IV, HD**. 2008. Germination of Sorghum Under the Influences of Water Restriction and Temperature. *Agricultural J* 3(3): 220-224.
6. Lobato, AKS^U; Oliveira Neto, CF; Costa, RCL^U; Santos Filho, BG; Silva, FKS; Cruz, FJR; **Laughinghouse IV, HD**. 2008. Biochemical and Physiological Behavior of *Vigna unguiculata* (L.) Walp. Under Water Stress during the Vegetative Stage. *Asian J Plant Sci* 7(1): 44-49.
5. Lubini, G^U; Fachinetto, JM^U; **Laughinghouse IV, HD**; Paranhos, JT; Silva, ACF; Tedesco, SB. 2008. Extracts affecting mitotic division in root tip meristematic cells. *Biologia* 63(5): 647-651.
4. Olkoski, D^U; **Laughinghouse IV, HD**; Silva, ACF; Tedesco, SB. 2008. Meiotic Analysis of the Germplasm of three Medicinal Species from the Asteraceae Family. *Ciência Rural* 38(6): 1777-1780.

2006-2007

3. Silva, MHL^U; Costa, RCL^U; Lobato, AKS^U; Oliveira Neto, CF; **Laughinghouse IV, HD**. 2007. Effect of Temperature and Water Restriction on *Piper aduncum* L. Seed Germination. *J Agronomy* 6(3): 472-475.
2. Köche, A; Rieger, A; Geller, FC^U; **Laughinghouse IV, HD**. 2006. Epidemiological, behavioral, and genetic aspects of alcoholism in a sample from the population of the Rio Pardo Valley, RS [In Portuguese]. *Caderno de Pesquisa, Série Biologia* 18(2): 151-165.

Books/Book Chapters

1. Tedesco, SB; **Laughinghouse IV, HD**. 2012. Bioindicator of Genotoxicity: the *Allium cepa* test. In: Srivastava, J.K. *Environmental Contamination*. Rijeka: InTech Publisher. pp. 137-156. ISBN: 978-953-51-0120-8. doi: 10.5772/31371. *16,384 downloads as of 05 Jan 2020.

PAST ACADEMIC & RESEARCH EMPLOYMENTS

2016-2019. **Smithsonian Institution, National Museum of Natural History Department of Botany** (Washington, DC, USA)

Research Associate in Phycology (Nov/2016- Dec/2019)

2015-2017. **Institute for Bioscience & Biotechnology Research** (Rockville, MD, USA)

Postdoctoral Research Fellow (Dec/2015- Jan/2017)

2014-2016. **The University Centre in Svalbard, Department of Arctic Biology** (Longyearbyen, Svalbard, Norway)

Lecturer (Nov/2014-Nov/2015)

Postdoctoral Research Fellow (Nov/2014- Dec/2015)

2013-2014. **Smith College, Department of Biology** (Northampton, MA, USA)

Postdoctoral Research Fellow (Dec/2013-Nov/2014)

2012-2013. **Université de Liège, Centre for Protein Engineering** (Liège, Belgium)

Postdoctoral Research Scientist (Aug/2012-Dec/2013)

2008-2013. **Smithsonian Institution, National Museum of Natural History, Department of Botany** (Washington, DC, USA)

Research Associate ('Drouet Curator of Cyanobacteria') (Dec/2012-May/2013)

Program Manager & Senior Algae Analyst (June/2008-Aug/2012)

2009-2012. **University of Maryland, College Park, Department of Biology** (College Park, MD, USA)

Graduate Teaching Assistant (TA) (Jan/2011-May/2011)

College of Agriculture and Natural Resources, Department of Environmental Science & Technology
Graduate Research Assistant (Aug/2009-Jan/2011; Aug/2011-May/2012)

2007-2008. **John Carroll University, Department of Biology** (University Heights, OH, USA)
Graduate Teaching Assistant (TA)

2005-2007. **Museum of Natural Sciences, Fundação Zoobotânica do Rio Grande do Sul** (Porto Alegre, RS, Brazil)
CNPq Undergraduate National Research Fellow (Aug/2005-Jan/2007)
FAPERGS Undergraduate State Research Fellow (Apr/2005-Aug/2005)

2004-2005. **Universidade de Santa Cruz do Sul – UNISC** (Santa Cruz do Sul, RS, Brazil)
Center for Archaeological Studies, Research, and Education
Undergraduate Research Assistant (Bolsista PUIC) (Mar/2004-Dec/2004)
Laboratory of Biotechnology
Undergraduate Research Assistant (Bolsista PUIC) (Aug/2005-Dec/2005)

RESEARCH GRANTS, CONTRACTS & OTHER SUPPORT

(Principal Investigator or Co-Principal Investigator)

SUBMITTED

FUNDED

US\$ 39,415 Effects of stormwater ponds on microbial communities and subsequent ecosystem functioning in downstream receiving waters. Grant from University of Florida/IFAS Center for Land Use Efficiency. 2021-2022. (co-PI)

US\$ 937,000 Algae Harvesting and biomass reuse for sustainable nutrient reduction in agricultural runoff to the Gulf of Mexico. Grant from US Environmental Protection Agency. 2021-2023. (PI)

US\$ 5,000 Exploring the potential for upstream copper-based algaecide application to exacerbate downstream eutrophication and compromise shellfish production and safety. 2021-2022. Grant from Florida Sea Grant. (co-PI)

US\$ 27,000 MDC STEM Spring 2021 Research. 2021. Grant from Miami Dade College (via US Department of Education). (co-PI)

US\$ 30,000 Cyanocide: a novel biological control approach for cyanobacteria. Grant from Oak Ridge Institute for Science and Education (US Department of Energy). 2021-2022. (co-PI)

US\$ 1,545,234 Efficacy of algaecides and novel ozone nanobubble technology on prevention and management of harmful algal blooms (HABs) in Lake Erie. Grant from US Army Corps of Engineers. 2021-2024. (co-PI)

US\$ 9,990 *Sargassum* composting for soil amendments in coastal landscapes. Grant from Florida Sea Grant. 2020-2022. (co-PI)

US\$ 150,687 Characterization and Mitigation of Harmful Cyanobacteria in US waters. Grant from US Army Corps of Engineers. 2020-2023. (PI)

US\$ 200,000 Field Deployable Measurement of Brevetoxins in Airborne Harmful Algae using Colorimetric Immunoassay. Grant from Florida Fish and Wildlife Conservation Commission. 2020-2021 (co-PI)

US\$ 19,200 Responses and Toxin Production of Planktonic Cyanobacteria to Rodeo (glyphosate). Grant from South Florida Water Management District (PI). 2020-2021.

US\$ 81,107 Effect of aquatic plant control on planktonic cyanobacteria in Lake Tohopekaliga, Florida. Grant from Florida Fish and Wildlife Conservation Commission. 2019-2021 (PI)

US\$ 4,000 Isolation, Cultivation, Identification, and Evaluation of Toxin Potential of HAB Species. Grant from Florida Sea Grant. 2020 (PI)

US\$ 25,980 Comparative Efficacy of Algaecides for the control of a toxic *Microcystis aeruginosa* bloom in Lake Okeechobee. Grant from Aquatic Ecosystem Restoration Foundation (PI). 2019.

US\$ 15,001 Systematic identification and ecology of *Chara* and their application in water remediation in the Stormwater Treatment Areas (STAs) of South Florida. Grant from South Florida Water Management District (PI). 2019-2020

US\$ 50,000 Characterization and mitigation of freshwater harmful cyanobacteria from Lake Okeechobee to the St. Lucie Estuary. Grant from University of Florida/IFAS Dean of Research (PI). 2019-2021.

US\$ 20,422 Quantifying Life Cycle and Phosphorus Uptake and Release from Periphyton and Phytoplanktonic Communities. Grant from South Florida Water Management District (PI). 2018-2019.

US\$ 12,614 Laboratory experiments on the effects of glyphosate on the growth of select planktonic and benthic cyanobacteria (blue-green algae). Grant from South Florida Water Management District (PI). 2018-2019.

US\$ 28,500 Laughinghouse SHARE Program. Multiple Sponsors. (PI) 2017-2020

US\$ 30,000 Comparative Efficacy of Algaecides for Control of Harmful Algal Blooms /HABs) in the Okeechobee: Demonstration Scale Study. Grant from Aquatic Ecosystem Restoration Foundation (PI). 2018.

US\$ 59,730 Novel oxidant product formulation for greenhouse disinfection. Grant from US Department of Agriculture SBIR Phase 2 through TDA Research, Inc. (PI). 2018-2020.

US\$ 5,000 Developing effective management options for *Nostoc* spp. in Florida nurseries. Grant from Florida Nursery Growers and Landscape Association (PI). 2017-2018.

US\$ 51,812 Laughinghouse UF/IFAS Research Service Program. Multiple sponsors (PI). 2017-2022.

US\$ 20,000 Novel oxidant product formulation for greenhouse disinfection. Grant from US Department of Agriculture SBIR through TDA Research, Inc. (PI). 2017-2018.

US\$ 22,500 Preliminary study on the systematic identification and ecology of *Chara* and their application in water remediation. Grant from South Florida Water Management District (PI). 2017-2018

US\$ 1,587 Volunteer Algal Monitoring Program (VAMP). Grant from St. Lucie County, FL. (PI). 2017.

US\$ 3,179 MDC STEM EngIne. Grant from US National Science Foundation. (co-PI). 2017.

US\$ 7,919 Laughinghouse Extension Services. Multiple Sponsors. (PI) 2017

CLP 75,792,000 Microbial diversity and function of surface terrestrial communities in Antarctica and Sub-Antarctica in a regime of climate change. Grant from FONDECYT-CONICYT (PI). 2015-2018.

NOK 408,000 Polar cyanobacteria and their toxins – are we safe? Grant from Svalbard Environmental Fund (PI). 2015-2016.

€ 389,250 Preservation of Photosynthetic microalgae of BCCM collections (PRESPHOTO). Grant from BEL-SPO (Co-PI). 2014-2016.

NOK 48,000 Ecological and evolutionary constraints of prokaryotic microbial biodiversity in terrestrial and lake ecosystems of Svalbard (ProSval). Grant from The Svalbard Science Forum (PI). 2013.

US\$ 25,200 Periphyton analyses on New York City-Jamaica Bay algal turf scrubber (ATS) systems. Grant from New York City Government/Biohabitats (PI). 2011-2012.

