

CURRICULUM-VITA

Daniel L. Roelke, Professor and Department Head
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EDUCATION

- 1997-98 Post-Doctoral Fellow, Consortium of Oceanographic Research and Education, Naval Research Laboratory, Stennis Space Center, Mississippi.
- 1993-97 Ph.D. Oceanography, Texas A&M University, TX
- 1990-93 M.S. Oceanography, Texas A&M University, TX
- 1985-89 B.S. Earth Science, Minor in Chemistry, Millersville University, PA

PROFESSIONAL EXPERIENCE

Primary appointment

- 2019-P Professor and Department Head, Department of Marine Biology, Texas A&M University Galveston.

Other current positions

- 2021-P Faculty (courtesy joint appointment), Department of Ecology and Conservation Biology, Texas A&M University.
- 2021-P Guest Editor, *Climate*, journal of the Multidisciplinary Digital Publishing Institute, special issue "Resilience and Adaptation to Climate Change of Aquatic Populations and Communities, and its Impact on Ecosystem Functioning".
- 2015-P Associate Editor, *Marine & Freshwater Research*, journal of the Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia.
- 2005- P Faculty, Water Management and Hydrologic Sciences, Interdisciplinary Degree Program, Texas A&M University.
- 2005- P Faculty, Ecology and Evolutionary Biology, Interdisciplinary Degree Program, Texas A&M University.

Past positions

- 2017-20 Guest Editor, *Marine & Freshwater Research*, journal of the Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia, special issue “Aspects of new monitoring, reporting, modeling and ecological research on cyanobacteria in inland waters”.
- 2016-19 Guest Editor, *Estuarine, Coastal and Shelf Science*, journal of the Estuarine Coastal Sciences Association (ECSA), United Kingdom, special issue “Coastal systems in transition: From a 'natural' to an 'anthropogenically-modified' state”.
- 1998-19 Assistant/Associate/Full Professor, Department of Wildlife and Fisheries Sciences, Texas A&M University, with a joint appointment in Department of Oceanography.
- 2018 Visiting Scientist, School of the Environment, University of Technology Sydney, Australia.
- 2012-17 Editorial Board, *Marine Science and Technology Bulletin*, published by Canakkale Onsekiz Mart University, Canakkale, Turkey.
- 2010-16 Member, National Harmful Algal Blooms Committee, USA.
- 2007-16 Associate Editor, *The American Naturalist*, journal of the American Society of Naturalists.
- 2011-15 Member, Institute for Applied Mathematics and Computational Science, Texas A&M University and King Abdullah University of Science and Technology, Saudi Arabia.
- 2013-15 Executive Committee, Institute of Applied Mathematics and Computational Sciences, Texas A&M University.
- 2012 Visiting Scientist, School of the Environment, University of Technology Sydney, Australia.
- 2012 Visiting Scientist, Department of Marine Sciences, University of the Aegean, Greece.
- 2010-11 Associate Chair, Ecology and Evolutionary Biology, Interdisciplinary Research Program, Texas A&M University.
- 2008-11 Faculty Senator, Texas A&M University.
- 2005-08 Board Member, Texas River and Reservoir Management Society.
- 2006 Visiting Scientist, US Environmental Protection Agency, Western Ecology Division, Hatfield Marine Science Center, Oregon.

HONORS/AWARDS/ACKNOWLEDGEMENTS

- 2021 Invited to serve a 3rd term on the editorial board of *Marine and Freshwater Research*
- 2018 Invited to serve a 2nd term on the editorial board of *Marine and Freshwater Research*
- 2015 Invited to serve a 1st term on the editorial board of *Marine and Freshwater Research*
- 2015 Recipient of the Texas A&M University Wildlife and Fisheries Sciences Department “Outstanding Graduate Teaching” Award
- 2015 Recipient of the Texas Chapter American Fisheries Society “Outstanding Fisheries Educator” Award

- 2014 Invited to serve a 3rd term on the editorial board of *The American Naturalist*
- 2014 Nominated for the Texas Chapter American Fisheries Society Education Award (did not receive)
- 2013 Re-elected to the National Harmful Algal Bloom Committee (USA)
- 2010 Nominated for Vice-Chancellor's Award for Excellence in Research (Texas A&M University, College of Agriculture and Life Sciences) (did not receive)
- 2010 Elected to the National Harmful Algal Bloom Committee (USA)
- 2010 Invited to serve a 2nd term on the editorial board of *The American Naturalist*
- 2009 Invited to serve as "Opponent" in the dissertation defense of Andreas Brutemark (E. Graneli, Chair), University of Kalmar Sweden
- 2009 Invited to organize a special session for the 30th Annual Conference of the Society of Environmental Toxicology and Chemistry (SETAC), New Orleans, LA, USA focused on ecotoxicology and the fate of phycotoxins
- 2008 Invited to write a chapter for the multivolume Treatise on Estuarine and Coastal Science (vol. 9, Elsevier) focused on incidence of hypoxia in coastal waters
- 2008 Elected to the Faculty Senate, Texas A&M University
- 2007 Invited to join the editorial board of *The American Naturalist*
- 1998 Invited to participate in the International Council for the Exploration of the Sea: Young Scientists Conference on Marine Ecosystem Perspectives (limited to 2 participants per country)
- 1997 Awarded a Consortium of Oceanographic Research and Education (CORE) Postdoctoral Fellow

MEMBERSHIPS/SOCIETIES

Current

- Gulf Estuarine Research Society (GERS)
- Coastal and Estuarine Research Federation (CERF)

Past

- Association for the Sciences of Limnology and Oceanography (ASLO)
- American Society of Naturalists
- American Fisheries Society, Texas Chapter
- Phycological Society of America
- Society of Environmental Toxicology and Chemistry
- Texas River and Reservoir Management Society

Honor Society of Phi Kappa Phi

ADMINISTRATIVE

As Department Head of Marine Biology at Texas A&M University Galveston, I serve as the executive responsible for all operations, finances and academics with the department. I also coordinate with the Offices of the Chief Operating Officer, the Executive Associate Vice President for Academic Affairs and Chief Academic Officer, and the Chief Finance and Compliance Officer. Other offices with which I interact include: the Research & Graduate Studies Office; the Academic Operations Office; the Office of Administration and Auxiliary Services; the Office of Student Affairs; Office of Civic Literacy, Inclusion, Diversity, and Equity; the Office of Foundation Development; the Office of Human Resources; and the Office of Marine Education Support and Safety Operations.

Visioning and Culture Change

- 2020-P Diversity recruiting at the graduate student level started in summer 2020 and is ongoing, where the approach is to build collaborative research programs between MARB and Texas A&M University Prairie View (PVAMU) that will lead cross fertilization of our student bodies.
- 2020-P Increase interdepartmental collaboration between MARB/MCES/LIST/MARA through interdisciplinary proposal development facilitated by the TAMU Division of Research (DOR). We put together a process document describing a sequence of events for this effort, compiled bios of faculty wanting to participate, held brainstorming sessions, and allowed a period for faculty to begin forming teams. This led emergence of a core team. This process facilitated across-campus interactions, with many faculty getting to know others for the first time. With the assistance of a professional proposal writer, we aim to make the one-time occurrence routine at TAMUG.
- 2020-21 Directed an Intercultural Development Inventory Assessment of MARB in the fall 2020. Faculty and staff participation was 100%. Results of the debriefing have informed discussions about climate in the department.
- 2019-20 Co-Leader (with Kyeong Park), envisioned, planned and implemented a shared first-year curriculum between four B.S. degrees offered through the Department of Marine Biology and the Department of Marine and Coastal Environmental Sciences consistent with the meta-major concept.
- 2019-20 Participated and carried out the end-game for development and approval of the degree program proposals to the Texas Higher Education Board Commission in Marine Biology (M.S. and Ph.D.). In the end game, this involved being on hand to answer questions to THECB panel members and supplying requested data. These degree programs were approved in December 2020, immediately replacing the MARB IDP. This also involved compressing of the two-year cycle of UG classes offered by MARB to make room for a host of new graduate classes to be offered by MARB faculty.
- 2019-20 Formalized a transparent annual review process that involved development and faculty feedback for rubric to be used for the annual review process (which was then revised

according to DOF guidelines provided late in 2020 and input from the MARB Evaluation Criteria Committee), providing individual feedback with guidance for junior faculty for what they need to accomplish to attain DH support for promotion, and providing departmental feedback so that faculty could place their performance relative to others in the department (note, this process was then used to quantitatively determine the one-time merit payments to faculty in 2021, bringing about congruence between annual performance reviews, merit raises and P&T decisions for MARB).

- 2019-20 Assembled and met with a MARB Stakeholders Committee to receive feedback on MARB functioning and my changes to teaching, research and administrative operations. The committee is comprised of Dr. Pamela Plotkin (Director, TX Sea Grant), Dr. Robin Reicher (Director, TPWD Coastal Fisheries), Dr. Charles Ardizzone (Project Leader, US Fish and Wildlife, Texas Coast), Dr. Chris Dorsett, Vice President, Ocean Conservancy), and Mr. Joe Martin, formerly TCEQ, Project Leader, Water Quality).
- 2019-P Created and maintain a safe space for pedagogy experimentation for MARB faculty. This was achieved by reducing the weight of student evaluation scores during annual evaluations, and increasing the value of peer reviews of teaching, implementation of HITS, and comments left by students.
- 2019-P Created and maintain greater parity in teaching loads among MARB faculty. This was achieved by reducing the emphasis on SCH generation and assuring that MARB faculty all have the same teaching load.
- 2019-P Started and run “Kudos Corner”, which are monthly recognitions of MARB faculty achievements (large grants, prominent publications, awards, appearances in popular media, and other notable recognitions).
- 2019-P Designed and launched, and manage the “Mentorship Through Collaboration Program” that is focused on the development of junior faculty through funded research collaborations with more senior faculty.
- 2019-P Created and implemented, and follow a transparent policy of shared-governance involving formalized, iterative information exchanges between me, standing and ad-hoc committees, and the greater faculty and staff.
- 2019-P Created and implemented, and follow a formalized “Mentoring of Junior Faculty” policy that describes roles of mentee, mentor and department head, as well as the timeline of annual one-on-one mentoring activities, and describes group mentoring within the department.
- 2019-P Created and implemented, and follow a formalized “Allocation of Graduate Teaching Assistantships” policy aimed at limiting the incidence of ‘career students’ and making these departmental resources available to all MARB faculty.

