

Peter F. Straub PhD - Curriculum Vitae

Dean and Tenured Professor of Biology
School of Natural Sciences & Mathematics
Unified Science Center 240
Stockton University



Administrative Units

www.stockton.edu/nams

<https://www.stockton.edu/marine/>

www.stockton.edu/crc

EDUCATION

- Ph.D.** Marine Studies, College of Earth, Ocean and Environment, University of Delaware, Newark, DE. 8/90
- MS** Marine Studies, College of Earth, Ocean and Environment, University of Delaware, Newark, DE. 5/85
- BS** Marine Science, Stockton University, Galloway, NJ, 5/80

ACADEMIC APPOINTMENTS

Professor -Biology Program, Stockton University, Galloway, NJ, 9/06-present
Associate Professor- Biology Program, Stockton University, Galloway, NJ, 9/99-8/06.
Assistant Professor- Biology Program, Stockton University, Galloway, N. J. 9/94-8/99
Instructor of Horticulture, St. Louis Community College, Meramec, St. Louis, MO, 1/94-5/94

RESEARCH APPOINTMENTS

Senior Research Associate, NOAA, National Marine Fisheries Service, Howard Marine Science Lab, Sandy Hook, NJ. National Research Council Award-In residence, 7/2004-6/2005.
Seasonal Scientist- Mount Desert Island Biological Laboratory. Salisbury Cove, ME. In residence summers, 8/2003-10/2005.
Research Faculty, National Science Foundation: Research Experiences for Undergraduates, NSF-REU: Coastal Conservation Research Program, Stockton University and the Wetlands Institute, Stone Harbor, NJ summers, 5/2001-4/2004
Postdoctoral Research Associate- Biology Department, Washington University, St. Louis, MO 63130. 9/1989-8/1994.
Graduate Research Assistant, College of Marine Studies, University of Delaware, Lewes, DE, 1/1983-8/1989.

ADMINISTRATIVE APPOINTMENTS

Dean, School of Natural Sciences and Mathematics Stockton University, 7/2015-present (8 mo. interim). Academic leader and administrator for undergraduate and graduate sciences and mathematics programs, academic laboratories and field facilities and the Coastal Research Center with over 1340 undergraduate and graduate students in 9 undergraduate and 2 graduate degree granting programs, 78 tenure and non-tenure track faculty, 25 adjunct faculty, 37 staff and a greater than 9.3 million dollar annual operating budget. In addition, oversee an external grants and contracts program of over 1.9 million dollars annual.

Coordinator (Chair) -Biology Program, Stockton University, Galloway, NJ, 8/2001-7/2002. Manage and schedule 12 faculty program with over 500 majors.

Dive Safety Officer-Stockton University, Galloway, NJ 6/2002-present. Oversee safety training, records, compliance, and reporting.

Radiation Safety Officer (acting) Stockton University, Galloway, NJ 10/2010-8/2011. Oversee radiation users, inventory, testing, records, compliance, reporting and licensing.

Director, NSF-MRI DNA Sequencing Facility at Stockton University, 9/2001-8/2004. Training, purchasing, records, annual reports and service.

Laboratory Manager, Atlantic Cape Community College, Mays Landing, NJ, 8/1981-9/1982 Oversee prep staff of laboratories in chemistry, biology, physics, anthropology and medical technology plus animal and plant growth facilities. Record keeping, personnel evaluation, compliance, purchasing, maintenance and inventory.

Laboratory Assistant Manager, Atlantic Cape Community College, Mays Landing, NJ, 6/1980-7/1981. Chemical hygiene plan, right to know, hazardous waste disposal, personnel evaluation, oversee chemistry purchasing, inventory and chemical laboratory preparations.

Administrative Initiatives/Activities

Development: Established the **Atlantic City Historical Waterfront Endowed Fund** for Marine and Maritime Studies in the Stockton Foundation. This fund will support faculty and student research in the waters around Atlantic City and with the Atlantic City Aquarium. \$125,000 donation, 12/31/2018.