US\$ 40,000 Ecological and Taxonomic Studies of the Algal Communities on Floating Algal Turf Scrubbers. Grant from Statoil-Hydro/College of William & Mary (Co-PI). 2009-2011.

US\$ 90,000 Ecological and Taxonomic Analysis of Algal Turf Communities for the WMRI/ChAP Project. Grant from Statoil-Hydro/College of William & Mary (Co-PI). 2009-2011.

US\$ 47,800 Community Analyses of the Algal Turf Scrubber (ATS) Algae to Energy Project. Subgrant from Lewis Foundation/Smithsonian (PI). 2008-2009.

€ 18,175 Ecological and evolutionary constraints of microbial biodiversity in lake ecosystems: a bipolar comparison (MiBipol). INTERACT. (co-PI). 2013.

~US\$ 15,000 Several small grants from private consulting companies and state agencies to identify and count algae from different environments.

~US\$ 15,000 Several small grants for travel

NON-FUNDED

US\$ 10,000 Maintenance and Curation of an Algal Culture Collection and Herbarium for Research and Extension. Submitted to the Florida Sea Grant College (PI).

US\$ 49,000 The effect of select commonly used aquatic herbicides on microbial community. Submitted to the Florida Fish and Wildlife Conservation Commission.

US\$ 40,000 Effects of algaecides on cyanobacterial blooms: a multi-omics approach. Submitted to the Aquatic Plant Management Society (PI)

US\$ 30,000 Treatment to remove cyanobacteria and cyanotoxins from water. Submitted to US Environmental Protection Agency SBIR with TDA Research (PI)

US\$ \$1,600,000 CNH: Valuing and managing anthropized ecosystems: Primary and secondary services provided by stormwater ponds in urban landscapes Submitted to US National Science Foundation (co-PI)

US\$ 5,000 Terrestrial cyanobacteria (blue-green algae) in plant nurseries and greenhouses: a potential threat to plant and human health. Submitted to Florida Nursery, Growers and Landscape Association (PI)

US\$ \$1,695,390 Collaborative Research: ECO-CBET: Engineering Algal Turf Scrubbers for Nitrogen Management. Submitted to US National Science Foundation (co-PI)

US\$ 576,000 LEAP-HI/GOALI: Health Infrastructure and Prosperity from Filamentous Algal Cultivating Technologies (HIP FACTs). Submitted to US National Science Foundation (PI)

US\$ 1,588,601 CNH2-L: Valuing and managing anthropized ecosystems: Primary and secondary services provided by stormwater ponds in urban landscapes. Submitted to NSF (co-PI)

US\$ 60,000 Improved Algal Cultivation with Reduced Capital Expense. Submitted to US DOE (PI)

US\$ 12,207 Advanced methods for algal growth to enhance aquaculture. Submitted to USDA SBIR with TDA Research, Inc. (PI).

US\$ 4,986,723 Defining and Forecasting HAB Threats to Coastal Ecosystems, Communities and Fisheries. Submitted to NOAA-ECOHAB (co-PI)

US\$ 222,683 Nutrient Recycling in the Lake Martin Watershed: A Systems Approach for Sustainable Food, Energy, and Water Management in Dammed Waterways. Submitted to NSF (with Auburn) (PI)

US\$ 56,716 Systems modeling of nitrogen recycling in multi-trophic aquaculture. Submitted to USDA (with Auburn) (PI)

US\$ 99,995 Characterization of cyanobacterial harmful algal blooms (cyanoHABs) and toxin levels in the water and American alligators of the Okeechobee - Everglades Watershed. CESU – Department of Interior (PI)

US\$ 50,000 Microbial biodiversity in near-shore waters around the Hurricane-impacted Florida Keys and correlations with anthropogenic impact and physico-chemical parameters. Submitted to UF Biodiversity Institute (co-PI)

US\$ 12,001 Advanced methods for algal growth to enhance aquaculture. Submitted to USDA SBIR through TDA Research, Inc. (PI).

US\$ 38,945 Filamentous Algae Advanced Substrate Technology (FAAST) for improved algal biomass enrichment and recovery. Submitted to DOE through TDA Research, Inc. (PI).

US\$ 744,278 CNH-S: Tradeoffs between aesthetic and environmental functioning within stormwater ponds in residential developments. Submitted to NSF (Co-PI)

US\$ 156,060 Understanding the effects of substrate surface chemistry and topography on the selective growth of filamentous algae. Submitted to NSF (PI). 2017

US\$ 295,733 Opening a black box: Comprehensive analysis of key microbial players and metabolic processes involved in sulfide production and detoxification related to seagrass die-offs in Florida Bay. Submitted to DOI NPS (Co-PI). 2017

US\$ 996,878 Creating Safe Operating Space and Enhancing Coastal Resilience in South Florida. Submitted to NOAA (Co-PI). 2017.

US\$ 318,130 Characterization to mitigation of freshwater harmful cyanobacteria in the state of Florida. Submitted to the EPA (EPA-G2017-STAR-A2). (PI). 2017.

US\$ 18,000 A proposal to the Drouet Herbarium. Submitted to the Drouet Endowment, Smithsonian Institution (PI). 2016.

€ 58,000 Opening the treasure chest to improve the taxonomy and the biodiversity baseline data of cyanobacteria. Submitted to FNRS (co-PI). 2015.

SEK 450,000 Why are some cyanobacterial blooms toxic? – a population genomic approach. Submitted to Crafoord Foundation. (co-PI). 2014.

NOK 50,000 Cyanobacterial succession in glacier forefields (Cyanofields). Submitted to The Svalbard Science Forum (PI). 2014.

€ 150,000 Spring bloom dynamics and diversity in the Gulf of Finland. Submitted to the Estonian Science Foundation (Collaborator). 2014.

€ 1,188,782 MICROFUNANT- Microbial diversity and function of terrestrial microbial communities in Antarctica. Submitted to BELSPO. (Co-PI). 2013.

€ 62,000 Diversity, Distribution and Expansion of toxigenic bloom-forming planktonic and benthic *Nodularia* species in the Baltic Sea. Submitted to the Maj and Tor Nessling Foundation. (co-PI). 2011.

€ 26,100 Diversity, Distribution and Expansion of toxigenic bloom-forming planktonic and benthic *Nodularia* species in the Baltic Sea. Submitted to the Walter and Andrée Nottbeck Foundation. (co-PI). 2011.

HONORS/AWARDS

Erasmus+ Teaching Mobility Fellowship (to Lucian Blaga University of Sibiu, Sibiu, Romania), 2019

Smithsonian Fellow, 2012-2013.

FRS-FNRS Postdoctoral Research Scientist, 2012-2013.

Graduate Teaching Assistantship (Univ. of Maryland), 2011 (ca. \$40,000)

Graduate Research Assistantship (Univ. of Maryland), 2009; 2011-2012 (ca. \$80,000)

Graduate Teaching Assistantship (John Carroll Univ.), 2007-2008 (ca. \$60,000)

Valedictorian of BS in Biological Sciences (Univ. of Santa Cruz do Sul), 2007

CNPq National Research Fellowship, (Museum of Natural Sciences, FZB/RS), 2005-2007 (R\$ 5,460)

FAPERGS State Research Fellowship, (Museum of Natural Sciences, FZB/RS), 2005-2005 (R\$ 1,500)

Undergraduate Research Assistantship (Univ. of Santa Cruz do Sul), 2004-2005

2013. Hoehne Award for Poster (1st place)

2011. Maryland Branch ASM: J. Howard Brown Award – US\$200

2011. Northeast Algal Society: Frank R. Trainor Graduate Poster Award – US\$75

2006. Award Knowledge of Waters by UFRGS, Brazilian Assoc. of Sanit. Eng. & Reference Center of L. Guaíba Watershed – R\$250.

TEACHING

Undergraduate (U) /Graduate level (G)

2018-2020: University of Florida (Gainesville, FL, USA)
AGR 6932: Special Topics in Agronomy (Phycology) (G)
AGR 6905: Agronomic Problems (Phycology) (G)

2017: University of Florida (Gainesville, FL, USA)
ALS 5932: Project Team: Determining strategies for algal preservation aimed at improving an algae drug delivery platform (G)

2016: University of Maryland (College Park, MD, USA)
ENST373: Natural History of the Chesapeake Bay (U)

2015: The University Centre in Svalbard (Longyearbyen, Norway)
AB332/832: Arctic Marine Molecular Ecology (G)
AB327/827: Arctic Microbiology (G)
AB201: Terrestrial Arctic Biology (U)

2014: The University Centre in Svalbard (Longyearbyen, Norway)

AB332/832: Arctic Marine Molecular Ecology (G)
 2014: Smith College (Northampton, MA, USA)
BIO180Y: Biogeochemical Cycling in the Avery Brook Watershed (U)
 2012: University of Liège (Liège, Belgium)
TP Algologie: Lab study of algal groups (G)
 2011: University of Maryland (College Park, MD, USA)
BSCI222: Principles of Genetics (Discussion): Mendelian & Molecular Genetics and Gene Expression (U)
 2007-2008: John Carroll University (University Heights, OH, USA)
BL158: Principles of Biology 2 Lab: study of plant and animal physiology (U)
BL160: Principles of Biology 3 Lab: Taxonomy of bacteria, algae, protists, fungi & eukaryotic plants & animals (U)
BL445: Aquatic Resources Lab: Laboratory Analysis of Aquatic Life (U, G)

ESL Teaching

2000-2007 English as a Second Language (ESL) part-time teacher, teaching children, teenagers, and adults English at several schools in southern Brazil.