Campus and University Progress

- 2022-P Member of the President’s ‘Path Forward Working Group Elevate Remote Locations’ as a part of TAMU’s restructuring.

- 2022-P Member of the President's 'Path Forward Working Group Life Sciences Meta-Major' as a part of TAMU's restructuring.
- 2021-22 Member of CAO's Strategic Enrollment Committee.
- 2020-P Member of the Provost's 'Department Heads Steering Committee' where dialog with the Provost act as source of information exchange between Provost and academic units.
- 2020-P MARB curricula assessment through the TAMU Office of Institutional Effectiveness and Evaluation, which involves front-end and back-end involvement, and final approval.
- 2020-P Further developed and increased enrollment in MARB's non-thesis Master's Degree program, now supporting ~20 graduate students.
- 2020-P Member of TAMUG's Council of the Built Environment.
- 2020-21 Shepherded the merging of the Businesses Offices of the Department of Marine Biology and the Department of Marine and Coastal Environmental Sciences.
- 2020 Composed an assurance letter to MARB undergraduates regarding departmental restructuring and covid-19 issues to counter misinformation being circulated.
- 2020 Participated in a networking function with Pacific Northwest National Laboratory (PNNL) hosted by TAMUG.
- 2019-20 Invested in teaching laboratory infrastructure that involved replacing bench counter tops, purchasing several microscopes, and purchasing a 3-D printer.
- 2019-20 Co-Chair (with Antonietta Quigg) of the "Strengthen and Harness Our Research Enterprise" (SHORE) sub-committee, a part of the TAMUG Strategic Planning Committee.
- 2019-20 Member of the "Enhance Undergraduate Success" sub-committee, also a part of the TAMUG Strategic Planning Committee, that concluded its work.
- 2019-20 Chaired the search committee for the Marine Transportation Department Head, which led to the retention of Capt. Augusta Roth.
- 2019-20 Planned and hosted a game-based learning workshop with college-wide participation
- 2019 Shepherded the merging of the Academic Advising Offices of the Department of Marine Biology and the Department of Marine and Coastal Environmental Sciences.
- 2019 Participated in a networking function with University of Texas Medical Branch Galveston (UTMB) hosted by TAMUG.
- 2019 Participated and brought back information from the co-production workshop hosted by National Oceanic and Atmospheric Administration (NOAA).
- 2019 Participant, "Big Ideas" session with Vice President for Research Office.
- 2019 Department Head Convening through Office of the Provost.

Recurring Departmental

- Approve expense reports (several hundred transactions per year, totaling ~\$4 million)
- Approve travel requests (100-150 submissions per year)
- Approve proposal submissions (~50 submissions per year)
- Perform annual reviews of faculty and staff (20 faculty, 6 staff)
- Perform evaluations for promotion, mid-term reviews, and post-tenure review
- Decide annual merit raises and one-time bonuses
- Prepare and/or guide award nomination processes of faculty and staff
- Perform credentialing of faculty
- Research and teaching staff hiring and terminations
- Quarterly 'check-ins' with faculty mentors and mentees, providing additional mentoring
- Organize and conduct monthly faculty meetings
- Biannually set tasks of departmental committees
- Oversee operation of three undergraduate degrees (~550 students)
- Recruit into undergraduate programs through event organized by the Academic Affairs Office
- Decide undergraduate student re-admissions (~100 per year)
- Approve class offerings
- Provide departmental news monthly to SGA, TAMUG's undergraduate student council
- Participate in Freshman Networking Activities as part of MARB 101 Succeeding in Science
- Approve graduate admissions
- Chair the committees of non-thesis option M.S. students (see Students section of CV)
- Determine faculty teaching assignments
- Determine faculty committee appointments
- Participate in graduation ceremonies

Recurring College and Recurring University – see 'Service' section of CV

PUBLICATIONS

Underlined name indicates author was a graduate student supervised by Roelke at the time of research

Double underlined name indicates author was an undergraduate supervised by Roelke or held a B.S. at the time of research and worked out of Roelke's lab.

When multiple authors, '*' indicates **senior** author

Peer-reviewed journal articles

104. Grover*, J.P., J.T. Scott, **D.L. Roelke**, B.W. Brooks. 2022. Competitive superiority of N-fixing cyanobacteria when fixed N is scarce: Reconsiderations based on a model with heterocyst differentiation. *Ecological Modelling*. 466 (online, 109904), 17 pages.
103. Cagle, S.E., **D.L. Roelke***. 2021. Relative roles of fundamental processes underpinning PEG dynamics in dimictic lakes as revealed by a self-organizing, multi-population plankton model. *Ecological Modelling*. 462 (online, 109793), 16 pages.

102. Cagle, S.E., **D.L. Roelke***, C. Hernández-Zepeda, G. Rosiles-González, V.H. Carrillo-Jovel, D. Ortega-Camacho, E. Cejudo. 2021. Cyanobacteria and nitrates in karstic systems of Yucatan (Mexico) and Texas (USA). *Aquatic Sciences*. 83:74 (online), 12 pages.
101. Cagle, S.E., **D.L. Roelke***, R.M.W Muhl. 2021. Allelopathy and micropredation paradigms reconcile with system stoichiometry. *Ecosphere*. 12, e03372. 13 pages.
100. Sim, D.Z.H., M.A.D. Mowe, Y. Song, J. Lu, H.T.W. Tan, S.M. Mitrovic, **D.L. Roelke**, D.C.J. Yeo*. 2021. Tropical macrophytes promote phytoplankton community shifts in lake mesocosms: relevance for lake restoration in warm climates. *Hydrobiologia*, 848:4861–4884.
99. **Roelke***, **D.L.**, S.E. Cagle, R.M.W. Muhl, A. Sakavara, G. Tsirtsis. 2020. Resource fluctuation patterns influence emergent properties of phytoplankton assemblages and their resistance to harmful algal blooms. *Marine and Freshwater Research*. 71: 56-67.
98. Bhattacharyya, J., **D.L. Roelke***, J.R. Walton, S. Banerjee. 2020. Using YY supermales to destabilize invasive fish populations. *Theoretical Population Biology*. 134: 1-14.
97. Grover*, J.P., J.T. Scott, **D.L. Roelke**, B.W. Brooks. 2020. Dynamics of nitrogen-fixing cyanobacteria with heterocysts: a stoichiometric model. *Marine and Freshwater Research*. 71: 644–658.
96. Mitrovic*, S.M., T. Kobayashi, **D.L. Roelke**. 2020. Cyanobacteria in inland waters: new monitoring, reporting, modelling and ecological research. *Marine and Freshwater Research*. 2020: i-iv.
95. Thayer, A.W., A. Vargas, A.A. Castellanos, C.W. Lafon, B.A. McCarl*, **D.L. Roelke**, K.O. Winemiller, T.E. Lacher. 2020. Integrating agriculture and ecosystems to find suitable adaptations to climate change. *Climate*. 8, 10; doi:10.3390/cli8010010 (20 pages).
94. Bhattacharyya, J., **D.L. Roelke***, S. Pal, S. Banerjee. 2019. Sliding mode dynamics on a prey-predator system with intermittent harvesting policy. *Nonlinear Dynamics*. 98: 1299–1314
93. Cagle, S.E., **D.L. Roelke***, R.M.W Muhl. 2019. Compounding effects of co-occurring disturbances on populations of a harmful bloom-forming mixotrophic protist. *Hydrobiologia*. 831: 23–31.
92. Mazaheri Kouhanestani, Z., **D.L. Roelke***, R. Ghorbani, M. Fujiwara. 2019. Assessment of spatiotemporal phytoplankton composition in relation to environmental conditions of Gorgan Bay, Iran. *Estuaries and Coasts*. 42: 173–189.
91. Spatharis*, S., V. Lamprinou, A. Meziti, K.A. Kormas, D.D. Danielidis, E. Smeti, **D.L. Roelke**, R. Mancy, G. Tsirtsis. 2019. Everything is not everywhere: Marine compartments shape phytoplankton assemblages. *Proceedings of the Royal Society B*, 286: 20191890. <http://dx.doi.org/10.1098/rspb.2019.1890>.
90. **Roelke, D.L.** 2018. Grazers, pathogens and shelf-shading enhance phytoplankton species richness more and reduce productivity less when environments are less dynamic: A theoretical study. *Estuarine, Coastal and Shelf Science*. 211: 152-165.