Stockton Student Spaceflight Experiments Program (SSEP) Mission 14. Working with faculty to involve students in an authentic space research competition. One student team experiment design, will be selected by a two tier review system, fly to the International Space Station in June 2020 for microgravity research. <https://stocktonspaceflight.org/>

Stockton Student Spaceflight Experiments Program (SSEP) Mission 13. Working with faculty to involve students in an authentic space research competition. One student team experiment design, will be selected by a two tier review system, fly to the International Space Station in June 2019 for microgravity research. <https://stocktonspaceflight.org/>

Stockton Student Spaceflight Experiments Program (SSEP) Mission 12. Working with faculty to involve students in an authentic space research competition. One student team experiment design, selected by a two tier review system, fly to the International Space Station in June 2018 for microgravity research. <https://stocktonspaceflight.org/>

New Research Programs Initiatives: Proposed a 41 million dollar Marine Science Complex, Resiliency Institute and “Blue Economy” Incubator linked to the new University campus in Atlantic City which would be a collaborative project with the City of Atlantic City. Currently in feasibility study (\$100,000) funded by the NJ Economic Development Agency to the City of Atlantic City in collaboration with Stockton University.

2016 AASCU Excellence and Innovation Award: Sustainability and Sustainable Development. American Association of State Colleges and Universities (AASCU), October 2016, Miami FL. Co-wrote award application to highlight programs within the School of Natural Sciences and Mathematics and across the University, accepted award with President Kesselman.

Stockton STEM Collaborative: As part of the Stockton 2020 strategic planning process, developed an initiative to support Science, Technology, Engineering and Mathematics (STEM) engagement and outreach across the University and to promote diversity in STEM students.

Stockton Student Spaceflight Experiments Program (SSEP) Mission 11. Worked with faculty, to initiate a learning community to involve students and faculty in an authentic space research competition that saw one student team design, selected by a two tier review system, fly to the International Space Station in August 2017 for microgravity research.

<https://stocktonspaceflight.org/>.

School of Natural Sciences and Mathematics Shared Governance initiative. Goal to develop bylaws for the School and its programs as well as a mission statement, committee structure and strategic plan. 2015-ongoing.

School of Natural Sciences and Mathematics purchasing and staffing: Developed efficiencies in budgeting, purchasing and travel by reorganizing staff and implementing new University P-card purchasing system.

Construction-Unified Science Center-2. Continued planning and implementation of a new \$28.62 million, 58,210 ft² addition to the Stockton Unified Science Center (64,000 ft²) which opened in 2013 plus a Sustainability laboratory in an adjacent building. Both buildings are under construction opened and occupied in June, 2018

Construction Planning- Marine Field Station (MFS)- Planning completed for a 25,000 ft² multi-purpose building at the Port Republic, NJ MFS to share between marine science and the NJ Department of Environmental Protection, Bureau of Marine Water Management. Currently looking to fund.

Construction; Coastal Oceanographic vessel: Supported completion, fitting out and commissioning of the RV Petrel (5/2016). The Petrel is a 36 ft. diesel powered vessel, purpose built for the Stockton coastal oceanography program and contains an A-frame and winch system and advanced marine technology including multibeam sonar.

Faculty Development: Recruited 11 new tenure track faculty and 14 new non-tenure track and visiting faculty in the past three years. Have increased the diversity of the faculty and am committed to the University goal of broadening faculty and student diversity.

New Academic Programs Development: 1) Led a Master’s Program in Data Science and Strategic Analytics NJ through university and state approval processes to holding inaugural classes in fall 2017. 2) Developed a proposal with faculty for a Masters and Professional Science Masters in Coastal Zone Management and led through University review. Currently is under state review.