Invited Lectures in Universities/Conferences

2020: “Cyanobacteria: diversity, ecology and toxicity”. Miami-Dade Naturalist Certification Program, UF/IFAS Extension (in September)
 2020: “Cyanobacteria in Lake Okeechobee and the St. Lucie River and Estuary”. Virtual Water Ambassador, UF/IFAS Extension and Florida Sea Grant (in June)
 2020: “Cyanobacteria ecology & management”. Bite-Sized Science, Florida Sea Grant (in June)
 2020: “Cyanobacteria public health & pets”. Bite-Sized Science, Florida Sea Grant (in June)
 2020: “From blooms to mats or a crust: the diversity and ecology of cyanobacteria and how to manage them”: US Environmental Protection Agency, Office of Research and Development. Duluth, MN, USA (in May)
 2020: “Identification, prevention and management of cyanobacteria and algae”. CEU variety pack Pinellas County, Largo, FL USA (in March)
 2020: “Identification, prevention and management of cyanobacteria and algae”. Master Gardner’s Training, UF/IFAS Extension Broward County, FL USA (in March)
 2020: “Identification, prevention and management of cyanobacteria and algae”. Training for the Department of the Environment of Belize (in March)
 2020: “Trophic state, watershed use, and blooms of cyanobacteria – a Chilean Example”: 7th UF Water Institute Symposium – Gainesville, FL, USA.
 2019: “Understanding Blue-Green Algae”: UF/IFAS Extension Broward County, Davie, FL USA (in August)
 2019: “Algal Identification in the Environment. Part. 2.”: Florida Lake Management 30th Annual Technical Symposium, Duck Key, FL, USA (in August)
 2019: “Cyanobacterial Harmful Algal Blooms”: Florida Master Gardner Volunteer Conference, Ocala, FL, USA (in August)
 2019: “Mitigation and Control of Cyanobacteria”: UF/IFAS Sea Grant Harmful Algal Bloom State of the Science Symposium, St. Petersburg, FL, USA (in August)
 2019: “Algal Identification in the Environment. Part. 1.”: Florida Lake Management 30th Annual Technical Symposium, Duck Key, FL, USA (in August)
 2019: “Association between trophic state, water use, and blooms of cyanobacteria in South-Central Chile”: Florida Lake Management 30th Annual Technical Symposium, Duck Key, FL, USA (in August)
 2019: “Beyond Dead Fish: How Red Tide Affects All Floridians”: Thompson Earth Systems Institute, Florida Museum of Natural History, Gainesville, FL, USA (in April)
 2019: “Cyanobacteria: toxic blooms and beyond”: Archbold Biological Station, Venus, FL, USA (in April)
 2019: “Cyanobacteria: toxic blooms and beyond”: Florida Agriculture Policy Outlook Conference, Wimauma, FL, USA (in February)

- 2019: “Cyanobacteria: toxic blooms and beyond”: American Farm Bureau Federation, Internal Water Advisory Committee, Washington, DC, USA (in February)
- 2019: “Cyanobacteria: toxic blooms and beyond” UF/IFAS Extension Broward County, Davie, FL USA (in February)
- 2019: “Cyanobacteria, understanding blue-green algae: environmental influences, toxicity, and health”: UF/IFAS Extension Broward County, Davie, FL USA (in February)
- 2019: “Cyanobacteria: toxic blooms and beyond”: Discussion of Local Agricultural Issues with Legislators, SW Florida REC, University of Florida/IFAS, Immokalee, FL USA (in February)
- 2018: “Reflections from the EU CyanoCOST Project on Diversity, Prevention, Control and mitigation of Cyanobacteria”: Center of European Studies, University of Florida, Gainesville, FL USA (in December)
- 2018: “Cyanobacteria: from toxicity to treatment”: Aquapôle, Université de Liège, Liège, Belgium (in November)
- 2018: “The Science of Harmful Algal Blooms: A Panel Discussion”: UF/IFAS Extension Sarasota County, Sarasota, FL (in November)
- 2018: “Field Identification of Algae”: University of Santa Cruz do Sul, Santa Cruz do Sul, RS, Brazil (in October - via web)
- 2018: “Field Identification of Algae”: Florida Lake Management Society Technical Meeting, Ft. Lauderdale, FL, USA (in August)
- 2018: “Workshop on Identification of Algae”: Florida Lake Management Society Technical Meeting, Ft. Lauderdale, FL, USA (in August)
- 2018: “Field Identification of Algae”: Aquatic Plant Short Course, Coral Springs, FL, USA (in May)
- 2018: “Cyanobacteria: toxic blooms and beyond”: Okeechobee Chamber of Commerce, Okeechobee, FL, USA (in April).
- 2018: “Cyanobacteria: toxic blooms, human health, treatment, and more”: Institute of Marine and Environmental Technology, University of Maryland Center for Environmental Sciences, Baltimore, MD USA. (In March)
- 2018: “Cyanobacteria: toxic blooms, human health, treatment, and more”: Tropical REC, University of Florida/IFAS, Homestead, FL, USA.
- 2017: “Cyanobacteria: toxic blooms, human health, treatment, and more”: Ft. Lauderdale REC, University of Florida/IFAS, Davie, FL, USA.
- 2017: “Phycoremediation: harnessing the power of algae to reverse eutrophication and restore water resources”: University of Georgia, Athens, GA, USA.
- 2017: “Cyanobacteria: toxic blooms, human health, treatment, and more”: Florida International University, Miami, FL, USA.
- 2017: “Algal Turf Scrubbers for Phycoremediation”: Aquatic Plant Management Society, Daytona Beach, FL, USA
- 2017: “Use of modern techniques for the study of microbial ecology”: Universidade de Santa Maria, Santa Maria, RS, Brazil.
- 2017: “Cyanobacteria: Blooms, Toxins and Health”: University of North Florida, Jacksonville, FL, USA.
- 2017: “Algae identification, prevention and management”: CEU Variety Pack Pinellas County, Largo, FL.
- 2017: “Algal Responses to Acids and Alkalis in Freshwater Lakes”: South Florida Aquatic Plant Management Society Meeting, Miramar, FL, USA
- 2017: “Harmful Algal Blooms”: UF/IFAS Southern Regional Natural Resources and CEU event, Davie, FL, USA.
- 2017: “Cyanobacteria: Blooms, Toxins and Health”: Broward College, Davie, FL, USA.
- 2016: “Molecular phylogeny and its applications in bioremediation, clinical microbiology, and bioproducts (medicinal plants and microbiology)”: Centre for Research and Training in Biotechnology, University of Santa Cruz do Sul, Santa Cruz do Sul, RS, Brazil
- 2014: “Taxon-rich analyses using a phylogenomic pipeline resolve the eukaryotic tree of life and reveal the power of subsampling by sites”: Protist 2014, Banff, AB, Canada

- 2013: “Algal Turf Scrubbing: productivity, algal community structure, substrate and chemistry”: Centre of Protein Engineering, Université de Liège, Liège, Belgium.
- 2013: “Polar Microbial Ecology”: Chilean Antarctic Institute, Ministry of Foreign Affairs, Punta Arenas, Magallanes y Antártica Chilena, Chile
- 2011: “Algal Turf Scrubbers and Clean Water Innovation”: Ecological Economics Course, University of Maryland, College Park, MD, USA
- 2010: “Algal Turf Scrubber (ATS): Cleaning Rivers while producing biofuels and agricultural products”: Aquapôle, Université de Liège, Liège, Belgium.
- 2010: “Biodiversity of Algae in the Statoil Project”: ChAP Workshop, College of William & Mary, VA.
- 2010: “Subaerophytic Algae”: Wet Walls Ecosystems CAPSTONE Course, University of Maryland, College Park, MD, USA
- 2010: “Algae: Water Quality, Consequences & Solution”: Emerging Environmental Threats Course, University of Maryland, College Park, MD.
- 2009: “Chroococcales and *Anabaena* of potentially toxic blooms in southern Brazil”: Advanced Course on Blue-green and Green Algal Identification, Durham University, Durham, England, UK.
- 2009: “Algal Turf Scrubber (ATS) Systems”: Advanced Course on Blue-green and Green Algal Identification, Durham University, Durham, England, UK.
- 2009: “Introduction to the Algae”: University of Arkansas, Fayetteville, AR, USA.
- 2009: “Introduction to Algal Turf Scrubber (ATS) Systems”: University of Arkansas, Fayetteville, AR.
- 2009: “Common periphytic cyanobacteria and algae found on ATS Systems”: University of Arkansas, Fayetteville, AR.
- 2007: “Cytotoxicity and genotoxicity of aqueous extracts of *Microcystis aeruginosa*”: Seminar in Biological Sciences Course, John Carroll University, University Heights, OH, USA.
- 2007: “Cyanotoxins: their effect on water quality and human health”: Aquatic Resources Course, John Carroll University, University Heights, OH, USA.

Current Students

Graduate: Ph. D.

Max Barbosa, University of Florida – Agronomy

David Berthold, Florida International University – Biological Sciences

Forrest Lefler, University of Florida – Interdisciplinary Ecology

Graduate: Master’s

Sergio Gonzalez, University of Florida – Agronomy/Agroecology

Bethany McClellon, University of Florida – Interdisciplinary Ecology

Former Students

Graduate: Ph. D.

Igor S. Pessi, University of Liège, Belgium. “Cyanobacterial biodiversity, biogeography, and evolutionary history in Antarctic lacustrine microbial mats”. (Co-advisor of PhD thesis)

Camila F. da S. Malone, Instituto de Botânica de São Paulo, São Paulo, Brazil – Botany . “Polyphasic evaluation of tropical strains assigned to the *Phormidium autumnale* complex”, 2013. – Internship

Graduate: M.Sc.

Emily Becks, University of Florida – Environmental Horticulture, “The use of algae from Algal Turf Scrubbers as slow release organic fertilizers” (Advisor)

Undergraduate

Ariel Elazar, Broward College, FL, USA. Internship with cyanobacteria, 2017-2019

Annie Wu, Broward College, FL, USA. Internship with cyanobacteria. 2019

Emily Margolis, Broward College, FL, USA. Internship with cyanobacteria, 2018.