89. Bhattacharyya, J., **D.L. Roelke***, R.M.W. Muhl, F.G. Withrow. 2018. Exploitative competition of invaders differentially influences the diversity of neutral, lumpy and intransitive phytoplankton assemblages in spatially heterogeneous environments. *Ecological Modelling*. 370: 59-66.
88. Muhl, R.M.W., **D.L. Roelke***, T. Zohary, M. Moustaka-Gouni, U. Sommer, G. Borics, U. Gaedke, F.G. Withrow, J. Bhattacharyya. 2018. Resisting annihilation: Relationships between functional trait dissimilarity, assemblage competitive power and allelopathy. *Ecology Letters*. 9: 1390-1400.
87. Nordhaus*, I., **D.L. Roelke**, R. Vaquer-Sunyer, C. Winter. 2018. Coastal systems in transition from a 'natural' to an 'anthropogenically-modified' state. *Estuarine, Coastal and Shelf Science*. 211: 1-5.
86. Papanikolopoulou, L.A., E. Smeti, **D.L. Roelke**, P.G. Dimitrakopoulos, G.D. Kokkoris, D. Danielidis, S. Spatharis*. 2018. Interplay between r- and K-strategists leads to phytoplankton underyielding under pulsed resource supply. *Oecologia*. 186: 755–764.
85. Sakavara, A., G. Tsirtsis, **D.L. Roelke**, R. Mancy, S. Spatharis*. 2018. Lumpy species coexistence arises robustly in fluctuating resource environments. *Proceedings of the National Academy of Sciences, USA*. 115: 738–743.
84. Smeti, E., **D.L. Roelke***, G. Tsirtsis, S. Spatharis. 2018. Species extinctions strengthen the relationship between biodiversity and resource use efficiency. *Ecological Modelling*. 384: 75-86.
83. Withrow, F.G., **D.L. Roelke***, R.M.W. Muhl, J. Bhattacharyya. 2018. Water column processes differentially influence richness and diversity of neutral, lumpy and intransitive phytoplankton assemblages. *Ecological Modelling*. 370: pp. 22-32.
82. **Roelke, D.L.** 2017. Applying principles of resource competition theory to microalgae biomass production: A more refined relationship between species richness and productivity. *Algal Research*. 25: 431–438.
81. **Roelke***, **D.L.**, H-P. Li, C.J. Miller-DeBoer, G.M. Gable, S.E. Davis. 2017. Regional shifts in phytoplankton succession and primary productivity in the San Antonio Bay System (USA) in response to diminished freshwater inflows. *Marine and Freshwater Research*. 68: 131-145.
80. Grover*, J.P., **D.L. Roelke**, B.W. Brooks. 2017. Population persistence in flowing-water habitats: Conditions where flow-based management of harmful algal blooms works, and where it does not. *Ecological Engineering*. 99: 172-181.
79. Pinckney*, J.L., A. Quigg, **D.L. Roelke**. 2017. Interannual and seasonal patterns of estuarine phytoplankton diversity in Galveston Bay, Texas, USA. *Estuaries and Coasts*. 40: 310-316.
78. **Roelke***, **D.L.**, A. Barkoh, B.W. Brooks, J.P. Grover, K.D. Hambright, J.W. La Claire II, P.D.R. Moeller, R. Patino. 2016. A chronicle of a killer alga in the west: Ecology, assessment and management of *Prymnesium parvum* blooms. *Hydrobiologia*. 764: 29–50.
77. Hitchcock, J.N., S.M. Mitrovic*, W.L. Hadwen, **D.L. Roelke**, I.O. Gowns and A.M. Rohlfs. 2016. Terrestrial dissolved organic carbon subsidizes estuarine zooplankton: an in-situ mesocosm study. *Limnology and Oceanography*. 61: 254-267.

76. Smeti*, E., S. Spatharis, **D.L. Roelke**. 2016. Spatial averaging and disturbance lead to high productivity in aquatic metacommunities. *Oikos*. 125: 812-820.
75. **Roelke***, **D.L.**, S. Spatharis. 2015. Phytoplankton succession in recurrently fluctuating environments. *PLoS ONE*. 10(3): 1-17. doi:10.1371/journal.pone.0121392.
74. **Roelke***, **D.L.**, S. Spatharis. 2015. Phytoplankton assemblage characteristics in recurrently fluctuating environments. *PLoS ONE*. 10(3): 1-25. doi:10.1371/journal.pone.0120673.
73. Davis, S.L., **D.L. Roelke***, B.W. Brooks, V.M. Lundgren, F. Withrow, W.C. Scott. 2015. Rotifer–*Prymnesium parvum* interactions: role of lake bloom history on rotifer adaptation to toxins produced by *P. parvum*. *Aquatic Microbial Ecology*. 75: 55-68.
72. Dorado, S., T. Booe, J. Steichen, A.S. McInnes, R. Windham, A. Shepard, A.E.B. Lucchese, H. Preischel, J.L. Pinckney, S.E. Davis, **D.L. Roelke** and A. Quigg*. 2015. Towards an understanding of the interactions between freshwater inflows and phytoplankton communities in a subtropical estuary in the Gulf of Mexico. *PLoS ONE*. 10(7): 1-23. doi:10.1371/journal.pone.0130931.
71. Lundgren, V.M., **D.L. Roelke***, B.W. Brooks, E. Granéli, S.L. Davis, T. Baty, W.C. Scott. 2015. *Prymnesium parvum* invasion success into coastal bays of the Gulf of Mexico: Galveston Bay case study. *Harmful Algae*. 43: 31-45.
70. Smeti, E., **D.L. Roelke**, G. Gremion, J.M. Linhart, D.B. Danielidis, S. Spatharis*. 2015. Potential mechanisms of coexistence between two globally important *Pseudo-nitzschia* (Bacillariophyta) species. *Hydrobiologia*. 762: 89-101.
69. Winemiller*, K.O., C. Montaña, **D.L. Roelke**, J.B. Cotner, J.V. Montoya, L. Sanchez, M.M. Castillo, and C.A. Layman. 2014. Pulsing hydrology determines top-down control of basal resources in a tropical river-floodplain ecosystem. *Ecological Monographs*. 84: 621–635.
68. Witmer, A.D., **D.L. Roelke***. 2014. Human interference prevents recovery of infaunal beach communities from hurricane disturbance. *Ocean and Coastal Management*. 87: 54-60.
67. **Roelke***, **D.L.**, H-P. Li, N.J. Hayden, C.J. Miller, S.E. Davis, A. Quigg, Y. Buyukates. 2013. Co-occurring and opposing freshwater inflow effects on phytoplankton biomass, productivity and community composition of Galveston Bay, USA. *Mar. Ecol. Progress. Ser.* 477: 61-76.
66. Grover*, J.P., **D.L. Roelke**, B.W. Brooks, G.M. Gable, M.T. Neisch, N.J. Hayden, T.W. Valenti, Jr., K.N. Prosser, G.D. Umphres, N.C. Hewitt. 2013. Ammonium treatments to suppress toxic blooms of *Prymnesium parvum* in a subtropical lake of semi-arid climate: results from *in situ* mesocosm experiments. *Water Research*. 47: 4274-4285.
65. Lundgren, V.M., **D.L. Roelke***, J.P. Grover, B.W. Brooks, K.N. Prosser, W.C. Scott, C.A. Laws, G.D. Umphres. 2013. Interplay between ambient surface water mixing and manipulated hydraulic flushing: Implications for harmful algal bloom mitigation. *Ecological Engineering*. 60: 289-298.
64. Umphres IV, G.D., **D.L. Roelke***, M.D. Netherland. 2013. The potential algaecide flumioxazin has little effect on growth, survival and feed conversion of the bluegill sunfish *Lepomis macrochirus*. *Aquaculture*. 380-383: 80-83.

63. **Roelke*, D.L.**, S. Spatharis, S.M. Mitrovic. 2012. A new hydrology: effects on ecosystem form and functioning. *Can. J. Fish. Aquat. Sci.* 69:1377-1379.
62. **Roelke*, D.L.**, B.W. Brooks, J.P. Grover, G.M. Gable, L. Schwierzke-Wade, N.C. Hewitt. 2012. Anticipated human population and climate change effects on algal blooms of a toxic haptophyte in the south-central USA. *Can. J. Fish. Aquat. Sci.* 69:1389-1404.
61. Granéli*, E., B. Edvardsen, **D.L. Roelke**, J.A. Hagström. 2012. The ecophysiology and bloom dynamics of *Prymnesium* spp. *Harmful Algae.* 14:260-270.
60. Grover*, J.P., **D.L. Roelke**, B.W. Brooks. 2012. Modeling of plankton community dynamics characterized by algal toxicity and allelopathy: A focus on historical *Prymnesium parvum* blooms in a Texas reservoir. *Ecological Modelling.* 227:147-161.
59. Hayden, N.J., **D.L. Roelke***, B.W. Brooks, J.P. Grover, M.T. Neisch, T.W. Valenti, Jr., K.N. Prosser, G.M. Gable, G.D. Umphres, N.C. Hewitt. 2012. Beyond hydraulic flushing: Deep water mixing takes the harm out of a haptophyte bloom. *Harmful Algae.* 20:42-57.
58. Neisch, M.T., **D.L. Roelke***, B.W. Brooks, J.P. Grover, M.P. Masser. 2012. Stimulating effect of *Anabaena* sp. exudate on *Prymnesium parvum*. *Journal of Phycology.* 48:1045-1049.
57. Prosser, K.N., T.W. Valenti Jr., N.J. Hayden, M.T. Neisch, N. Hewitt, G.D. Umphres, G.M. Gable, J.P. Grover, **D.L. Roelke**, B.W. Brooks*. 2012. Low pH preempts bloom development of a toxic haptophyte. *Harmful Algae.* 20:156-164.
56. Umphres IV, G.D., **D.L. Roelke***, M.D. Netherland. 2012. A chemical approach for the mitigation of *Prymnesium parvum* blooms. *Toxicol.* 60:1235-1244.
55. **Roelke*, D.L.**, R.H. Pierce. 2011. Effects of inflow on harmful algal blooms – some considerations. *Journal of Plankton Research.* 33: 205-210.
54. **Roelke*, D.L.**, J.P. Grover, B.W. Brooks, J. Glass, D. Buzan, G.M. Southard, L. Fries, G.M. Gable, L. Schwierzke-Wade, M. Byrd, J. Nelson. 2011. A decade of fish-killing *Prymnesium parvum* blooms in Texas: Roles of inflow and salinity. *Journal of Plankton Research.* 33: 243-254.
53. Brooks*, B.W., J.P. Grover, **D.L. Roelke**. 2011. *Prymnesium parvum*, An emerging threat to inland waters. *Environmental Toxicology and Chemistry* (featured article). 30: 1955-1964.
52. Grover*, J.P., K.W. Crane, J.W. Baker, B.W. Brooks, **D.L. Roelke**. 2011. Spatial variation of harmful algae and their toxins in flowing-water habitats: a theoretical exploration. *Journal of Plankton Research.* 33: 211-228.
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6. Roelke, D.L., B.W. Brooks, J.P. Grover. 2012. *Prymnesium parvum* blooms in south-central USA: Concerns of climate change and population growth. K.A. Pagou and G.M. Hallegraeff (Eds.), Proceedings of the 14th International Conference on Harmful Algae. Intergovernmental Oceanographic Commission of UNESCO, pp. 102-104.
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1. Roelke, D.L., S. Augustine, and Y. Buyukates. 2003. Directing the Fall of Darwin's "Grain in the Balance": Manipulation of Hydraulic Flushing as a Potential Control of Phytoplankton Population Dynamics. Texas Water Resource Institute, Technical Report 245. 13 pages.