PEER REVIEWED PUBLICATIONS

- Sullivan, M., S. Evert, P. **Straub**, M. Reding, N. Robinson, E. Zimmermann and D. Ambrose. (2019). [Identification, recovery, and impact of ghost fishing gear in the Mullica River-Great Bay Estuary \(New Jersey, USA\): Big implications for smaller-scale systems](#). *Marine Pollution Bulletin*. 138: 37-48.
- Nagiewicz, S. D. P.F. **Straub**, S. P. Evert, and V. Capone (2018). Mapping Shipwrecks of the Revolutionary War: 1778 Battle of Chestnut Neck, New Jersey. *In*: Gochfeld, D.J. and T.J. Herrlinger. eds. 2018. **Diving for Science 2018: Proceedings of the American Academy of Underwater Sciences 37th Symposium**. October 8-13th, Tahoe City, CA. American Academy of Underwater Sciences. Dauphin Island, AL. pp. 66-78. ISBN 978-0-9962343-3-7
- Straub**, P.F., S.D. Nagiewicz, V.J. Capone, D. Lieb and S.P. Evert, (2015). Mapping the 1860 Wreck of the US Coast Survey Vessel Robert J. Walker. *In*: Lobel, L. K. ed. **Diving for Science 2015: Proceedings of the 34th American Academy of Underwater Sciences Symposium**. September 28th-October 3, 2015, Key West, FL. American Academy of Underwater Sciences. Dauphin Island, AL, pgs. 100-106. ISBN 978-0-9962343-0-6
- Straub**, P.F., S. Evert, T.L. Luke and M.C. Sullivan (2013). Mapping of artificial reef habitats by side scan sonar and ROV in the northwestern mid-Atlantic coastal ocean. *In*: Lang M. and M.D.J Sayer, eds. [Proceedings of the AAUS/ESDP Curacao Joint Interantional Scientific Diving Symposium](#), October 24-27, 2013, Curacao. American Academy of Underwater Sciences. Dauphin Island, AL, pgs: 331-338. ISBN: 978-0-9800423-7-5. NJSJG-13-843.
- Straub**, P. F. and T. L. Harmer Luke (2008) DNA sequencing of 18s ribosomal RNA genes of the Northern Star Coral (*Astrangia poculata*) collected from New Jersey artificial reefs. *In*: In: Brueggeman P, Pollock NW, eds. [Diving for Science 2008. Proceedings of the American Academy of Underwater Sciences 27th Symposium](#). Dauphin Island, AL: AAUS.pgs: 167-174. ISBN 978-0-9800423-2-0
- Straub**, P. F., M.L Higham and W.C. Phoel and A.Deshpande (2006) [Progress towards a Pseudopleuronectes americanus Liver Microarray](#). **Bulletin of the MDI Biological Laboratory** 45: 133-136. NJSJG-06-617
- Straub**, P. F., M.L Higham and W.C. Phoel. (2005). [Suppression subtractive hybridization \(SSH\) cDNA library construction from fuel oil treated winter flounder \(Pseudopleuronectes americanus\)](#). **Bulletin of the MDI Biological Laboratory** 44:121. NJSJG-05-580
- Straub**, P. F., M. L.Higham,* A. Tanguy, B. J. Landau, W. C. Phoel, L. S. Hales and T. Thwing*. (2004). [Suppression Subtraction Hybridization cDNA Libraries to Identify Differentially Expressed Genes from Contrasting Fish Habitats](#). **Marine Biotechnology**. 6(4): 386-399. NJSJG-03-525.
- Straub**, P. F., M .L. Higham,* W. Phoel, and B. J. Landau. (2004). [Functional genomics and quantitative PCR for the study of environmentally related gene expression in Pseudopleuronectes americanus](#). **Bulletin of the Mt. Desert Island Biological Laboratory**. 43:51-53. NJSJG-04-555
- Straub**, P. F., G. Shearer, P.H.S. Reynolds, S.A. Saywer and D. H. Kohl (1997) [Effects of disabling bacteroid proline catabolism on the response of soybeans to repeated drought stress](#). **Journal of Experimental Botany**. 48:1299-1307.
- Straub**, P. F., P. H. S. Reynolds, S. Althomsons*, V. Mett, Y-x. Zhu, G. S. Shearer, and D. H. Kohl. (1996) [Isolation, DNA sequence analysis, and mutagenesis of a proline dehydrogenase](#)

- [gene \(*putA*\) from *Bradyrhizobium japonicum*](#). **Applied and Environmental Microbiology**. 62(1): 221-229.
- Straub, P. F., Q. Shen, and T. H. D. Ho.** (1994) [Structure and promoter analysis of an ABA- and stress regulated barley gene, *HVA1*](#). **Plant Molecular Biology**.26:617-630.
- Kohl, D. H., P. F. Straub and G. Shearer** (1994) [Opinion: Does proline play a special role in bacteroid metabolism?](#) **Plant Cell and Environment**. 17:1257-1262.
- Straub, P. F., D. M. Decker, and J. L. Gallagher.** (1992) [Characterization of tissue culture initiation and plant regeneration in *Sporobolus virginicus* \(Gramineae\)](#). **American Journal of Botany**. 79:1119-1125.
- Straub, P. F., D. M. Decker, and J. L. Gallagher.** (1989) [Tissue culture and regeneration of *Distichlis spicata*](#). **American Journal of Botany**. 76: 1448-1451.
- Straub, P. F., and J. L. Gallagher.** (1989) [Cold tolerance in *Sporobolus virginicus* Robust form tissue cultures and whole plants](#). **Plant Cell and Environment**. 12: 503-509.
- Straub, P. F., D. M. Decker, and J. L. Gallagher.** (1988) [Tissue culture and long-term regeneration of *Phragmites australis* \(Cav.\) Trin. ex Steud.](#) **Plant Cell, Tissue and Organ Culture**. 15: 73-78.
- *undergraduate authors