Nikita Zanko, Miami-Dade College, FL, USA. Internship with cyanobacteria, 2017-2018.
 Stasa Lukowski, Broward College, FL, USA. Internship with cyanobacteria, 2017
 Olivia Rymsok, Broward College, FL, USA. Internship with cyanobacteria, 2017
 Cynthia Masai, Smith College, MA, USA. “Apicomplexa in the Open Tree of Life”, 2014. – Summer SURF program.
 Jenn Yoo, Smith College, MA, USA. “Microbes in the Open Tree of Life”, 2014. – Summer SURF program.
 Kayla Foney, Smith College, MA, USA. “Microbes in the Open Tree of Life”, 2014. – Summer SURF program.
 Cameah Wood, Smith College, MA, USA. “Amoebozoa in the Open Tree of Life”, 2014. – Summer SURF program.
 Lindy Jensen, Smith College, MA, USA. “Testing new curation tools in the Open Tree of Life”, 2014. – Summer SURF program.
 Doris Juarez, Smith College, MA, USA. “Ciliophora in the Open Tree of Life”, 2014. – Summer SURF program.
 Florence MacGregor, Smith College, MA, USA. “Open Tree of Life and Encyclopedia of Life integration”, 2014. – Summer SURF program.
 Ghida El-Banna, Smith College, MA, USA. “Diversity of sulfate reducing bacteria in the Avery Brook Watershed”, 2014. – Summer SURF program.
 Eirini Tsekitsidou, Smith College, MA, USA. “Diversity of sulfate reducing bacteria in the Avery Brook Watershed”, 2014. – Summer SURF program.
 Jiaqi Mei, Smith College, MA, USA. “Horizontal Gene Transfer into Fungi”, 2014. – Summer SURF program.
 Lindy Jensen, Smith College, MA, USA. “Germline Sequestration on the tempo of lateral gene transfer from bacteria to animals”, 2014. – Honor’s Thesis Co-Advisor.
 Jody Lee, Smith College, MA, USA. “Molecular Diversity of Polar and Herbarium Cyanobacteria”, 2014. – Special Studies
 Javier Gilbert Jaramillo, Escuela Superior Politecnica del Litoral, Ecuador. “Diversity and Biogeography of terrestrial cyanobacteria” 2013. – Internship in Antarctica
 Olivier Joris, Haute École de la Province de Liège, Belgium. “Molecular characterization of strains and environmental samples of cyanobacteria”, 2013.

GRADUATE COMMITTEE MEMBER

Current

Timothy Shardlow, University of Waterloo, Canada
 Quincy Faber, University of Florida, USA
 Joey Sigmon, University of Florida, USA

Defended

2020: Dan Fucich, University of Maryland, USA
 2019: Raphael Negrisoni (MS), University of Florida/IFAS, USA
 2018: Jens Beets (MS), University of Florida/IFAS, USA
 2015: Pia Tahvanainen (PhD), University of Helsinki, Finland. *Biogeography and genetic structure of the toxic dinoflagellate Alexandrium ostenfeldhii in the Baltic Sea*.
 2014: Yannick Lara (PhD), University of Liège, Belgium. *Molecular tools applied to the study of microcystin-producing cyanobacteria in Belgian waterbodies*

Other Publications and Abstracts

Expanded Abstracts

121. Tedesco, SB; Frescura, VD; **Laughinghouse IV, HD**; Canto-Dorow, TS. 2011. Estimativa da viabilidade dos grãos de pólen de *Polygala paniculata* L. por metodologias de coloração. In: I Simpósio de Melhoria e Propagação Vegetativa de Plantas. Santa Maria-RS, pp. 165-170.

120. Werner, VR; Juliano, VB; **Laughinghouse IV, HD**, Domingues, CD; Nunes, ML. 2007. *Florações de cianobactérias no Lago Guaíba (RS) durante os Verões de 2004, 2005 e 2006*. In: III Mostra de Trabalhos Técnicos, Científicos e Comunitários. Porto Alegre - RS 2007, pp. 1-4.

Magazine articles

119. **Laughinghouse IV, HD**. 2010. Review of Bursaries and Grants: Freshwater Diatoms: Taxonomy and Bio-monitoring at the Humboldt Field Research Inst. in Steuben, ME, USA. In: *The Phycologist* (79): 7.
118. **Laughinghouse IV, HD**. 2009. Review of Bursaries and Grants: Introductory Course on Freshwater Algal Identification (Durham). In: *The Phycologist* (77): 6.
117. Werner, VR; **Laughinghouse IV, HD**. 2006. CIANOBACTÉRIAS: Qualidade de Água e Saúde Pública. *Biologia Atual* 13: 2.
116. **Laughinghouse IV, HD**. 2005. Algas Marinhas – Parte 1. *Biologia Atual* 11: 6.

Abstracts (as contributed papers/posters)

115. Kinley-Baird, C; Calomeni, A; Berthold, DE^G; Lefler, FW^G; Barbosa, M^G; Rodgers, JH; and **Laughinghouse IV, HD**. 2021. Laboratory-scale evaluation of effectiveness for control of microcystin producing cyanobacteria from Lake Okeechobee, Florida. In: *Florida Lake Management 31st Annual Technical Symposium – Virtual*
114. Lefler, FW^G; Berthold, DE^G; Crawford, E; **Laughinghouse IV, HD**. 2021. Common bloom-forming cyanobacteria of South Florida. In: *Florida Lake Management 31st Annual Technical Symposium – Virtual*
113. Barbosa, M^G; Berthold, DE^G; Lefler, FW^G; Crawford, E; **Laughinghouse IV, HD**. 2021. Effects of glyphosate (Rodeo) on the growth of planktonic cyanobacteria. In: *Florida Lake Management 31st Annual Technical Symposium – Virtual*
112. Pokrzywinski, KL; Bishop, WM; Grasso, CR; Fernando, B; Sperry, BP; Berthold, DE^G; **Laughinghouse IV, HD**; VanGoethm, E; Volk, K; Heilman, M; Getsinger, K. 2020. Evaluation of a peroxide-based algaecide product for cyanobacterial control in Lake Okeechobee. In: SETAC SciCon2 North America – Virtual.
111. Wilmotte, A; Pessi, IS; Velazquez, D; Durieu, B; **Laughinghouse IV, HD**. 2020. Past cyanobacteria biodiversity in herbarium collections: a time travel to a lost world? In: 11th European Workshop on the Biology of Cyanobacteria, pg. 205.
110. Wilmotte, A; Pessi, IS; Velazquez, D; **Laughinghouse IV, HD**. 2020. Past cyanobacterial diversity in polar regions. In: 2020 Scientific Committee on Antarctic Research Meeting (SCAR 2020 Online) – Virtual.
109. Encomio, V; Kaminski, D; Gioeli, K; Laughinghouse IV, HD; Krimsky, L. 2020. Extension efforts of the treasure coast HAB working group. In: 7th UF Water Institute Symposium – Gainesville, FL, USA
108. Almanza, VP; Urrutia, R; Wilmotte, A; Laughinghouse IV, HD. 2020. Trophic state, watershed use, and blooms of cyanobacteria – a Chilean Example. In: 7th UF Water Institute Symposium – Gainesville, FL, USA.
107. Barbosa, M; Berthold, DE; Lefler, FW; Crawford, E; Laughinghouse IV, HD. 2020. Effects of glyphosate (Rodeo) on the growth of planktonic cyanobacteria. In: 7th UF Water Institute Symposium – Gainesville, FL, USA.
106. Lefler, FW; Berthold, DE; Barbosa, M; Calomeni, AJ; Laughinghouse IV, HD. 2020. The effects of algaecides and herbicides on a *Microcystis aeruginosa* bloom in Lake Okeechobee, Florida (USA). In: 7th UF Water Institute Symposium – Gainesville, FL, USA.
105. Baird, C; Calomeni-Eck, AJ; Berthold, DE; Barbosa, M; Laughinghouse IV, HD. 2020. *Laboratory-scale evaluation of algaecide effectiveness for control of microcystin-producing cyanobacteria collected from Lake Okeechobee*. In: Midwest Aquatic Plant Management Society – Indianapolis, IN, USA.
104. Katona, S; Horváth, N; Berthold, DE^G; Molnár, Z; Bálint, P; Ördög, V; Pap, B; Maróti, G; Bánáti, F; Szenthe, K; Vörös, L; Kilgore, C; and **Laughinghouse IV, HD**. 2019. Phylogenetic re-evaluation of previously identified *Chlamydomonas* (Chlorophyta, Chlamydomonadaceae) strains from the Mosonmagyaróvár Algal Culture Collection (Hungary) using molecular data. In: 9th Symposium on Microalgae and Seaweed Products. Mosonmagyaróvár, Hungary, 25-26 June, 2019