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1. Roelke D.L. 2007. Book Review: Ecology of Harmful Algae. Ecological Studies 189. E. Graneli and J.T. Turner (Eds.). Springer-Verlag, Berlin. 413 pages. 2006. **Eos**. 88(30): 4.

Book Scientific Consultant

Food Chains, Discover Biology, 2021. Emma Huddleston. Abdo Publishing, North Mankato, Minnesota.

POPULAR PRESS FEATURING ROELKE-LAB RESEARCH

- “Red Tide Appearing In Gulf Of Mexico - Texas A&M-Galveston marine biologist Daniel Roelke says the algae bloom can be devastating to marine life and can threaten humans”. Texas A&M Today, July 29, 2021 (written by Keith Randall). <https://today.tamu.edu/2021/07/29/red-tide-appearing-in-gulf-of-mexico/>.
- “Tiny algae, big problems” published by College of Agriculture and Life Sciences, Texas A&M University, July 2018 (written by Kendra Davis).
- “A little competition could rein in algal blooms” published by Futurity, Earth and Environment, August 2018 (rewritten by Keith Randall, original written by Kendra Davis).
- “Texas A&M Researchers Found A Fix For Out-Of-Control Algal Blooms” published by Texas A&M Today, Texas A&M University, August 2018 (re-posted and modified, original written by Kendra Davis)
- “The hauntingly beautiful underworld of Yucatan cenotes” CSIRO Publishing Facebook page, October 2016, an outreach program of the international journal *Marine and Freshwater Research*.
- “Meet a scientist: Daniel Roelke” Conservation Matters, May 2016, an online publication of Texas Water Resources Institute (written by Eva Vigh).
- “Protecting the Red Sea’s Coral Reefs” tamuTimes, June 17, 2014, an online publication of Texas A&M University. Also featured in the College of Agriculture and Like Sciences Newsletter posted on June 12, 2014 (written by Angel Futrell).
- “Lower lake to bring more algae” – Hood County News (regional newspaper), June 15, 2011. Also, online article brief - “Golden algae will thrive with low lake levels”
- “Texas scientists publish needed golden algae research” - New Waves, Texas Water Resources Institute's E-Newsletter, Agrilife Research and Extension, Texas A&M University, April 2011.
- “Battling golden algae Results suggest preventative lake management approaches – tx H₂O, Publication of the Texas Water Research Institute, 2011.
- “Toxic and Deadly Working to manage algae in Lake Granbury” – tx H₂O Special Edition, Publication of the Texas Water Research Institute, 2011.
- “Researchers Identify What Makes Deadly Algae More Toxic” - Science Daily, Online Publication (<http://www.sciencedaily.com>), November 11, 2009.
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- “Researchers study harmful golden algae”, The Lariat online, Publication of Baylor University, April 18, 2008.

- “Study Identifies Variables That Contribute to High Golden Algae Blooms; Awarded, New Grant”, Baylor In the News, April 8, 2008.
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- “Group trying to prevent widespread lake pollution”, Hood County News Online, March 29, 2006.
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- “What’s the Plan: Groups tackling water quality problems on Lake Granbury”, tx H₂O, Publication of the Texas Water Research Institute, Texas, 2006.
- “Texas’ Natural Lake: Research to help restore environmental flows to Caddo Lake”, tx H₂O, Publication of the Texas Water Research Institute, 2006.
- “Texas Gold Rush: Scientists seek to understand and control golden algae”, tx H₂O, Publication of the Texas Water Research Institute, Texas, 2005.
- “Caddo Studied”, Newspaper Article, Marshall News Messenger, May 5, 2005.
- “Texas the State of the Water, Finding a Balance: Narrated by Walter Cronkite”, Documentary, Texas Parks and Wildlife, Aired February 3, state wide on PBS stations, 2005.
- “Reports indicate golden algae no longer active”, Newspaper Article, Lake Country Sun, May 23, 2003.
- “Who Will Win”, Internet news report, Scientific American, May 29, 2001.

GRANTS AND CONTRACTS

Extramural Funds

(\$-number is the total award and (%-number) is the proportion of funds directly coming to the Roelke lab)

- 2021 Labonte, JM (PI), Roelke, D (co-PI), and Santschi, P (co-PI). New ultrafiltration apparatus to concentrate viruses from large volumes. TAMUG TCRF funds 2021. \$4,767.51
- 2021-24 Factors critical to long-term lake and reservoir management: Relationships between land-use, nutrient loading, inflows, HABs and anoxia, with J. Labonte, U.S. Army Corps of Engineers, \$1,431,009 (\$606,112, 42%) – lead-PI.
- 2020-22 Multispecies, Multinutrient plankton model for Galveston and Corpus Christi Bays with development of forms to enter and retrieve information. Texas Commission on Environmental Quality, \$327,584 – sole-PI
- 2019-20 Better Water-Use Efficiency Through Coupled Microalgae Production And Horticulture Industries. Triad Program, Texas A&M University, \$35,115 (\$17,558, 50%) – lead PI.

- 2018-19 Linkages between land use, ground water pollution, and cyanotoxins: a comparison between lake-like and stream-like systems, and between urban and rural landscapes, with C. Hernández Zepeda, Consejo Nacional de Ciencia y Tecnología (abbreviated CONACYT), \$50,000 (\$32,745, 65%) – lead-PI.
- 2016-17 Water quality in sink-hole lakes (cenotes) of the Yucatan, Mexico, with C. Munster, Yucatan Initiative, Consejo Nacional de Ciencia y Tecnología (abbreviated CONACYT) and AgriLife Research Texas A&M University, \$15,000 (100%) – lead-PI.
- 2016 Spatiotemporal variation in plankton assemblages and water quality parameters in Lake Conroe, Texas, San Jacinto River Authority, \$16,859 (100%) – sole-PI
- 2015-17 Relationships between inflows, nutrient loading, phytoplankton and dissolved oxygen in two bay systems of the western Gulf of Mexico: A numerical modeling study, with A. Quigg, Texas Commission on Environmental Quality, \$322,825 (\$278,489, 86%). – lead-PI
- 2015-16 A Prototype Information System for Monitoring and Predicting Phytoplankton Productivity over Galveston Bay, with H. Gao, NOAA Coastal Management Program, \$95,475 (\$16,607, 17%). – co-PI
- 2015-16 Phytoplankton assemblage composition and productivity in the middle-Trinity River, Texas Water Development Board, \$35,570 (100%). – sole-PI
- 2015 Efficacy of Flumioxazin as a golden algae bloom inhibitor, NuFram Inc., \$10,000 (100%) – sole-PI.
- 2014-15 Mechanisms for bloom formation of *Karenia brevis* and *Prymnesium parvum* in Texas bays. National Fish and Wildlife Foundation, Conservation Scholars Program, \$36,416.00 (100%). – Investigator (this award was for graduate student research, Rika Muhl)
- 2014-15 The relative roles of niche and neutral mechanisms in controlling phytoplankton genetic and morphological diversity – “ECOGENE”, Greek Secretariat of Research and Technology (GSRT) as an Action of Excellence through the European Union, \$472,290 (\$30,000, 6%) – Investigator (non-Greeks could not be listed as co-PIs)
- 2012-13 Coupling water-column bio-optics and coral reef ecology to predict the impacts of climate change and coastal zone development on the Red Sea – beginning steps in research, with Jay Walton, Christian Voolstra, Cornelia Roder. TAMU Institute for Applied Mathematics and Computational Science, King Abdullah University of Science and Technology, \$40,000 (\$40,000, 100%). – lead PI
- 2011-12, Golden Algae Control: Efficacy of Cove Manipulations, with J. Grover, B. Brooks, US Army Corps of Engineers, \$300,000 (\$208,335, 69%). - lead PI
- 2010-14 Mathematical modeling in ecology, subprogram of KAUST Global Research Partnership: TAMU Institute for Applied Mathematics and Computational Science, with J. Walton (lead PI), King Abdullah University of Science and Technology, \$1,600,000 (\$65,000, 4%). – collaborating scientist (I was added on after award was won)
- 2010-11, Testing approaches to Golden Algae control: In-lake mesocosm experiments, with J. Grover, B. Brooks, US Army Corps of Engineers, \$450,000 (\$289,502, 64%). - lead PI