OTHER PUBLICATIONS

- Delgado, J., S. Nagiewicz, D. Leib, V. Capone, J. Steinmetz, A. Theberge, M. Lawrence, P. **Straub.** (2020) "Robert J. Walker: The Life, Loss and Recovery of an Early American Steamship." **University of Florida Press** (Book In Press).
- Jarvis, J. C., P. F. **Straub** and S. P. Evert (2015). Modeling *Zostera marina* restoration potential in Barnegat Bay New Jersey: Final Report. **Barnegat Bay Partnership**. 39 pgs.
- Sullivan, M., P. **Straub**, S. Evert and M. Reding. (2014) Operations guide for the recovery of derelict crab pots from shallow soft sediment estuaries: Lessons learned from a mid-Atlantic coastal bay. **Richard Stockton College**. 8 pgs
- Phoel, W. C., P. F. **Straub** and R. A. Eckhardt. (2004). Preliminary population genetics of *Tautoga onitis* in New Jersey and New York based on microsatellite analysis. Final Report to the **NJ Fisheries Information Development Center**. Cape May, NJ. 9 pp.
- Straub, P. F.** (2002) Richard Stockton College's Marine Programs: In the field for knowledge. **The Jersey Shoreline**. A publication of NJ Sea Grant. Spring/Summer 22(1):15-16.
- Straub, P. F., Y-X. Zhu, S. Althomsons*, R. Bennett*, G. Shearer, and D. H. Kohl.** (1993) Construction of a *putA* Proline dehydrogenase) mutant of *Bradyrhizobium japonicum* to evaluate the significance of proline to the energetics of nitrogen fixation in soybeans subject to drought. **In: "The Past Present and Future of Plant Biology"** (eds. T.H. D. Ho and H. Pakrasi) Washington University Press, St Louis MO. pp
- Straub, P. F.** (1990) Tissue culture and somatic cell genetics of *Sporobolus virginicus* and *Distichlis spicata*. **University of Delaware Dissertation**. Newark, DE. August 1990. 80 pp.
- Straub, P.F.** (1985). The response of respiration rate, TTC reduction and regrowth of tissue cultures and rhizome sections of *Sporobolus virginicus* (L.) Kunth, robust form to low temperature exposure. **University of Delaware Thesis**, June, 1985 72 pp.