103. Lefler, FW; Berthold, DE; Barbosa, M; Baird, CM; Laughinghouse IV, HD. 2019. *The effects of algaecides and herbicides on a Microcystis winter bloom in Lake Okeechobee, Florida (USA)*. In: 10th US Harmful Algal Bloom Symposium – Orange Beach, AL, USA.
102. Berthold, DE; Lefler, FW; Bishop, W; **Laughinghouse IV, HD**. 2019. *Microcystin-LR binding and sedimentation using Phoslock*. In: 10th US Harmful Algal Bloom Symposium – Orange Beach, AL, USA
101. Lefler, FW; Berthold, DE; Barbosa, M; Baird, CM; **Laughinghouse IV, HD**. 2019. *The effects of algaecides and herbicides on a Microcystis winter bloom in Lake Okeechobee, Florida (USA)*. In: Florida Lake Management 30th Annual Technical Symposium – Duck Key, FL, USA.
100. **Laughinghouse IV, HD**; Almanza, V; Wilmotte, A; Urrutia, R. 2019. *Association between trophic state, water use, and blooms of cyanobacteria in South-Central Chile*. In: Florida Lake Management 30th Annual Technical Symposium – Duck Key, FL, USA.
99. Berthold, DE; Lefler, FW; Paul, F; **Laughinghouse IV, HD**. 2019. *Can Phoslock be used to bind and sediment microcystin-LR in aquatic systems?* In: 59th Meeting of the Aquatic Plant Management Society – San Diego, CA, USA.
98. Barbosa, M; Berthold, DE; Lefler, FW; Crawford, E; **Laughinghouse IV, HD**. 2019. *Systematic identification and ecology of Chara (Charales) in Stormwater Treatment Areas of South Florida: a preliminary study*. In: 59th Meeting of the Aquatic Plant Management Society – San Diego, CA, USA.
97. Berthold, DE; Gantar, M; Frankovich, T; Gaiser, E; **Laughinghouse IV, HD**. 2019. *Omega-7 producing alkaliphilic diatom *Fistulifera alcalina* sp. nov. from Lake Okeechobee, Florida*. In: The 73rd Annual Meeting of the Phycological Society of America – Ft. Lauderdale, FL, USA.
96. Lefler, FW; Berthold, DE; Barbosa, M; Baird, CM; **Laughinghouse IV, HD**. 2019. *The effects of algaecides and herbicides on a Microcystis winter bloom in Lake Okeechobee, Florida (USA)*. In: The 73rd Annual Meeting of the Phycological Society of America – Ft. Lauderdale, FL, USA.
95. Lefler, FW; Berthold, DE; **Laughinghouse IV, HD**. 2019. *Novel species of Neolyngbya from benthic cyanobacterial mats of coastal South Florida*. In: The 73rd Annual Meeting of the Phycological Society of America – Ft. Lauderdale, FL, USA.
94. Elazar, A; Berthold, DE; Lefler, FW; Paul, F; **Laughinghouse IV, HD**. 2019. *Can Phoslock be used to bind and sediment microcystin-LR in aquatic systems?* In: The 73rd Annual Meeting of the Phycological Society of America – Ft. Lauderdale, FL, USA.
93. Berthold, DE; Lefler, FW; Paul, F; **Laughinghouse IV, HD**. 2019. *Three new genera of marine cyanobacteria from the coast of South Florida*. In: The 73rd Annual Meeting of the Phycological Society of America – Ft. Lauderdale, FL, USA.
92. Barbosa, M; Berthold, DE; Lefler, FW; **Laughinghouse IV, HD**. 2019. *Effects of Glyphosate (Rodeo) on the growth of Microcystis aeruginosa (Cyanobacteria)*. In: The 73rd Annual Meeting of the Phycological Society of America – Ft. Lauderdale, FL, USA.
91. Barbosa, M; Berthold, DE; Lefler, FW; Crawford, E; **Laughinghouse IV, HD**. 2019. *Systematic identification and ecology of Chara (Charales) in Stormwater Treatment Areas of South Florida: a preliminary study*. In: The 73rd Annual Meeting of the Phycological Society of America – Ft. Lauderdale, FL, USA.
90. Barbosa, M; Berthold, DE; Lefler, FW; Baird, CM; **Laughinghouse IV, HD**. 2019. *The effects of algaecides and herbicides on a Microcystis winter bloom in Lake Okeechobee, Florida (USA)*. In: The 58th Annual Northeast Algal Symposium – Salem, MA, USA.
89. Lefler, FW; Berthold, DE; Bishop, W; **Laughinghouse IV, HD**. 2019. *Can Phoslock be used to bind and sediment microcystin-LR in aquatic systems?*. In: 11th International Conference on Toxic Cyanobacteria – Kraków, Poland.
88. Berthold, DE; Barbosa, M; Lefler, FW; Baird, CM; **Laughinghouse IV, HD**. 2019. *The effects of algaecides and herbicides on a Microcystis winter bloom in Lake Okeechobee, Florida (USA)*. In: 11th International Conference on Toxic Cyanobacteria – Kraków, Poland.
87. **Laughinghouse IV, HD**; Berthold, DE. 2018. *Field Identification of Algae*. In: Florida Lake Management Society 29th Technical Symposium – Ft. Lauderdale, FL, USA.
86. **Laughinghouse IV, HD**; Tucci, A; Berthold, D; Silva, L; Yunes, J; Werner, V. 2018. *Morphological,*

- ecological, and toxicological aspects of Cylindrospermopsis raciborskii in a eutrophic urban lake in southern Brazil*. In: The 18th International Conference on Harmful Algae – Nantes, France.
85. Berthold, DE; Gantar, M; Engene, N; Shetty, K; Jayachandran, K; **Laughinghouse IV, HD**. *Omega-7 producing alkaphilic diatom *Fistulifera alcalinus* sp. nov. from Lake Okeechobee, Florida*. In: 2018 PSA/ISOP Annual Meeting – Vancouver, BC, Canada.
 84. Berthold, DE; Elazar, A; Lefler, F; Marble, SC; **Laughinghouse IV, HD**. 2018. *Control of algal growth on greenhouse surfaces using commercial algaecides*. In: 2018 PSA/ISOP Annual Meeting – Vancouver, BC, Canada.
 83. Berthold, DE; Elazar, A; Lefler, F; Marble, C; **Laughinghouse IV, HD**. 2018. *Control of algal growth on irrigated greenhouse surfaces using commercial algaecides*. In: APMS 58th Annual Meeting – Buffalo, NY, USA
 82. Almanza, V; Wilmotte, A; **Laughinghouse IV, HD**; Savaglia, V; Urrutia, R. 2018. *Diversity, optimal conditions and tolerance of planktonic cyanobacteria to different environmental conditions in the temperate zone of south-central Chile, South America*. In: The 18th International Conference on Harmful Algae – Nantes, France.
 81. Wilmotte, A; Beets, K; Lara, Y; Santoro, M; Simons, V; Durieu, B; Savaglia, V; **Laughinghouse IV, HD**; Stenico, ME; Fiore, MF; Cornet, L; Baurain, D. 2018. *Diversity and bioactivities of cyanobacteria in the BCCM/ULC public collection*. In: The International Conference on Harmful Algae – Nantes, France.
 80. Wilmotte, A; Beets, K; Simons, V; Lara, Y; Durieu, B; CORNET, L; BAURAIN, D; **Laughinghouse IV, HD**. 2018. *Polar cyanobacteria in the BCCM/ULC Collection: diversity and characterization*. In: Polar 2018 Conference – Davos, Switzerland.
 79. **Laughinghouse IV, HD**; Gioeli, KT; Krinsky, LS; Skvarch, EA. 2018. *Harmful algal Bloom Extension Program for the Indian River Lagoon*. In: 131st Annual FSHS Conference – Ft. Lauderdale, FL, USA.
 78. Gioeli, KT; **Laughinghouse IV, HD**; Krinsky, LS; Skvarch, EA. 2018. *Volunteer algal monitoring program (VAMP) in the Indian River Lagoon estuary (Florida)*. In: Association of Natural Resource Extension Professionals (ANREP) – Biloxi, MS.
 77. Negrisoni, R; Odero, DC; MacDonald, G; Sellers, B; **Laughinghouse IV, HD**. 2018. *Fall panicum control and sugarcane response to topramezone applied alone or in tank-mixing with triazines*. Proceedings of the 40th Annual Meeting of the Florida Weed Science Society, p 12. Haines City, FL
 76. **Laughinghouse IV, HD**, Kangas, PK; Adey, WH. 2017. *Algal Turf Scrubbers for Phycoremediation*. In: 2017 Aquatic Plant Management Society meeting – Daytona Beach, FL.
 75. **Laughinghouse IV, HD**; Almanza, V; Parra, O; Azocar, M; Urrutia, RO. 2017. *Distribution of Cyanobacteria in lakes and rivers on the West Coast of South America*. In: 9th US Harmful Algal Bloom Conference – Baltimore, MD.
 74. Qiu, J; Fletcher, P; **Laughinghouse IV, HD**; Her, YG; Smyth, A; Bahder, B. 2017. *Developing a methodology to promote resilient socio-ecological systems in South Florida USA*. In: International Council for the Exploration of the Sea (ICES) – Ft. Lauderdale, FL.
 73. Wilmotte, A; Willems, A; Verleyen, E; Vyerman, W; Velázquez, D; Quesada, A; **Laughinghouse IV, HD**; Kleinteich, J; Pearce, DA; Elster, J; Hughes, K. 2017. *A strategy to protect reference sites for future microbiology research in Antarctica*. In: XII SCAR Biology Symposium – Leuven, Belgium.
 72. Almanza, V; **Laughinghouse IV, HD**; Parra, O; Azocar, M; Urrutia, RO. 2017. *Floraciones tóxicas de cianobacterias en sistemas de aguas continentales de Chile*. In: X Congreso Chileno de Micro y Macroalgas – Coquimbo, Chile.
 71. **Laughinghouse IV, HD**; Pessi, IS; Velázquez, D; Lara, Y; Wilmotte, A. 2017. *The Biogeography of Cyanobacteria in the Svalbard Archipelago*. In: PSA 2017 Annual Meeting – Monterey, CA.
 70. Wilmotte, A; Beets, K; Lara, Y; CORNET, L; BAURAIN, D.; Silva-Stenico, ME; Fiore, MF; **Laughinghouse IV, HD**. 2017. *The BCCM/ULC collection for ex-situ conservation and exploration of Polar cyanobacterial diversity*. In: PSA 2017 Annual Meeting – Monterey, CA.
 69. **Laughinghouse IV, HD**; Gioeli, KT; Krinsky, LS; Skvarch, EA. 2017. *Volunteer algal monitoring program (VAMP) in the Indian River Lagoon estuary (Florida)*. In: PSA 2017 Annual Meeting – Monterey, CA.