- 2008-09, Water Quality Program for Lakes Granbury, Whitney and Waco, TX, with J. Grover, B. Brooks, US Department of Energy, \$424,848 (\$215,000, 51%). - lead PI
- 2007-09, Refining a Predictive Understanding of Physical, Chemical and Biological Factors Influencing *Prymnesium parvum* Population Dynamics, with B. Brooks, J. Grover, Texas Parks and Wildlife Department, \$490,445 (\$200,000, 41%). - co-lead PI
- 2007-09, Freshwater inflows: influence of nutrient and sediment load on our ability to define beneficial flows for Galveston Bay, with A. Quigg, S. Davis, Texas Sea Grant, \$281,012 (\$20,000, 7%). - co-PI
- 2007-08, Pan-Caribbean Climate Change and Marine Ecosystem Management Program - Marine Ecosystem Assessment and Management, TAMU sub-team (Planning Period), with S. Davis, A. Filippi, Stanford Family, \$164,449 (\$50,000, 30%). - co-PI
- 2007-08, Phytoplankton Responses to Freshwater Inflows in the Trinity-San Jacinto Estuary, with A. Quigg, S. Davis, Texas Water Development Board, \$32,000 (\$10,000, 31%). - co-PI
- 2007-08, Phytoplankton Responses to Freshwater Inflows in Galveston Bay, with A. Quigg, S. Davis, Galveston Bay Estuaries Program, \$70,021 (\$20,000, 29%). - co-PI
- 2007-08, Freshwater inflows and the health of Galveston Bay: influence of nutrient and sediment load on the base of the food web, with A. Quigg, S. Davis, NOAA Coastal Management Program, \$94,704 (\$30,000, 32%). - co-PI
- 2007, Antigua and Barbuda Coastal and Marine Ecosystem Management Program – Marine Ecosystem Assessment and Management, TAMU sub-team (Interim Period), with S. Davis, A. Filippi, Stanford Family, \$100,000 (\$30,000, 30%). - co-PI
- 2006-07, Lake Granbury Water Quality Assessment, with B. Brooks, J. Grover, S. Davis, R. Kiesling, US Department of Energy, \$384,800 (\$200,000, 52%). - lead PI
- 2006-07, Advancing the predictive understanding of bloom formation and toxicity in *Prymnesium parvum*, with J. Grover, B. Brooks, R. Kiesling, Texas Parks and Wildlife Department, \$529,023 (\$200,000, 38%). - co-lead PI
- 2004-06, Reduced Freshwater Inflows and Productivity in the Guadalupe Estuary: Use of High-Resolution Spatial Mapping, with S. Davis, Texas Sea Grant (award number NA16RG1078), \$208,746 (\$104,000, 50%). - co-lead PI
- 2004-06, Bridging the Gap Between Plankton Dynamics and Spatial Variability in Water Quality in the Guadalupe Estuary (Texas): The Importance of Freshwater Pulses, with S. Davis, National Institute Water Resources/U.S. Geological Survey, National Competitive Grant Program (award number 03HQGR0122), \$233,953 (\$115,000, 49%). - co-lead PI
- 2004-06, Monitoring ecosystem health with bioindicators: mapping seasonal changes in primary productivity & the primary producers in Galveston Bay, with A. Quigg, S. Davis, Coastal Management Program, \$70,000 (\$23,000, 33%). - co-PI
- 2004-06, Use of High-Resolution Spatial Mapping to Estimate Plankton Response to Freshwater Inflows Entering Galveston Bay: Importance to Watershed Development and Ecosystem

- Health, with S. Davis, J. Pinckney, Galveston Bay Estuaries Program (582-4-65034), \$131,717 (\$50,000, 38%). - co-PI
- 2004-05, Developing a predictive understanding of *Prymnesium parvum* toxic bloom formation and its control, with R. Kiesling, B. Brooks, J. Grover, Texas Parks and Wildlife Department, \$565,000 (\$200,000, 35%). - co-lead PI
- 2004-05, Developing inflow recommendations for Caddo Lake, TX, with K. Winemiller, S. Davis, A. Chin, B. Wilcox, The Nature Conservancy, \$67,000 (\$7,000, 10%). - co-PI
- 2003-06, Undergraduate Research in Biodiversity and Ecological Processes in Fluctuating Environments, with R.L. Honeycutt, J. Bonner, R. Autenrieth, J. Bickam, and C. Page, National Science Foundation, Division of Environmental Biology (EEC-9912278), \$268,397 (\$53,000, 20%). - co-PI
- 2001-04, Variable Effects of Nutrients, Productivity, Consumption, and the Flood Pulse on Floodplain River Ecosystems, with K.O. Winemiller and J.B. Cotner, National Science Foundation, Ecology/Ecosystems Program (DEB-0089834), \$318,000 (\$109,000, 34%). - co-PI
- 2000-03, Productivity and Structure of a Coastal Wetland: Response to Fluctuating Freshwater Inflow, with J.L. Heilman, K.J. McInnes, and D.A. Zuberer, U.S. Department of Agriculture, National Research Initiative (00-35101-9275), \$215,000 (\$100,000, 46%). - co-lead PI
- 2000-02, Undergraduate Research in Biodiversity and Ecological Processes in Fluctuating Environments, with R.L. Honeycutt, J. Bonner, T. Lacher, and R. Autenrieth, National Science Foundation, Division of Environmental Biology (EEC-9912278), \$194,760 (\$38,952, 20%). - co-PI
- 1999-04, Water Quality Monitoring of Lake Somerville, TX, US Army Corps of Engineers, \$118,682 (100%). - sole PI
- 1999-02, Health of a Texas Estuary: Influence of Freshwater Inflow and Nutrient Loading, Texas Sea Grant (NA86RG0058), \$47,697 (100%). - sole PI

TEACHING

(year class was offered and student evaluations on a scale of 0-5 are shown in parentheses)

WFSC 404, Aquatic Ecosystems

(15-4.76, 16-4.70, 17-4.72, 18-4.59, 19-4.65)

WFSC 414, Ecology of Lakes and Rivers - formerly called Limnology

(98-4.07, 99-4.32, 00-4.74, 01-4.64, 02-4.23, 03-4.76, 04-4.15, 06-4.60, 08-n/a [PICA failure], 10-4.58, 11-4.88, 13-4.73)

WFSC 418, Ecology of the Coastal Zone

(05-4.51, 07-4.90, 09-4.96, 11-4.71, 13-4.80)

WFSC 449, Professional Aspects of Aquatic Sciences

(14-5.00, 15-4.74, 17-4.67)

WFSC 484, Undergraduate Internships

(see list of students in 'Student Supervision' section)

WFSC 611, Estuarine Ecology

(03-4.79, 07-4.89, 08-4.73, 09-4.96, 10-4.62, 12-4.46, 14-4.67)

WFSC 621, Aquatic Ecology - formerly called Lower Foodweb Dynamics of Aquatic Ecosystems cross-listed with OCNG 629

(99-4.75, 00-4.49, 01-4.67, 05-4.90)

WFSC 685, Chaos in Plankton Ecosystems

(02-4.81)

UPAS, 181 Killer Algae: Ecology and Management (First Year Seminars through the Dean of Undergraduate Programs)

(09-quality of freshman seminars in this program are not evaluated)

Guest lectures

WFSC 101, Introduction to Wildlife and Fisheries Sciences (1998-2001, 2015-17)

EEBL 603, Community Ecology, Biodiversity Mechanisms Module (2017)

MATH 442, Mathematical Modeling (2011, 2012, 2013)

MATH 469, Mathematical Biology (2012, 2013)

STUDENT SUPERVISION

Graduate Students, Chair or co-Chaired Committee

2021-P Royoung Park (Ph.D., Marine Biology, TAMUG)

2021-P Crista Kieley (Ph.D., Marine Biology, TAMUG)

2014-19 Cagle, Sierra (Ph.D., Wildlife and Fisheries Sciences)

2013-17 Bloomer, Tymon (M.S., Wildlife and Fisheries Sciences)

2013-17 Méndez-Jiménez, Adriana (Ph.D., Wildlife and Fisheries Sciences – transferred to Lacher)

2013-17 Withrow, Frances (M.S., Wildlife and Fisheries Sciences)

2012-14 Davis, Stephen (M.S., Wildlife and Fisheries Sciences)

2011-18 Muhl, Rika (Ph.D., Wildlife and Fisheries Sciences)

2010-14 Smeti, Evangelia (Ph.D., Department of Marine Sciences, U. Aegean, Greece)

2010-12 Umphres, George (M.S., Wildlife and Fisheries Sciences)

2010-14 Neisch, Michael (M.S., Wildlife and Fisheries Sciences)

2009-11 Hayden, Natanya (M.S., Wildlife and Fisheries Sciences)

2008-11 Hewitt, Natalie (M.S., Wildlife and Fisheries Sciences)
2004-09 Hsiu-Ping Li (Ph.D., Wildlife and Fisheries Sciences – transferred, finished under Santschi)
2004-07 Miller, Carrie (M.S., Wildlife and Fisheries Sciences)
2004-07 Gable, George (M.S., Wildlife and Fisheries Sciences)
2003-05 Errera, Reagan (M.S., Wildlife and Fisheries Sciences)
2001-08 Montoya Ceballos, Jose (Ph.D., Wildlife and Fisheries Sciences)
2000-03 Fejes, Elizabeth (M.S., Wildlife and Fisheries Sciences)
2000-02 Murdock, Justin (M.S., Wildlife and Fisheries Sciences)
1998-03 Buyukates, Yesim (Ph.D., Wildlife and Fisheries Sciences)