ABSTRACTS OF PRESENTATIONS

- Straub, P.F., S. P. Evert, T. Harmer Luke, S. D. Nagiewicz, and Mark Sullivan.** (2019). Diving wrecks for scientific and cultural purpose. **New England Wreck Diving Symposium**, UCONN-Avery Point Scuba Club and SECONN Skin Divers, Groton CT. 2/16/2019.
- Nagiewicz, S. D. P.F. **Straub***, S. P. Evert, and V. Capone (2018). Mapping Shipwrecks of the Revolutionary War: 1778 Battle of Chestnut Neck, New Jersey. **Diving for Science 2018: American Academy of Underwater Sciences 37th Symposium.** -October 8-13th, 2018, Tahoe City, CA. *presenting author
- Sullivan, M., S. Evert, P. **Straub** and K. Gannon. "Identification, recovery, and impact of ghost fishing gear in the Mullica River-Great Bay Estuary (New Jersey, USA): Big implications for smaller-scale systems." 148th Annual **American Fisheries Society** Meeting, Atlantic City, NJ, August 2018.
- Nagiewicz, S., S. Evert, P. **Straub**, J. Swain. "Conservation of 240-year-old anchor from the Historic Bead Wreck in the Mullica River." Poster, **Atlantic Estuarine Research Society** Meeting, Galloway, NJ, October, 2018
- Nagiewicz, S., S. Evert, P. **Straub**. "Horseshoe Crab Migration/Habitat tracking using low impact Side Scan Sonar." Poster, **Atlantic Estuarine Research Society** Meeting, Galloway, NJ, October, 2018.
- Sullivan, M.C., S. P. Evert, P. F. **Straub** and M. Reding (2018) Derelict crab trap removal and prevention in Southern New Jersey coastal bays: big implications for smaller scale systems. **Sixth International Marine Debris Conference**, 3/12-16, 2018, San Diego, CA.
- Straub, P.F., S.D. Nagiewicz, V.J. Capone, D. Lieb and S.P. Evert,** (2015). Mapping the 1860 Wreck of the US Coast Survey Vessel Robert J. Walker. **American Academy of Underwater Sciences Symposium**, October, 1-3, 2015, Key West, FL. (Oral Presentation Abstracts, pg. 100).
- Straub, P.F., J.C. Jarvis and S. Evert** (2015) Modelling *Zostera marina* restoration potential in Barnegat Bay. **2015 Barnegat Bay Program Science Symposium**, Ocean County College, May 27th, 2015. (Oral Presentation Abstracts).
- Jarvis, J.C., P.F. **Straub**, and S. Evert (2015) Modelling *Zostera marina* restoration potential in Barnegat Bay New Jersey. **Atlantic Estuarine Research Society**, Spring Meeting Abstracts, Manteo, NC. March 12-14th, 2015, (Poster Presentation).
- Sullivan, M.C., S.P. Evert, P.F. **Straub**, M. Reding (2014) Derelict crab trap removal in a southern New Jersey estuary: Lessons learned and future directions. **Atlantic Estuarine Research Society**, Fall Meeting Abstracts, Galloway, NJ. pg 30. October 30-November 1, 2014, (Oral Presentation).
- Straub P.F., S. Evert, M. Sullivan, N. Robinson, E. Burnite*, C. Shields*, D. Ambrose*, S. Pazzaglia*, E. Zimmermann.** (2014) Multi-beam and side scan mapping of oyster resources in the Mullica River/Great Bay New Jersey. **Atlantic Estuarine Research Society**, Fall Meeting Abstracts, Galloway, NJ. pg 30. October 30-November 1, 2014, (Oral Presentation)
- Straub, P.F., S.P. Evert, T.L. Luke and M.C. Sullivan** (2013). Mapping of artificial reef habitats by side scan sonar and ROV in the northwestern mid-Atlantic coastal ocean. Joint Science Diving Symposium, **American Academy of Underwater Science/ European Scientific Diving Panel.**; October 23-27th, Curacao, NA, (Oral Presentation Abstracts).