68. **Laughinghouse IV, HD**; Kangas, PC. 2017. *Exploring the potential of an algal-based concrete*. In: PSA 2017 Annual Meeting – Monterey, CA.
67. Pessi, IS; **Laughinghouse IV, HD**; Velázquez, D; Lara, Y; Wilmotte, A. 2017. *The Biogeography of Cyanobacteria in the Svalbard Archipelago*. In: Arctic Science Summit Week – Prague, Czech Republic.
66. Adjahouinou, DB; **Laughinghouse IV, HD**; Fiogbe, ED. 2016. *Diversité phytoplanctonique et qualité des eaux de la lagune de Cotonou*. In: Journées Scientifiques Internationales de Lomé, (JSIL 2016) XVIIe édition – Lomé, Togo.
65. Wilmotte, A; Renard, M; Lara, Y; Durieu, B; Pessi, IS; Simons, V; **Laughinghouse IV, HD**; Cornet, L; Baurain, D. 2016. *The BCCM/ULC collection to conserve and study the biodiversity of Polar cyanobacteria*. In: 20th IAC Cyanophyte/Cyanobacteria Symposium – Innsbruck, Austria.
64. Becker, P; Szternfeld, P; Andjelkovic, M; Verschaeve, L; Hendrickx, M; Renard, M; Lara, Y; Durieu, B; Simons, V; **Laughinghouse IV, HD**; Cornet, L; Baurain, D; Wilmotte, A. 2016. *The BCCM/ULC collection to conserve the biodiversity and explore the applied potential of Polar cyanobacteria*. In: Symposium “Microbiome and Host Metabolism” – Brussels, Belgium.
63. Pessi, IS; **Laughinghouse IV, HD**; Velázquez, D; Lara, Y; Wilmotte, A. 2016. *The ‘Cyanobiome’ of Svalbard, High Arctic*. In: Symposium “Microbiome and Host Metabolism” – Brussels, Belgium.
62. Lara, Y; Durieu, B; Borderie, F; Pessi, IS; Crahay, C; Defise, A; **Laughinghouse IV, HD**; Wilmotte, A. 2016. *Characterization of Leptolyngbya and Phormidium diversity in Antarctic biotopes*. In: XXXIV SCAR – Kuala Lumpur, Malaysia.
61. Wilmotte, A; Willems, A; Verleyen, E; Vyerman, W; Velázquez, D; Quesada, A; **Laughinghouse IV, HD**; Kleinteich, J; Pearce, DA; Elster, J; Hughes, K. 2016. *Inviolate areas to protect reference sites for future microbiology research in Antarctica*. In: XXXIV SCAR – Kuala Lumpur, Malaysia.
60. Wilmotte, A; Renard, M; Lara, Y; Borderie, F; Simons, V; **Laughinghouse IV, HD**; Silva-Stenico; Fiore, MF. 2016. *The BCCM/ULC collection to allow the ex-situ conservation and the exploitation of the Antarctic cyanobacterial diversity*. In: GGBN Conference 2016 – Berlin, Germany.
59. Lara, Y; Durieu, B; Deblander, V; Defise, A; **Laughinghouse IV, HD**; Wilmotte, A. 2016. *Elucidating diversity of thin filamentous mat-forming Antarctic cyanobacteria*. In: BNCCG-BNCAR Symposium – Brussels, Belgium.
58. **Laughinghouse IV, HD**; Pessi, IS; Velázquez, D; Wilmotte, A. 2015. *Baseline data on the cyanobacterial diversity of Svalbard assessed by pyrosequencing*. In: 6th International Conference on Polar & Alpine Microbiology – České Budějovice, Czech Republic.
57. **Laughinghouse IV, HD**; Vader, A; Meshram, AR; Gabrielsen, TM. 2015. *Unique diversity of marine microbial eukaryotes in the High Arctic (Svalbard)*. In: 6th International Conference on Polar & Alpine Microbiology – České Budějovice, Czech Republic.
56. Pessi, IS; Maalouf, pc; **Laughinghouse IV, HD**; Wilmotte, A. 2015. *A next generation protocol for the assessment of cyanobacterial diversity*. In: 6th International Conference on Polar & Alpine Microbiology – České Budějovice, Czech Republic.
55. Wilmotte, A; Renard, M; Kleinteich, J; Lara, Y; Cornet, L; Baurain, D; Silva-Stenico, ME; Fiore, MF; Verleyen, E; Vyerman, W; Velázquez, D; Quesada, A; **Laughinghouse IV, HD**; Pushkareva, E; elster, j. 2015. *The BCCM/ULC Collection to conserve, document and explore the polar cyanobacterial diversity*. In: 6th International Conference on Polar & Alpine Microbiology – České Budějovice, Czech Republic.
54. Wilmotte, A; Willems, A; verleyen, E; vyerman, w; Velázquez, D; quesada, a; **Laughinghouse IV, HD**; Kleinteich, J; pearce, d; elster, j; Hughes, K. 2015. *A plea for the creation of inviolate areas to protect reference areas for future microbial research in Antarctica*. In: 6th International Conference on Polar & Alpine Microbiology – České Budějovice, Czech Republic.
53. **Laughinghouse IV, HD**; Pessi, IS; Velázquez, D; Wilmotte, A. 2015. *A next-generation approach to assess the cyanobacterial diversity and biogeography in the High Arctic (Svalbard)*. In: 15th ISPP Symposium – Tübingen, Germany.
52. Kleinteich, J; Puddick, J; **Laughinghouse IV, HD**; Wood, SA; Pearce, D; Dietrich, DR; Wilmotte, A. 2015. *Microcystin variants in Arctic cyanobacteria identified using a new analytical screening method*. In: FEMS 2015 – Maastricht, Netherlands.

51. Pessi, IS; Maalouf, PC; **Laughinghouse IV, HD**; Wilmotte, A. 2014. *Biogeographical patterns of Antarctic cyanobacteria*. In: Polar Ecology Conference – České Budějovice, Czech Republic.
50. Wilmotte, A; Pessi, IS; Maalouf, PC; **Laughinghouse IV, HD**; Baurain, D. 2014. *Unveiling biogeographic patterns of Antarctic cyanobacteria by 454 pyrosequencing*. In: XXXIII SCAR Biennial Meeting – Auckland, New Zealand.
49. Jensen, L; **Laughinghouse IV, HD**; Grant, J; Katz, LA. 2014. *Interdomain lateral gene transfer and the animal germline*. In: Protist 2014 – Banff, AB, Canada.
48. **Laughinghouse IV, HD**; Grant, J; Katz, LA. 2014. *Effects of EGT on deep phylogenetic patterns in plastid containing organisms and their close relatives*. In: Protist 2014 – Banff, AB, Canada.
47. Pessi, IS; Maalouf, PC; **Laughinghouse IV, HD**; Baurain, D; Wilmotte, A. 2013. *Assessment of bioinformatic pipelines for the analysis of 454 pyrosequencing data using artificial cyanobacterial communities*. In: 2013 BSM Annual Meeting – Brussels, Belgium.
46. Maalouf, PC; Pessi, IS; Lambion, A; **Laughinghouse IV, HD**; Wilmotte, A. 2013. *Bioregionalisation and biodiversity of cyanobacterial communities in East-Antarctic lakes*. In: 11th SCAR Biology Meeting, Barcelona, Spain.
45. Malone, CF; **Laughinghouse IV, HD**; Sant'Anna, CL; Wilmotte, A; Fiore, MF. 2013. *Polyphasic evaluation of tropical strains assigned to the Phormidium autumnale complex*. In: 20^a RAIbt – São Paulo, SP, Brazil.
44. Strunecky, O; Elster, J; Fiore, MF; Silva-Stenico, ME; Genuário, D; Renard, M; Ouldamer, Y; Lara, Y; **Laughinghouse IV, HD**; Calunsinská, M; Waleron, M; Waleron, K; Wilmotte, A. 2013. *Safeguard and exploitation of the Antarctic cyanobacterial diversity in the BCCM/ULC collection*. In: 19th IAC Symposium – University Heights, OH, USA.
43. Malone, CF; Sant'Anna, CL; **Laughinghouse IV, HD**; Wilmotte, A; Fiore, MF. 2013. *Polyphasic evaluation of tropical strains assigned to the Phormidium autumnale complex*. In: 19th IAC Symposium – University Heights, OH, USA.
42. Strunecky, O; Elster, J; Fiore, MF; Silva-Stenico, ME; Genuário, D; Renard, M; Ouldamer, Y; Lara, Y; **Laughinghouse IV, HD**; Calunsinská, M; Waleron, M; Waleron, K; Wilmotte, A. 2013. *Study and conservation of the Antarctic cyanobacterial diversity in the BCCM/ULC collection*. In: XI SCAR Biology Symposium – Barcelona, Spain.
41. Hughes, k; Verleyen, E; Vyverman, W; Obbels, D; Willems, A; Tytgat, B; Pessi, IS; **Laughinghouse IV, HD**; Wilmotte, A. 2013. *Human impacts on Antarctic ecosystems: do not forget the microorganisms!* In: XI SCAR Biology Symposium – Barcelona, Spain.
40. Convey, P; Danis, B; **Laughinghouse IV, HD**; Obbels, D; Pearce, D; Pessi, IS; Tytgat, B; Vijver, B; Verleyen, E; Vyverman, W; Willems, A; Wilmotte, A. 2012. *The CCAMBIO project: responses of the aquatic microbial mats to Climate Change*. In: NGS at the Poles Workshop – Liège, Belgium.
39. Wilmotte, A; Renard, M; Namsareav, Z; **Laughinghouse IV, HD**; Vincent, WF; Castenholz, RW; Marinelli, F; Komárek, J; Elster, J. 2012. *Conservation of the Polar Diversity: the BCCM/ULC culture collection*. In: NGS at the Poles Workshop – Liège, Belgium.
38. Pessi, IS; **Laughinghouse IV, HD**; Maalouf, PC; Wilmotte, A. 2012. *Cyanobacteria in polar environments: research at the University of Liège*. In: APECS BeNeLux Symposium – Ghent, Belgium.
37. Richardson, R; Bowman, NA; Canuel, L; Duffy, JE; Ferer, E; **Laughinghouse IV, HD**; Littreal, P; Mainor, M. 2011. *Algae based bioremediation of the Chesapeake Bay and a possible feedstock for biofuel*. In: 2011 Benthic Ecology Meeting – Mobile, AL, USA.
36. **Laughinghouse IV, HD**; Adey, WH; Miller, J.; Kangas, PC. 2011. *Produção de algal turf no Rio Great Wicomico (Virginia-EUA): Diversidade e Bioquímica de um Algal Turf Scrubber (ATS)*. In: IX Congreso de Ficología de Latinoamérica y el Caribe – La Plata, Buenos Aires, Argentina.
35. Santos, KRS; Sant'Anna, CL; Andreote, APD; Fiore, MF; **Laughinghouse IV, HD**. 2011. *Análises morfológicas e moleculares de Anabaenopsis (Cyanobacteria) do Pantanal Brasileiro: Implicações Taxonômicas*. In: IX Congreso de Ficología de Latinoamérica y el Caribe – La Plata, Buenos Aires, Argentina.
34. Frescura, VDS; Tedesco, SB; Canto-Dorow, TS; Auler, NMF; **Laughinghouse IV, HD**. 2011. *Pollen*