Graduate Students, Member of Committee

2019-P Chengxue Li (Ph.D., Marine Biology, TAMUG)
2019-21 Tiffany Chin (M.S., Marine Sciences, TAMU-CC)
2017-P James Fiorendino (Ph.D., Oceanography, TAMU)
2015-17 Xiao Shen (M.S., Civil Engineering, TAMU)
2015-16 Gesundheit, Pablo (Ph.D., WFSC, TAMU) – stopped graduate school, health
2015-17 Preischel, Hannah (M.S., Oceanography, TAMUG)
2015-17 Yang, Mingyue (Ph.D., WMHS, TAMU) – did not finish
2013-17 Sandoval, Christopher (M.S., Wildlife and Fisheries Sciences, TAMU)
2010-17 Burgess, Allyson (M.S., Oceanography -TAMUG)
2010-16 Rose, Emily (Ph.D., Biology Department, TAMU)
2010-13 Chouly, Ou (Ph.D., Wildlife and Fisheries Sciences, TAMU)
2009-15, Weaver, Carolyn (Ph.D., TAMUG)
2008-11, Miller, Carrie (Ph.D., Biology Department, University of Oklahoma)
2008-12, Leavitt, Daniel (Ph.D., Wildlife and Fisheries Sciences, TAMU)
2006-12, Steichen, Jamie (Ph.D., TAMUG)
2005-09, Knight, Trevor (M.S., Wildlife and Fisheries Sciences, TAMU)
2004-07, Baker, Jason (Ph.D., University of Texas, Arlington)
2003-07, Hoehinghouse, David (Ph.D., Wildlife and Fisheries Sciences)
2003-07, Papadopoulos, Anthony (Ph.D., Wildlife and Fisheries Sciences)
2002-04, Romigh, Melissa (M.S., Wildlife and Fisheries Sciences)

2002-04, Salazar , Alicia (M.S., Oceanography)
2000-02, Lumson, Beth (M.S., Oceanography)
2000-04, Fletcher, William (M.S., Oceanography)
2000-03, Charbonnet, Danielle (M.S., Agricultural Engineering)
1999-04, Layman, Craig (Ph.D., Wildlife and Fisheries Sciences)
1999-02, Healy, Brian (M.S., Wildlife and Fisheries Sciences)
1999-06, Cramer, Nicholas (M.S., Soil and Crop Science)
1998-02, Ornofsdottir, Erla (Ph.D., Oceanography)
1998-02, Arrington, Albrey (Ph.D., Wildlife and Fisheries Sciences)
1998-02, Heinsch, Faith-Ann (Ph.D., Soil and Crop Science)

Graduate Students, Chair or co-Chaired Committee (non-research)

2021-P Abigail Brown (non-thesis M.S., Marine Biology, TAMUG)
2021-P Chance Byars (non-thesis M.S., Marine Biology, TAMUG)
2021-P Mikayla Childs (non-thesis M.S., Marine Biology, TAMUG)
2021-P Avery Franklin (non-thesis M.S., Marine Biology, TAMUG)
2021-P Mia Bennett (non-thesis M.S., Marine Biology, TAMUG)
2021-P Joshua Cavazos (non-thesis M.S., Marine Biology, TAMUG)
2021-P Kyler Carl (non-thesis M.S., Marine Biology, TAMUG)
2021-P Case Sloan (non-thesis M.S., Marine Biology, TAMUG)
2021-P Kailey Snead (non-thesis M.S., Marine Biology, TAMUG)
2021-P Mei Ling Valdes (non-thesis M.S., Marine Biology, TAMUG)
2021-P Halle Velasquez (non-thesis M.S., Marine Biology, TAMUG)
2020-21 Shannon Ainsworth (non-thesis M.S., Marine Biology, TAMUG)
2020-P Adrienne Ashe (non-thesis M.S., Marine Biology, TAMUG)
2020-21 Jordan Civay (non-thesis M.S., Marine Biology, TAMUG) – left for Mississippi State
2020-P Caitlin Ellison (non-thesis M.S., Marine Biology, TAMUG)
2020-P Christian Hockley (non-thesis M.S., Marine Biology, TAMUG)
2020-21 Erin Johnson (non-thesis M.S., Marine Biology, TAMUG) – transferred into MS thesis program under Dr. Wells
2020-P Haleigh Meck (non-thesis M.S., Marine Biology, TAMUG)

- 2020-P Christy Pittman (non-thesis M.S., Marine Biology, TAMUG)
- 2020-21 Justin Wilson (non-thesis M.S., Marine Biology, TAMUG) – transferred into MS thesis program under Dr. Marshall
- 2020-21 Jodi Witek (non-thesis M.S., Marine Biology, TAMUG) – John S. is chair?
- 2019-21 Veronica Houck (non-thesis M.S., Marine Biology, TAMUG)

Graduate Students, Member of Committee (non-research)

- 2020-P Justin Tirpak (non-thesis M.S., Marine and Coastal Environmental Sciences, TAMUG)
- 2020-21 Ava Cares (non-thesis M.S., Marine and Coastal Environmental Sciences, TAMUG)
- 2020-P Gregory Grimm (non-thesis M.S., Marine and Coastal Environmental Sciences, TAMUG)
- 2019-21 Ryan Septelka (non-thesis M.S., Marine Biology, TAMUG)
- 2019-20 Alan Salamonovitz (non-thesis M.S., Marine Biology, TAMUG)

Substituted Into Committee

- 2013 Mendoza, Maria (M.S., Wildlife and Fisheries Sciences)
- 1998 Wilson, Amela (Ph.D., Electrical Engineering)

Graduate Council Representative for Committee

- 2000-03, Scherer, Andrew (Ph.D., Anthropology)
- 1998-03, Van Tassel, William (Ph.D., Health Education)

Undergraduate Student Research and Mentoring

- 2019 Pierce, Leus (WFSC, Texas A&M University, only mentored)
- 2018 Depew, Alexandra (GEOL, Texas A&M University, TX)
- 2018 Walker, Kyle (WFSC, Texas A&M University, only mentored)
- 2017-18 Haile, Margaret (WFSC, Texas A&M University, TX)
- 2017 Coe, Sarah (WFSC, Texas A&M University, only mentored)
- 2017 Jozwiak, Ryan (WFSC, Texas A&M University, only mentored)
- 2017 Loveland, Richard (WFSC, Texas A&M University, only mentored)
- 2017 Oakley-Fajardo, Stephanie (WFSC, Texas A&M University, only mentored)
- 2016 Clark, Stuart (WFSC, Texas A&M University, only mentored)

2016 Stamps, Brittany (WFSC, Texas A&M University, only mentored)
 2016 Baker, Alexis (WFSC, Texas A&M University, only mentored)
 2016 Johnston, Jacob (WFSC, Texas A&M University, only mentored)
 2015 Alvarado, Genaro (WFSC, Texas A&M University, only mentored)
 2015 Thompson, John (WFSC, Texas A&M University, only mentored)
 2015 Haile, Margaret (WFSC, Texas A&M University, TX)
 2014-15 Gwinn, Jesse (WFSC, Texas A&M University, TX)
 2013 Bodiford, Hailey (MATH, Texas A&M University, TX)
 2013 Rogers, Danielle (MATH, Texas A&M University, TX)
 2012 Withrow, Frances (MATH, Texas A&M University, TX)
 2011-12 Baty, Tomas (Texas A&M University, TX)
 2009-10 Neisch, Michael (Texas A&M University, TX)
 2007-10 Umphres, George (Texas A&M University, TX)
 2006 Dean, Patrick (AGLS 105, Texas A&M University, TX)
 2006 Vendrell-Velez, Rebecca (AGLS 105, Texas A&M University, TX)
 2005 Martinez, Alexis (New Mexico Tech, NM)
 2003-04 Gable, George (Texas A&M University, TX)
 2003 Fong, Allison (University of Rhode Island, RI)
 2003 Hurley, Leah (University of Akron, OH)
 2005 Ludwig, Merissa (Texas A&M University, TX)
 2003-05 Snider, Jennifer (Texas A&M University, TX)
 2001-02 Augustine, Sarah (Texas A&M University, TX)
 2001 Birnbaum, Jenny (University of Texas at Austin, TX)
 2000 Jean, Jason (University of Texas at Austin, TX)
 2000 Williams, Michael (Mercyhurst College, PA)

TRAINING AND MENTORING OF OTHER PROFESSIONALS

2021-P Motamedi, Shahrzad (Postdoc, Ph.D. from University of Utah)
 2019-P Cagle, Sierra (Postdoc, Ph.D. from Texas A&M University)
 2017-18 Mazaheri Kouhanestani, Zohre (Postdoc, Ph.D. from Gorgan University, Iran)
 2015-17 Bhattacharyya, Joydeb (Postdoc, Ph.D. from Calcutta University, India)

2013-14 Gao, Huilin (Assistant Professor, Civil Engineering)
2013-14 Linhart, Jean Marie (Assistant Professor, Central Washington University)
2012-13 Witmer, Angela (Lecturer, Georgia Southern University, GA)
2012-13 Lungren, Veronica (Postdoc, Ph.D. from Linnaeus University, Sweden)
2012-14 Spatharis, Sophia (Lecturer, Glasgow University, Scotland)
2011-12 Kutlu, Banu (Assistant Professor, Tunceli University, Turkey).
2005-08 Schwierzke-Wade, Leslie (Research Associate, B.S. from Texas A&M University, TX)

SERVICE AT TEXAS A&M UNIVERSITY

Department-level

2017-19 Committee Member, Wildlife and Fisheries Departmental Bylaws Develop
2017 Committee Member, Wildlife, Fisheries and Ecological Sciences Building Grand Opening
2016-17 Committee Member, rubric post-tenure evaluation development
2016-19 Faculty Mentor, Kevin Conway (Associate Professor)
2016-19 Faculty Mentor, Jessica Yorzinski (Assistant Professor)
2016 Chair, Departmental Strategic Plan revision
2016-17 Committee Member, Fish Ecologist Search
2004-13, 16-19 Committee Member, Promotion and Tenure Committee
2013-17 Committee Member, Legacy Committee
2012-17 Committee Member, WFSC Faculty Advisory Board
2013-16 Chair, Promotion and Tenure Committee
2001-07, 09-16 Committee Member, Undergraduate Affairs
2015 Committee Member, Application Selection, Applied Biodiversity Sciences Conservation Scholars Program
2015 Committee Member, Avian Wetland Ecologist Search
2014 Committee Member, Large Mammal Ecologist Search
2013-14 Analyst, within university and national departmental assessments through Academic Analytics software
2013-14 Contributing Developer, electronic tool for assessing Faculty Achievement Reports auto-linked to a Faculty Evaluation Matrix for use during annual evaluations
2012-14 Subcommittee Chair, Fisheries Undergraduate Curriculum Revision, Subcommittee of the WFSC Undergraduate Affairs Committee
2006-13 Faculty Mentor, Mariana Mateos (Assistant Professor)