- Evert, S.P. P.F. **Straub** and M.C. Sullivan (2013) Entry level sonar –imaging and removing marine debris using low cost systems. **Coastal and Estuarine Research Federation 22nd Biennial Conference**. November 3-7th, San Diego, CA, (Oral Presentation Abstracts).
- Sullivan, M.C., S. Evert and P.F. **Straub** (2013) Spatial extent, patterns of bycatch, and probable loss mechanisms of derelict crab traps in two adjacent southern New Jersey estuaries **Coastal and Estuarine Research Federation 22nd Biennial Conference**. November 3-7th, San Diego, CA, (Oral Presentation Abstracts).
- Straub**, P.F., S. Evert, T.L. Luke and M.C. Sullivan (2012). Marine survey and imaging technology in fisheries research. **Coastal and Estuarine Research Federation Inaugural International Conference of the Americas: The changing coastal and estuarine environment: A comparative approach**. November 11-14th, Mar del Plata, Argentina, (Oral Presentation Abstracts).
- Straub**, P.F., S.P. Evert, T.L. Luke and M.C. Sullivan (2012) Acoustic and video evaluation of estuarine habitats by side scan sonar and remotely operated vehicle (ROV) survey. **Atlantic Estuarine Research Society**, Spring Meeting Abstracts, Cape May, NJ, March 8-10th (Oral Presentation Abstract).
- Straub**, P.F., S.P. Evert, T.L. Luke and M.C. Sullivan (2011). Acoustic and video evaluation of coastal habitats by side scan sonar coupled with remotely operated vehicle (ROV) survey. **Coastal and Estuarine Research Federation Conference: Societies, Estuaries and Coasts, Adapting to Change**, November 6-10th, 2011, Daytona Beach, FL. (Oral Presentation Abstract ID 1123699)
- Straub**, P.F., S.P. Evert, T.L. Luke and M.C. Sullivan (2010) "Evaluation of Coastal Artificial Reef Habitats by Remotely Operated Vehicle (ROV) Survey." **Atlantic Estuarine Research Society**, Spring Meeting Abstracts, Kitty Hawk, NC, November 4-6th, 2010. (Poster Presentation Abstract).
- Straub**, P.F., M.C. Sullivan and S.P. Evert, (2010) Assessments of side scan sonar for detection and removal of marine debris from the Mullica River- Great Bay NJ estuary. **Atlantic Estuarine Research Society**, Spring Meeting Abstracts, Atlantic City, NJ, March 4-6th, 2010. (Oral Presentation Abstract).
- Straub**, P.F. and N. Madensky*, (2009). Isolation, cloning, and expression analysis of winter flounder cytochrome P450 1A in fish from contaminated estuaries. **Coastal & Estuarine Research Federation Meeting**, Abstracts, Portland OR, Nov.1-5th, 2009. (Poster Presentation Abstract).
- Straub**, P.F., and T.L. Luke, (2009) Northern Star Coral (*Astrangia poculata*) Populations from the New Jersey Coast. **Atlantic Estuarine Research Society**, Spring Meeting Abstracts, Ocean City, Md. March 5-7th, 2009. (Poster Presentation Abstract).
- Straub**, P.F., and T.L. Luke, (2008) DNA sequencing of 18s ribosomal RNA genes of the Northern Star Coral (*Astrangia poculata*) collected from New Jersey Artificial Reefs. **27th annual Symposium of the American Academy of Underwater Scientists**, Scripps Institute of Oceanography, University of California-San Diego, La Jolla, CA, March 11-15th, 2008. (Oral Presentation Abstract).
- Straub**, P.F., M.L. Higham, W.C. Phoel (2007). Habitat-Specific Chemical and Gene Expression Signatures in Young of the Year Bluefish. **Atlantic Estuarine Research Society**, Spring Meeting Abstracts, Pine Knoll Shores, NC, March 15-17th, 2007. (Poster Presentation Abstract).