- viability of *Polygala paniculata* L. (Polygalaceae) using different methods of staining. In: 62° Congresso Nacional de Botânica – Fortaleza, CE, Brazil.
33. Kangas, PC; Mulbry, W; Klavon, PJ; **Laughinghouse IV, HD**; Adey, WH. 2011. *Use of an algal treatment system for water quality improvement along the Susquehanna River*. In: 4th National Conference on Ecosystem Restoration – Baltimore, MD, USA.
 32. Werner, VR; **Laughinghouse IV, HD**; Fiore, MF; Sant'Anna, CL; Hoff, C; Santos, KRS; Neuhaus, EB; Molica, RJR; Honda, RY; Echenique, RO. 2011. *Sphaerospermopsis torques-reginae* (Cyanobacteria, Nostocales) comb. nov. from South American water blooms. In: 2011 joint PSA/ISoP Meeting – Seattle, WA, USA.
 31. **Laughinghouse IV, HD**; Adey, WH; Miller, J. 2011. *Algal Turf production on the Great Wicomico River, VA, USA: Diversity and Biochemistry of an Algal Turf Scrubber (ATS)*. In: 2011 joint PSA/ISoP Meeting – Seattle, WA, USA.
 30. WANG, H; **Laughinghouse IV, HD**; Chen, F; Zheng, T; Hill, RT. 2011. *Bacterial aggregation of microalgae, a potential way to harvest biofuel-producing microalgae*. In: 2nd Annual MAAOAC-DCASM Joint Scientific Meeting – College Park, MD, USA.
 29. **Laughinghouse IV, HD**; Adey, WH; Miller, J. 2011. *Algal Turf Scrubber (ATSTM) production on the Great Wicomico River, USA: a look at Diversity and Biochemistry*. In: 50th Northeast Algal Society Symposium Abstracts – Wood's Hole, Massachusetts, USA.
 28. Werner, VR; **Laughinghouse IV, HD**; Fiore, MF; Sant'Anna, CL; Hoff, C; Santos, KRS; Neuhaus, EB; Molica, RJR; Honda, RY; Echenique, RO. 2011. *Morphological and molecular studies on Sphaerospermopsis torques-reginae* (Cyanobacteria, Nostocales) from South American water blooms. In: 50th Northeast Algal Society Symposium Abstracts – Wood's Hole, Massachusetts, USA.
 27. Pastori, T; Souza, LFB; **Laughinghouse IV, HD**; Tedesco, M; Kuhn, AW; Canto-Dorow, TS; Tedesco, SB. 2010. *Potencial genotóxico dos extratos aquosos de Artemisia verlotorum (Asteraceae) sobre o ciclo celular de Allium cepa*. In: 56° Congresso Brasileiro de Genética – Guarujá, Sao Paulo, Brazil.
 26. Werner, VR; **Laughinghouse IV, HD**; Sant'Anna, CL; Fiore, MF; Hoff, C; Santos, KRS; Neuhaus, EB; Molica, RJR; Honda, RY; Echenique, RO. 2010. *Morphological and molecular studies on Sphaerospermopsis torques-reginae* (Cyanobacteria, Nostocales) from South American water blooms. In: Book of Abstracts of the 18th Symposium of the International Association for Cyanophyte Research – České Budějovice, Czech Republic.
 25. **Laughinghouse IV, HD**; Kangas, PC; Adey, WH. 2010. *Species diversity in two algal production systems in southeastern Pennsylvania*. In: 2010 Annual Meeting of the Phycological Society of America – East Lansing, Michigan, USA.
 24. **Laughinghouse IV, HD**; Adey, WH; Kangas, PC; Miller, J; Hestekin, JA. 2009. *Algal Turf Scrubber (ATSTM) potential for water quality control and biomass production for biofuels*. In: 48th Northeast Algal Society Symposium Abstracts – Amherst, Massachusetts, USA.
 23. **Laughinghouse IV, HD**; Prá, D; Rieger, A; Silva-Stenico, ME; Fiore, MF; Franke, SIR. 2007. *Genotoxicological and Ecotoxicological Evaluation of Cyanobacterial Strains Using Plant and Fish Bioassays*. In: Environmental Mutagen Society 38th Annual Meeting Abstracts – Atlanta, Georgia, USA.
 22. Lubini, G; Fachinetto, JM; **Laughinghouse IV, HD**; Paranhos, JT; Silva, ACF; Tedesco, SB. 2007. *Efeitos dos extratos aquosos de Psychotria myriantha Müll. Arg. (Rubiaceae) sobre o ciclo celular de Allium cepa*. In: 59ª Reunião Anual da SBPC – Belém, Pará, Brazil.
 21. Werner, VR; Juliano, VB; Domingues, CD; **Laughinghouse IV, HD**; Carvalho, LR; Nunes, ML; Sant'Anna, CL. 2007. *Cyanobacterial Summer Blooms in a Water Supply Lake in Rio Grande do Sul*. In: 7th International Conference on Toxic Cyanobacteria – Rio de Janeiro, Rio de Janeiro, Brazil.
 20. Werner, VR; Sant'Anna, CL; **Laughinghouse IV, HD**; Echenique, RO; Bleta, S; Molica, RJR; Honda, RY; Carvalho, LR. 2007. *Occurrence of the little known Anabaena oumiana (Nostocales, Cyanobacteria) in South American water blooms*. In: 17th Symposium of the International Association for Cyanophyte Research – Mérida City, Yucatán, Mexico.
 19. **Laughinghouse IV, HD**; Werner, VR. 2006. *Anabaena (Cyanobacteria) com tricomas espiralados em sistemas aquáticos do Rio Grande do Sul, Brasil*. In: II Jornada de Iniciação Científica - Meio Ambiente -

Fundação Zoobotânica do Rio Grande do Sul e Fundação Estadual de Proteção Ambiental. Porto Alegre, Rio Grande do Sul, Brazil.

18. **Laughinghouse IV, HD**; Köche, A; Furtado, LBFS. 2006. *Aspectos Epidemiológicos, Comportamentais e Genéticos do Alcoolismo em uma Amostra da População do Vale do Rio Pardo, Rio Grande do Sul, Brasil*. In: 52º Congresso Brasileiro de Genética/12º Congresso da la Asociación Latinoamericana de Genética. Foz do Iguaçu, Paraná, Brazil.
17. **Laughinghouse IV, HD**; Werner, VR. 2006. *Avaliação taxonômica de Anabaena (Cyanobacteria) com tricomas espiralados em ambientes aquáticos do Rio Grande do Sul, Brasil*. In: Mostra UNISINOS de Iniciação Científica 2006. São Leopoldo, Rio Grande do Sul, Brazil.
16. Domingues, CD; **Laughinghouse IV, HD**; Werner, VR. 2006. *Chroococcales (Cyanobacteria) planctônicas comuns em ecossistemas aquáticos do Rio Grande do Sul, Brasil*. In: Livro de Resumos do XI Congresso Brasileiro de Ficologia & Simpósio Latino-Americano sobre Algas Nocivas – SLAN. pg.187. Itajaí, Santa Catarina, Brazil.
15. Werner, VR; **Laughinghouse IV, HD**. 2006. *Diversidade e distribuição de espécies de Anabaena (Cyanobacteria) com tricomas espiralados em manancias do estado do Rio Grande do Sul, Brasil*. In: Livro de Resumos do XI Congresso Brasileiro de Ficologia & Simpósio Latino Americano sobre Algas Nocivas – SLAN. pg. 188. Itajaí, Santa Catarina, Brazil.
14. Carvalho, LR; Pipole, F; Sant’Anna, CL; Werner, VR; **Laughinghouse IV, HD**; Ragnel, M; Konno, K; Carmargo, ACM. 2006. *Estudos biológicos e químicos de uma floração de cianobactérias ocorrida na Lagoa do Violão, Torres, RS*. In: Livro de Resumos do XI Congresso Brasileiro de Ficologia & Simpósio Latino Americano sobre Algas Nocivas – SLAN. pg. 239. Itajaí, Santa Catarina, Brazil.
13. **Laughinghouse IV, HD**; Werner, VR. 2006. *Novos Registros de Ocorrência de Anabaena (Cyanobacteria) planctônicas em águas continentais da América do Sul*. In: Anais do XII Seminário de Iniciação Científica e XI Jornada de Ensino, Pesquisa e Extensão/Universidade de Santa Cruz do Sul. Santa Cruz do Sul, Rio Grande do Sul, Brazil.
12. **Laughinghouse IV, HD**, Werner, VR. 2006. *Ocorrência de Anabaena oumiana M. Watanabe (Cyanobacteria) em mananciais do Rio Grande do Sul, Brasil* In: Livro de resumos-XVIII Salão de Iniciação Científica e XV Feira de Iniciação Científica da UFRGS, I Salão UFRGS Jovem. 2: 394. Porto Alegre, Rio Grande do Sul, Brazil.
11. Werner, VR; **Laughinghouse IV, HD**, Echenique, R; Bleta, S; Sant’Anna, CL; Honda, RY. 2006. *Ocorrência de Anabaena oumiana M. Watanabe (Nostocales, Cyanobacteria) em florações na América do Sul*. In: Resumos do Congresso: 57º Congresso Nacional de Botânica, 13º Encontro Estadual de Botânicos e 5º Encontro Estadual de Herbários. Gramado, Rio Grande do Sul, Brazil.
10. Werner, VR; **Laughinghouse IV, HD**; Martins, M. 2005. *Cianobactérias em ecossistemas costeiros do Rio Grande do Sul, Brasil: Áreas da Lagoa do Casamento e do Butiazal de Tapes*. In: Anais do X Congresso Brasileiro de Limnologia. Ilhéus, Bahia, Brazil.
9. **Laughinghouse IV, HD**; Werner, VR. 2005. *Florações de Cianobactérias: Consequências ao Meio Ambiente e à Saúde Pública*. In: XI Seminário de Iniciação Científica e XI Jornada de Ensino, Pesquisa e Extensão. Santa Cruz do Sul, Rio Grande do Sul, Brazil.
8. Werner, VR; **Laughinghouse IV, HD**; Juliano, VB; Sant’Anna, CL; Carvalho, LR; Nunes, ML. 2005. *Florações de cianobactérias no Lago Guaíba (RS) durante os verões de 2004 e 2005*. In: Programa e Resumos CBM 2005 XXIII Congresso Brasileiro de Microbiologia - XXIII CBM. Santos, São Paulo, Brazil.
7. **Laughinghouse IV, HD**; Klamt, SC; Fauth, G. 2005. *Levantamento fossilífero no Vale do Rio Pardo, RS: Os primeiros resultados confirmam a riqueza fossilífera da região*. In: Boletim Paleontologia em Destaque 07-08. Porto Alegre, Rio Grande do Sul, Brazil:
6. Rieger, A; **Laughinghouse IV, HD**; Köche, A; Furtado, L. 2005. *Polimorfismo do loco DRD2 em uma amostra de alcoolistas da população do Vale do Rio Pardo, RS*. In: 2005 XI Seminário de Iniciação Científica e X Jornada de Ensino, Pesquisa e Extensão. Santa Cruz do Sul, Rio Grande do Sul, Brazil
5. Geller, FC; **Laughinghouse IV, HD**; Assunção, AN, Rieger, A; Köche, A. 2004. *Aspectos Genéticos e Epidemiológicos do Uso do Alcool no Vale do Rio Pardo: Dados Preliminares*. In: X Seminário de Iniciação Científica e IX Jornada de Ensino, Pesquisa e Extensão. Santa Cruz do Sul, Rio Grande do Sul, Brazil.