2011-12 Committee Member, WFSC Department Head Search
2010-12 Faculty Mentor, Thom DeWitt (Associate Professor)
2009-10 Advisor, Graduate Student Departmental Seminar Series Committee
2008-10 Committee Member, Extension and Research Facilitation
2008-09 Committee Member, Support Staff Search
2007-08 Chair, Quantitative Ecologist Search
2004-07 Chair, Departmental Seminar Series
2005 Committee Member, Biocomplexity Scientist Search - *rescinded*
2005 Committee Member, Department Name Change
2004-05 Committee Member, Kleberg Chair Search
2004-05 Committee Member, Microbiologist Search (Soil and Crop Sciences)
1998-01 Committee Member, Graduate Program Enhancement Fund

College-level (TAMUG)

2019-P Member, Council of the Built Environment
2019-P Member, TAMUG Strategic Planning, Executive Committee
2019-P Undergraduate Curriculum Committee
2019-P Graduate Instructional Committee
2019-P Academic Affairs Coordination Committee
2019-P Academic Heads Committee
2019-20 Chair, Search Committee, Marine Transportation Department Head

College-level (COALS and Geosciences)

2017-19 Committee Member, College of Agriculture and Life Sciences Promotion and Tenure Committee
2013 Committee Participant, Graduate Program Council deliberations on implementation and impacts of Ecology and Evolutionary Biology Interdepartmental Ph.D. Degree Program
2010-11 Committee Member, Texas Sea Grant Director Search Committee
2008 Ex-officio Advisor, Agriculture Program Faculty Advisory Committee
2007 Chair, Agriculture Program Faculty Advisory Committee
2005 Chair, TAES Science Roadmap Attainment Indicators, Agriculture Program Faculty Advisory Subcommittee

- 2005-06 Committee Member, Agriculture Program Faculty Advisory Committee
2003 Committee Member, Association of Former Students Distinguished Teaching Awards

University-level

- 2020-P Member, Department Heads Steering Committee to the Provost
2019-P MARB curricula assessment through the TAMU Office of Institutional Effectiveness and Evaluation.
2015 Participant, TAMU Strategic Planning Forums: Message for Departmental Representatives: Primary obstacles that will inhibit attainment of objectives and thus vision, and opportunities on which to capitalize to achieve objectives and vision.
2010-11 Associate Chair, Ecology and Evolutionary Biology, Interdisciplinary Research Program
2008-11 Faculty Mentor, Colleague Circle Mentors Program
2009-11 Graduate Student Assessment Committee, Marine Biology Interdisciplinary Program
2009 Committee Chair, Bush Excellence Award for Faculty in Public Service
2008-11 Faculty Senator, Texas A&M University Faculty Senate
Legislative Affairs Committee (2008-2011)
International Programs Committee (2008-10)
Elections Committee (2008-09, 2010-2011)
2008 Committee Member, Bush Excellence Award for Faculty in Public Service

OTHER PROFESSIONAL SERVICE

Editorships (all listed previously)

- 2015-P Associate Editor, *Marine & Freshwater Research*, journal of the Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia.
2012-17 Editorial Board, *Marine Science and Technology Bulletin*, published by Canakkale Onsekiz Mart University, Canakkale, Turkey.
2007-16 Associate Editor, *The American Naturalist*, journal of the American Society of Naturalists, University of Chicago, USA.

National Committee

- 2010-16 Member, National Harmful Algal Blooms Committee, USA. (listed previously)

Organized Symposia, Dedicated Journal Issues, Book Consulting

- 2021-P Guest Editor, *Climate*, journal of the Multidisciplinary Digital Publishing Institute, special issue “Resilience and Adaptation to Climate Change of Aquatic Populations and Communities, and its Impact on Ecosystem Functioning”.
- 2020 Scientific Consultor, children’s book, *Discover Biology: Food Chains*, E. Huddleston, Abdo Publishing, Minneapolis, Minnesota, 32 pages.
- 2017-P Guest Editor, special issue of *Marine and Freshwater Research*, “Inland harmful algal blooms, new management technologies” (year, volume).
- 2016-19 Guest Editor, special issue of *Estuarine, Coastal and Shelf Sciences*, “Coastal Systems in Transition from a natural to anthropogenically modified state” (2018, volume 211).
- 2012-13 Co-Organizer, session titled “Plankton Ecology-Phytoplankton”, Association for the Sciences of Limnology and Oceanography, New Orleans (February, 2013).
- 2012-13 Co-Organizer of an international workshop, “Red Sea Center Research and Collaborations”, workshop series supported through King Abdullah University of Science and Technology (KAUST), Saudi Arabia (May, 2013).
- 2011 Co-Organizer of an international workshop, “Ecosystem Modeling, Simulation and Assessment - Assessing Effects of Climate Change and Human Population Growth on Natural Living Resources: The Red Sea as a Model Case Study”, workshop series supported through King Abdullah University of Science and Technology (KAUST), Saudi Arabia. College Station, TX, September.
- 2010-12 Lead-Organizer of a special issue of the *Canadian Journal of Fisheries and Aquatic Sciences* showcasing themed papers under the titled section “A new hydrology: inflow effects on ecosystem form and functioning” (2012, volume 69).
- 2010-11 Lead-Organizer of special session and Moderator, “A New Hydrology: Inflow effects on ecosystem form and functioning”, Annual Conference of the American Society of Limnology and Oceanography, Aquatic Sciences, San Juan, Puerto Rico. February.
- 2009-11 Lead-Organizer of a special issue of the *Journal of Plankton Research*, Oxford University Press, titled “Effects of inflow on harmful algal blooms” (2011, volume 33).
- 2009-09 Lead-Organizer of special session and Moderator, “Ecohydrology, eutrophication and salinization of aquatic systems, and the function and fate of phycotoxins”, 30th Annual Conference of the Society of Environmental Toxicology and Chemistry (SETAC), New Orleans, LA, USA. November.

Expert Recognition

- 2017 Session Moderator, “Plant Succession & Disturbance”, Society of Wetland Scientists. San Juan, Puerto Rico. June.
- 2016 Session Moderator, “Coastal Systems in Transition from a natural to anthropogenically modified state”, Estuarine Coastal Sciences Association (ECSA), United Kingdom, Bremen, Germany, September.

- 2014 Session Moderator, “Biogeography, dispersal and colonization”, 17th Workshop of the International Association of Phytoplankton Taxonomy and Ecology. Kastoria, Greece. September.
- 2014 Panelist and Reviewer. National Aeronautics and Space Administration, Pre-Aerosol, Clouds, and Ocean Ecosystem Program. Washington D.C. May.
- 2010 Workshop Participant. Texas Wildlife Management Plan – Harmful Algal Bloom Update Workshop, Texas Parks and Wildlife Department. Austin, TX. February.
- 2009 Workshop Participant. Texas Wildlife Management Plan – Harmful Algal Bloom Update Workshop, Texas Parks and Wildlife Department. Corpus Christi, TX. November.
- 2009 Opponent, Ph.D. defense of Andreas Brutemark, “Contribution of phagotrophy by microalgae to carbon flow in marine food webs”, University of Kalmar, Sweden. August.
- 2009 Speaker, “Joining a Community of Learners and Scholars”, First Year Seminar Program, New Student Conference program, Texas A&M University, TX, USA. June.
- 2009 Panelist, “How to get into graduate school”, Texas A&M Chapter of the Wildlife Society, Texas A&M University, TX, USA. March.
- 2008 Panelist, “Early career development”, 35th Annual Great Plains Limnology Conference & 3rd Triennial Oklahoma-Texas Oklahoma Biological Station, OK, USA. September.
- 2008 Steering Committee Member, Joint Great Plains Limnology and Oklahoma-Texas Aquatics Research Group Conference, Oklahoma Biological Station. October.
- 2006 Panelist, “NOAA/Center for Sponsored Coastal Ocean Research/Coastal Ocean Program's South Florida Research and Monitoring Program”, Larry Pugh (Program Director). Marathon Key, FL, USA. January.
- 2004 Panelist, “NOAA Monitoring and Event Response for Harmful Algal Bloom (MERHAB) program”, Washington, DC, USA. January.
- 2004 Session Moderator, “Neotropical River Ecology”, 89th Annual Meeting of the Ecological Society of America, Portland, OR, USA. August.
- 1999 Panelist, “Academic Job Search for Graduate Students”, Workshop of the Texas A&M University Career Center, College Station, TX, USA. October.
- 1999 Session Moderator, High School National Ocean Sciences Bowl. College Station, TX, USA. February.

INVITED SEMINARS

- 2016 Daniel Roelke and Sierra Cagle, Towards an understanding of linkages between Lake Conroe water quality and water treatment plant operation, San Jacinto River Authority, April 2016.
- 2016 Daniel Roelke, Rika Muhl, Joydeb Bhattacharyya, Fragility of biodiversity sustaining mechanisms: A focus on neutrality, lumpy coexistence and non-hierarchical competition, Glasgow University, UK, September, 2016.