- Straub, P.F.** and A.D. Deshpande (2006). Habitat-Specific Chemical and Gene Expression Signatures in Winter Flounder. **In: Tenth Flatfish Biology Conference**, NOAA-NMFS, Northeast Fisheries Science Center, Reference Document 06-23, pg 16. November 2006, Westport, CT. (Contributed Oral Presentation Abstract).
- Straub, P.F.**, A.D. Deshpande, W.C. Phoel, M.L. Higham and B.W. Dockum (2006) Genetic and Chemical Analysis of Winter Flounder (*Pseudopleuronectes americanus*) from Urban and Non-Urban Estuaries. **Atlantic Estuarine Research Society**, Fall Meeting Abstracts, Catonsville, MD, October 5-7th, 2006. (Contributed Oral Presentation Abstract).
- Straub, P.** M. Higham, W. Phoel and A. Deshpande (2006). Functional Genomics in Aquatic Environmental Health. **U.S. Environmental Protection Agency: Science Forum 2006-Your Health, Your Environment, Your Future**. Washington, D.C. 5/16-18. (Poster Presentation Abstract).
- Straub, P.F.**, M.L. Higham*, and W.C. Phoel and A.D. Deshpande. (2006) Effects of degraded habitat on liver gene expression in young of the year Bluefish (*Pomatomus saltatrix*). **Atlantic Estuarine Research Society**, Spring Meeting Abstracts, Philadelphia, PA. March 2006. (Contributed Oral Presentation Abstract). 3/12/06.
- Straub, P.F.**, M.L. Higham* and W.C. Phoel. (2005) Genomic biomarkers of environmental degradation in migratory estuarine fishes: Models for human health risks. **Estuarine Research Federation Abstracts**, Symposium 05- "Connecting Estuarine and Great Lakes Health and Human Health." Norfolk, VA. 10/16-20/05. (Contributed Oral Presentation Abstract).
- Straub, P.F.**, M.L. Higham* and W.C. Phoel. (2005) Genomic Biomarkers of Environmental Degradation in Marine Fish: Models for Human Health Risks. **In: Maine Medical and Biological Research Symposium**, April 2005, Mt. Desert Island Biological Laboratory, Salisbury Cove, ME. (Invited Oral Presentation Abstract).
- Straub, P.F.** and A.D. Deshpande (2004). Environmental gene expression in winter flounder *Pseudopleuronectes americanus*. **In: Ninth Flatfish Biology Conference**, NOAA-NMFS, Northeast Fisheries Science Center, Reference Document 04-13, pg 19. December 2004, Westport, CT. (Contributed Oral Presentation Abstract).
- Straub, P.F.**, M.L. Higham*, W.C., Phoel, L. S. Hales, Sterba*, G.P., and S.A. Williams*. (2004) Toxicogenomic Analysis of Fuel Oil number 4 Treated YOY Winter Flounder **Atlantic Estuarine Research Society**, Spring Meeting Abstracts, Lyndhurst, NJ, October 2004 (Contributed Poster Abstract).
- Straub, P.F.**, W.C. Phoel, M.L. Higham* and B.J. Landau (2004) Quantitative (q-)-PCR to assess environmental effects on gene expression in winter flounder. **Atlantic Estuarine Research Society**, Spring Meeting Abstracts, Salisbury, MD, March 2004. pg 20. (Contributed Oral Presentation Abstract).
- Sterba*, G.P., S.A. Williams*, M.L. Higham*, L.S. Hales and P.F. **Straub** (2004) Oil effects on juvenile winter flounder (*Pseudopleuronectes americanus*). **Atlantic Estuarine Research Society**, Spring Meeting Abstracts, Salisbury, MD, March 2004. pg 32. (Contributed Poster Abstract).
- Coleman*, C., M.L. Higham*, W.C. Phoel and P.F. **Straub** (2004). The development of microsatellite DNA markers in silver hake (*Merluccius bilinearis*) and Tautog (*Tautoga onitis*). 7th Annual Undergraduate Research Symposium in the Chemical and Biological Sciences. University of Maryland, Baltimore County, October 2004. pg 12. (Contributed Poster Abstract). 1st prize in (F) Biological Sciences-3.

- Coleman*, C., M.L. Higham*, W.C. Phoel and P.F. **Straub** (2004). The development of microsatellite DNA markers in silver hake (*Merluccius bilinearis*) and Tautog (*Tautoga onitis*). **Atlantic Estuarine Research Society**, Spring Meeting Abstracts, Salisbury, MD, March 2004. pg 26. (Contributed Poster Abstract).
- Higham*, M., R. Kuhllar* and P.F. **Straub**. (2003). PCR Studies on Environmental Gene Expression in Winter Flounder. **Atlantic Estuarine Research Society** Meeting Abstracts, Atlantic Beach, N.C. March 2003. (Contributed Oral Presentation Abstract).
- Higham*, M, T. Thwing* and P. F. **Straub** (2002). Bioinformatics approach to defining the effects of pollution on winter flounder. **Atlantic Estuarine Research Society** abstracts Fall Meeting, St. Mary's MD. Oct 2002. (Contributed Poster Abstract)
- Straub**, P. F., W. C. Phoel and K. Erstfeld (2002) Molecular Markers of Environmental Stress in winter flounder (*Pseudopleuronectes americanus*). **Atlantic Estuarine Research Society** abstracts, Spring Meeting, Lewes DE. 4/4/02-4/6/01. Page 11. (Contributed Oral Presentation Abstract).
- Straub**, P. F. and W. C. Phoel. (2001) Pollution Effects on gene expression in the liver of winter flounder. **Atlantic Estuarine Research Society** abstracts, Spring Meeting, Norfolk, VA. 4/5/01-4/7/01. Page 11. (Contributed Oral Presentation Abstract).
- Straub**, P.F. (2001) Proline catabolism in *Bradyrhizobium japonicum*: drought effects. "Botany 2001 Abstracts," published by **Botanical Society of America**, ©2001. pg 76. (Contributed Oral Presentation Abstract).
- Straub**, P.F. (2000) Construction of a *putA*-GUS reporter gene for insertion in the nitrogen fixing symbiont *Bradyrhizobium japonicum*. **American Journal of Botany** 87(6. Suppl.): 85. (Contributed Oral Presentation Abstract).
- Straub**, P. F. (1998). Sequencing, expression and characterization of a G6PDH cDNA clone from soybean (*Glycine max*). **American Journal of Botany** 85 (6. Suppl.): 89 (Contributed Oral Presentation Abstract).
- Straub**, P. F, S. Hansen* and B. J. Landau. (1997). The use of RAPD's to distinguish between domesticated and planted cultivars of American beachgrass (*Ammophila breviligulata*). **Estuarine Research Federation Abstracts**, Providence RI. **ERF-97** 10/12/97. (Contributed Poster Abstract).
- Straub**, P. F, M. J. Distler*, G. Shearer and D. H. Kohl. (1997) Isolation of a Glucose-6-Phosphate dehydrogenase (G6PDH) cDNA from soybean (*Glycine max*) by hybridization with a biotinylated oligonucleotide followed by streptavidin-magnetic particle capture. **American Journal of Botany**. 84 (6. Suppl.):148. (Contributed Oral Presentation Abstract).
- Straub**, P. F, S. Hansen* and B. J. Landau. (1997). The use of RAPD's to distinguish between domesticated and planted cultivars of American beachgrass (*Ammophila breviligulata*). **American Journal of Botany**. 84 (6.Suppl.):148. (Contributed Oral Presentation Abstract).
- Straub**, P. F., E. Benjamin*, P. Kaplan*, D. H. Kohl and G. Shearer. (1996) Isolation of a Glucose-6-Phosphate dehydrogenase (G6PDH) gene probe from soybean (*Glycine max*) by a reverse transcription polymerase chain reaction (RT-PCR). **American Journal of Botany**, 83 (6. Suppl.):115. (Contributed Oral Presentation Abstract).
- Straub**, P. F, S. Hansen* and B. J. Landau. (1996). The use of RAPD's to distinguish between domesticated and planted cultivars of American beachgrass (*Ammophila breviligulata*). **Atlantic Estuarine Research Society Abstracts**, Pine Knoll Shores NC.(Contributed Oral Presentation Abstract).