4. **Laughinghouse IV, HD**; Klamt, SC; Fauth, G. 2004. *Estado da Arte sobre estudo dos Fósseis no Vale do Rio Pardo*. In: X Seminário de Iniciação Científica e IX Jornada de Ensino, Pesquisa e Extensão. Santa Cruz do Sul, Rio Grande do Sul, Brazil.
3. Fauth, G; **Laughinghouse IV, HD**; Klamt, S. 2004. *Novas ocorrências de troncos fósseis do triássico no Rio Grande do Sul*. In: Boletim de Resumos - XI Reunião de Paleobotânicos e Palinólogos. Gramado, Rio Grande do Sul, Brazil.
2. **Laughinghouse IV, HD**; Klamt, SC; Fauth, G. 2004. *Novos registros fósseis no Vale do Rio Pardo: Um estudo pioneiro na UNISC*. In: X Seminário de Iniciação Científica e IX Jornada de Ensino, Pesquisa e Extensão. Santa Cruz do Sul, Rio Grande do Sul, Brazil

Artwork

- 1 **Laughinghouse IV, HD**. “Algae.” *BioScience* 61(6), June 2011, Journal Cover Image.

SERVICE

Events organized/Outreach

2021

Conference: Organizational Committee of the 10.5 US Symposium on Harmful Algae. Virtual, USA.

2019

Conference: Organizational Committee of the 7th Biannual UF Water Institute Symposium. Gainesville, Florida, USA

2019

Conference: Host/Convener of the 2019 Phycological Society of America Annual Meeting. Hollywood, Florida, USA

2018

Workshop: Taxonomy and Ecology of freshwater harmful algae. Ft. Lauderdale, Florida, USA

2012

Conference: Host/Convener of Workshop on Next Generation Sequencing at the Poles. Liège, Belgium
Science Fair: Phycological Society of America’s Event at the USA Science & Engineering Festival. Washington, DC, USA

2006

Workshop: Topics on Biology, Taxonomy, and Ecology of Cyanobacteria. Porto Alegre, RS, Brazil

2005

Workshop: Behind the Curtains of Science, How Researchers study Science. Porto Alegre, RS, Brazil
Mini Course: Algae and Environmental Quality – Exposure through visualizing algae through the microscope.

2003

Course: Method of collecting, identifying and ecology of marine algae. 2003.

Editorial boards

Editorial Board: *Iheringia – Botânica* (ISSN: 0073-4705), 2005-present

Research Editor for Aquatic Microbiology: *Frontiers in Microbiology*, 2017-present

Research Editor for Aquatic Microbiology: *Frontiers in Marine Science*, 2017-present

Section Editor for Microalgae: *Phytotaxa*, 2018-present

Editorial Board: *Journal of Phycology*, 2020-2023

Committees

Encyclopedia of Life (EOL): Full Curator, 2015-present

Webmaster: Phycological Society of America, 2015-present

Elections Director: Phycological Society of America, 2020-present

Board of Directors (member): South Florida Aquatic Plant Management Society, 2017-present.

Member: Indian River Lagoon STEM Advisory Committee, 2017-present.

Member: Communications Committee, Phycological Society of America, 2010-2011; 2014-present

Member: UF/IFAS Harmful Algae Taskforce, 2018-present
Member: Agronomy Department Diversity and Inclusion Committee, 2018-present
Member: UF/IFAS Diversity, Inclusion and Equity Committee, 2019-present
Member: UF/IFAS Agronomy Graduate Curriculum Committee, 2017-2018
Copy Editor: *The Plant Press* (Botany-NMNH-SI-newsletter), 2011-2014
Member: Education Committee, Phycological Society of America, 2011-2013

Conference Session Moderator

2020: UF Water Institute Symposium: Session ‘Harmful Algal Blooms’
2017: Phycological Conference of America: Session ‘Harmful Algal Blooms’

Conference judge for student presentations

2020: 7th biennial UF Water Institute Symposium
2019: 10th US HAB Conference (Orange Beach, AL, USA)
2017: Florida Weed Science Society Conference (Haines City, FL, USA)
2017: Phycological Society of America Conference (Monterey Bay, CA, USA)
2017: 9th US HAB Conference (Baltimore, MD, USA)

Professional affiliations

Aquatic Plant Management Society, British Phycological Society, Florida Weed Science Society, International Society of Applied Phycology, International Society of Phycology, Phycological Society of America, South Florida Aquatic Plant Management Society, Association of Polar Early Career Scientists

University Governance and Service

2020-pres: UF Water Institute Faculty Advisory Committee
2019-pres: Florida Sea Grant Harmful Algal Bloom Working Action Group
2019-pres: UF/IFAS Diversity, Inclusion and Equity Committee
2019-pres: UF/IFAS Harmful Algae Task Force
2018-pres: Diversity, Inclusion and Equity Committee, Agronomy Department
2018-pres: Member of several Faculty Search committees

Reviewer

Manuscripts

African Journal of Biotechnology; African Journal of Microbiology Research; Aquatic Toxicology; Caryologia; Chemistry & Ecology; Ciência e Natura; Encyclopedia of Arkansas; Environmental Engineering Science; Environmental Science and Pollution Research; Ecotoxicology and Environmental Safety; Environmental Technology; Frontiers in Microbiology; Hydrobiologia; Iheringia – Botânica; Journal of Animal and Plant Sciences; Journal of Molecular Biomarkers & Diagnosis; Journal of Applied Phycology; Journal of Aquatic Plant Management; Journal of Ecological Engineering; Journal of Integrated Pest Management; Journal of Phycology; Journal of Plankton Research; Journal of Water and Health; Microbial Ecology; MOJ Toxicology; Phycological Research; Phytotaxa; Polar Biology; Proceedings of the National Academy of Sciences, Biological Sciences; Science of the Total Environment; Taxon

Proposals/Agencies

*Chilean Antarctic Science Program; German Aerospace Agency
Euro-Mediterranean Cooperation – ERANETMED
Edital 011/2015 State University of Rio Grande do Sul
The University of Maryland Industrial Partnerships (MIPS) Program*

Review Panels

National Oceanic and Atmospheric Association (NOAA-NOS-NCCOS-2020) PCMHAB Panel, 2020

National Oceanic and Atmospheric Association (NOAA-NOS-NCCOS-2019) MERHAB Panel, 2019

Maryland Sea Grant Panel, 2017- 2019

Media and Newspaper interviews

>25 interviews in the past 4 years in local, state and national platforms

FIELDWORK & SCIENTIFIC COLLECTIONS

Antarctica, Arctic (Svalbard), Argentina, Austria, Belgium, Belize, Brazil, Canada, Chile, Colombia, Czech Republic, Finland, Germany, Guatemala, Hungary, Mexico, Norway, Paraguay, Romania, Slovakia, Uruguay, UK, USA.

LANGUAGES

Native: English & Portuguese

Fluent: Spanish

Studied: French, German, Italian, Indonesian, Norwegian

ADVANCED CERTIFICATION/TRAINING COURSES

- | | | | |
|------|---|------|---|
| 2003 | Sampling, identification, and ecology of marine algae
<i>Brazilian Botanical Society, Porto Belo, SC, Brazil</i> | | |
| 2004 | Biometry of Genetic Markers Applied to Population Genetics
<i>Brazilian Society of Genetics, Florianópolis, SC, Brazil</i> | 2007 | XII Summer Course on Genetics
<i>College of Medicine of Ribeirão Preto, University of São Paulo, Ribeirão Preto, SP, Brazil</i> |
| 2004 | Human Molecular Genetics
<i>Brazilian Society of Genetics/RS, Canoas, RS, Brazil</i> | 2007 | Protocols for Molecular Systematics of Cyanobacteria
<i>Universidad Nacional Autónoma de México, Mexico City, DF, Mexico</i> |
| 2005 | Toxic Cyanobacteria: Water Quality and Health
<i>University of Santa Cruz do Sul, Santa Cruz do Sul, RS, Brazil</i> | 2009 | Introductory Course on Freshwater Algal Identification
<i>Hilde-Bede College and School of Education, Durham University, Durham, England, UK</i> |
| 2006 | Molecular Evolution and Phylogeny
<i>Brazilian Society of Genetics, Foz do Iguaçu, PR, Brazil</i> | 2009 | Advanced Course on Blue-green and Green Algal Identification
<i>Hilde-Bede College and School of Education, Durham University, Durham, England, UK</i> |
| 2006 | Topics on Biology, Taxonomy and Ecology of Cyanobacteria
<i>Brazilian Botanical Society, Porto Alegre, RS, Brazil</i> | 2010 | Freshwater Diatoms: Taxonomy and Bio-monitoring
<i>Humboldt Field Research Institute, Steuben, Maine, USA</i> |
| 2006 | Identification and Quantification of Cyanobacteria
<i>Brazilian Phycological Society, Itajaí, SC, Brazil</i> | 2011 | Workshop on Molecular Evolution
<i>Česky Krumlov, Czech Republic</i> |
| 2006 | Gene Expression – New ways for Analysis | 2011 | PSA Genomics Workshop
<i>Phycological Society of America, Seattle, WA, USA</i> |

- | | |
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| <p>2011 Experimental Design for Phycologists
<i>Phycological Society of America, Seattle, WA, USA</i></p> <p>2011 Next-Generation DNA Sequencing Workshop – Background, Project Design & Data Analysis
<i>Smithsonian Institution, Washington, DC, USA</i></p> <p>2011 5th Determination Course of Freshwater and Terrestrial Cyanobacteria (DCC)
<i>University of South Bohemia, České Budejovice, Czech Republic</i></p> <p>2011 Workshop on Comparative Genomics
<i>Smithsonian Institution, Washington, DC, USA</i></p> | <p>2012 MOTHUR Training Course
<i>University of Liège, Liège, Belgium</i></p> <p>2015 Arctic Survival and Safety Course
<i>The University Centre in Svalbard – Longyearbyen, Norway</i></p> <p>2015 Advanced Course on Cyanobacteria & Cyanotoxins
<i>Universidad Autónoma de Madrid, Madrid, Spain</i></p> <p>2019 Teaching and Learning in the Diverse Classroom
<i>Cornell University, Ithaca, NY, USA</i></p> <p>2020 Workshop on Genomics
<i>Český Krumlov, Czech Republic</i></p> |
|--|---|