- 2016 Huilin Gao, Daniel Roelke, Freshwater Inflows, Phytoplankton Productivity, and Coastal Ecosystem Sustainability – a Modeling and Remote Sensing Perspective, Texas Master Naturalist, Houston/Galveston, October 2016.
- 2014 *Prymnesium parvum*: killer invasion into inland waters. Plenary talk for the 17th Workshop of the International Association of Phytoplankton Taxonomy and Ecology. Kastoria, Greece. September 2014.
- 2013 Aquatic Ecology in the Roelke Lab: Teaching and Research. Fish and Wildlife Department, University of Idaho. December 2013.
- 2013 Administration is not sexy. Fish and Wildlife Department, University of Idaho. December 2013.
- 2013 Research and Management Progress in Mitigating and Controlling Toxic Algae Blooms. Aquatic Plant Management Society, San Antonio, TX. July 2013.
- 2012 Golden algae: A killer in our waters. School of the Environment, University of Technology Sydney. November, Sydney, Australia.
- 2011 [keynote address] Water quality: The importance of multispecies modeling of plankton environments. Institute for Applied Mathematics and Computational Science (IAMCS), Texas A&M University, College Station, TX. September 2011.
- 2011 Human Population and Climate Change, Anticipated Effects to Harmful Algal Blooms of Southcentral USA. 51st Annual Meeting of the Aquatic Plant Management Society (APMS), Baltimore, MD. July 2011.
- 2011 Fish-killing haptophyte blooms in south-central USA: Importance of inflows, threat of climate change, management strategies. Department of Environmental Sciences, Baylor University, Waco, TX. February 2011.
- 2011 Fish-killing haptophyte blooms in south-central USA: Importance of inflows, threat of climate change, management strategies. Brazos River Authority, Waco, TX. February 2011.
- 2010 Finding the edge of Ockham's Razor: A need for complexity in plankton modeling. Department of Marine Sciences, University of the Aegean, Greece. November 2010.
- 2010 Finding the edge of Ockham's Razor: A need for complexity in plankton modeling. Department of Mathematics, Texas A&M University. October 2010.
- 2010 Finding the edge of Ockham's Razor: A need for complexity in plankton modeling. Department of Oceanography, Texas A&M University. September 2010.
- 2009 *Prymnesium parvum* blooms in Texas lakes and the importance of instream flows. Yigal Allon Kinneret Limnological Laboratory, Migdal, Israel, August 2009.
- 2009 *Prymnesium parvum* blooms in Texas lakes and the importance of instream flows. Marine Sciences Centre, University of Kalmar, Kalmar, Sweden, August 2009.
- 2009 Where have all the mermaids gone? The need for complex models in biodiversity science. Department of Biology Seminar Series, University of Texas at Arlington, Arlington, TX, February 2009.

- 2009 Factors influencing *Prymnesium parvum* population dynamics during bloom initiation: Results from in-lake mesocosm experiments. Golden Algae Symposium, Texas Parks and Wildlife Department, Fort Worth, TX, January 2009.
- 2006 Large-scale disturbances and the predictability of complex aquatic ecosystems. Center for Coastal Fisheries and Habitat Research, NOAA, Beaufort, N.C. November 8, 2006.
- 2006 Hypoxia in the northern Gulf of Mexico: Theoretical considerations regarding phytoplankton assemblage structure and chaos. Department of Marine Science, University of South Alabama, Dauphin Island, Alabama. October 26, 2006.
- 2006 Hypoxia in the northern Gulf of Mexico: Theoretical considerations regarding phytoplankton assemblage structure and chaos. Department of Oceanography, Oregon State University, Corvallis, Oregon. May 11, 2006.
- 2006 Large-scale disturbances and the predictability of complex aquatic ecosystems. US EPA, Western Ecology Division, Corvallis, Oregon. March 22, 2006.
- 2005 Regional species richness and supersaturation: The role of migration and disturbance of chaotic communities. Zoology Department, University of Oklahoma Seminar Series, OK, USA. October 12, 2005.
- 2004 Complex behavior and community dynamics of plankton assemblages from a semi-arid coastal wetland. Department of Marine Biology Seminar Series, Texas A&M University at Galveston, TX, USA. April 27, 2004.
- 2004 Complex behavior and community dynamics of plankton assemblages from a semi-arid coastal wetland. Kinneret Limnological Laboratory Seminar Series, Migdal, Israel. February 19, 2004.
- 2004 Complex behavior and community dynamics of plankton assemblages from a semi-arid coastal wetland. Department of Wildlife and Fisheries Sciences Seminar Series, Texas A&M University, TX, USA. September 2, 2004.
- 2004 System hysteresis and selection of alternate stable community states: A case study using the 34-year plankton record from Lake Kinneret (Sea of Galilee), Israel. Kinneret Limnological Laboratory Seminar Series, Migdal, Israel. June 29, 2004.
- 2003 Modeling Complex Behavior Workshop. Oklahoma Biological Station. University of Oklahoma Seminar Series, OK, USA. October 13, 2003.
- 2002 Deterministic and Chaotic Phytoplankton Dynamics: Management Hopes and Hurdles. Biology Department Seminar Series, Baylor University, TX. Waco, TX, USA. March 27, 2002.
- 2001 *Prymnesium parvum*, what do we know? "Golden Algae" Workshop to devise research agenda for *Prymnesium parvum* research in Texas. Governor's Office and Texas Parks and Wildlife Department. Possum Kingdom, TX, USA. August 21, 2001.
- 2000 Ecological Indicators of Bloom Development and Preventative Management Approaches. 5th Symposium of the National Health and Environmental Effects Research Laboratory, Environmental Protection Agency. Research Triangle Park, NC, USA. June 6-8, 2000.

- 1999 Synchronization of Bottom-Up and Top-Down Controls, and "Prey-Quality" Thresholds: A Modeling Study with Management Implications. Young Scientists Conference on Marine Ecosystems Perspectives, International Council for the Exploration of the Sea (ICES). Gilleleje, Denmark. November 20-24, 1999.
- 1999 Pulsing nutrient discharges and phytoplankton diversity: A proactive HAB management plan. Gulf Ecology Division. Environmental Protection Agency, Gulf Breeze, FL, USA, 1999.
- 1999 Emerging technologies in hyperspectral optics *in-situ*: Application to harmful algal blooms and mine warfare. Oceanography 50th Anniversary Seminar Series. Department of Oceanography, Texas A&M University, TX, USA. 1999.
- 1998 Managing aquatic ecosystems: A view into the 21st century. Department of Wildlife and Fisheries Sciences, Texas A&M University, TX, USA. May 12, 1998.
- 1997 Influence of pulsing nutrient supply on phytoplankton succession and copepod growth. Naval Research Laboratory, Stennis Space Center, MS, USA. September 23, 1997.
- 1997 Nutrient loading into the Nueces River Estuary, TX: Implications for phytoplankton management. Texas Parks and Wildlife Department, Austin, TX, USA. July 12, 1997.
- 1993 Amnesic shellfish poisoning: An overview. National Institute of Polar Research, Tokyo, Japan. 1993.
- 1993 *Crassostrea virginica* Gmelin feeding experiments with two forms of *Pseudonitzschia pungens*: Behavior and toxicity. Inha University, Seoul, South Korea. 1993.
- 1993 A history of North American domoic acid outbreaks, and their causative organisms. Korean Oceanographic Research and Development Institution, In'chon, South Korea. 1993.
- 1993 Laboratory and field procedures employed by Greta Fryxell's laboratory for toxic phytoplankton research, 1992. Jinan University, Guangzhou, China. 1993.

HOST FOR VISITING SCIENTISTS

- 2011-12 Banu Kutlu. Assistant Professor. Department of Fisheries, Tunceli University, Tunceli, Turkey.
- 2005-06 Luzmila Sanchez. Research Scientist. Estación Hidrobiológica de Guayana, Fundación La Salle de Ciencias Naturales. (Guayana's Hydrobiological Station, Natural Resource Foundation).

OTHER PROFESSIONAL DEVELOPMENT

- 2021 Small vessel operations – TAMUG
- 2021 Small vessel operations – TPWD
- 2021 CPR

- 2019 Texas A&M University System Department Head Convening, offered by the Chancellor's Office, Hilton College Station and Conference Center, June
- 2018-19 Advanced Agricultural Leadership Training (Cohort V), offered by the College of Agriculture and Life Sciences, Texas A&M University.
- 2016 Recruitment and retention for faculty diversity, search committee training, offered by the Office of the Dean of Faculties, February.
- 2016 Improving Departmental Climate through Evidence-Based Practices workshop, hosted by ADVANCE LEAD Program and The Office of the Dean of Faculties, January.
- 2013 Training on use of Academic Analytics for peer-institution analyses.
- 2012 Faculty Development Leave (Sabbatical) with the University of Technology, Sidney (Australia) and University of the Aegean (Greece).
- 2009 Integrative Learning Workshop, Texas A&M University, Student Affairs and Academic Affairs, April.
- 2009 Issues in Creating Equity for Faculty, Joint meeting of the Texas A&M and University of Texas Faculty Senates, Austin, TX, USA.
- 2009 Faculty Professional Development Series, Is This the Right Time or Not? Preparing for Promotion to Full Professor. Texas A&M University, TX, USA.
- 2006 Faculty Development Leave (Sabbatical) with the US Environmental Protection Agency, Western Ecology Division, Hatfield Marine Science Center, OR, USA.
- 2003 Developed a Teaching Portfolio through the Texas A&M University Office of Teaching Excellence, TX, USA.
- 2002 Training on use of WebCT for distance education delivery.
- 1993 Certificate of Flow and Imaging Cytometry. Bigelow Laboratory for Ocean Sciences, Boothbay Harbor, ME, USA.
- 1988 CPR
- 1988 Licensed for Scuba Diving. Y.M.C.A., Millersville, PA, USA.