- Straub, P. F., G. Shearer, and D. H. Kohl.** (1995) Effects on the ability of bacteroids to catabolize proline on seed yields of water stressed soybeans. **Plant Physiology** 108 (2. Suppl.):108. (Contributed Oral Presentation Abstract).
- Straub, P. F., P. H. S. Reynolds, S. Althomsons*, V. Mett, Y-x. Zhu, G. S. Shearer, and D. H. Kohl.** (1995) Isolation and DNA sequence analysis of a proline dehydrogenase gene (*putA*) from *Bradyrhizobium japonicum*. **American Journal of Botany** 82 (6. Suppl.):97. (Contributed Oral Presentation Abstract).
- Straub, P. F., S. Althomsons*, G. Shearer, and D. H. Kohl** (1994) The effects of proline catabolic mutants (*putA*) of (*Brady*) *Rhizobium* on seed dry weight and nitrogen yield in drought stressed soybean and pea. **Plant Physiology** 105 (1. Suppl.):38. (Contributed Oral Presentation Abstract).
- Kohl, D. H., Y-X Zhu, P. F. Straub, and G. Shearer.** (1992) Is bacteroid proline dehydrogenation an adaptive response to stress in soybeans. In: **New Horizons in Nitrogen Fixation Research: Proceedings of the 9th International Congress on Nitrogen Fixation** (eds R. Palacios, J. Mora and W. E. Newton) Kluwer Academic Publishers, Boston, p 621. (Contributed Oral Presentation Abstract).
- Straub, P. F., D. M. Decker, and J. L. Gallagher.** (1989) Tissue culture, regeneration, and variation in tissue ash content among regenerated plants of a halophytic grass, *Sporobolus virginicus*, in common garden under saline irrigation. **American Journal of Botany**. Suppl. 76:186. (Contributed Oral Presentation Abstract).
- Straub, P. F., S. E. Hellings, J. L. Gallagher, and P. M. Gaffney.** (1989) Genetic structuring of *Spartina alterniflora* at a GPI locus. **Ecology Abstracts** 70: 274 (Contributed Oral Presentation Abstract).
- Straub, P. F., and J. L. Gallagher.** (1987). SDS soluble protein patterns in salt (NaCl) treated and control suspension cultures of three halophytes. **Journal of Cellular Biochemistry**. Suppl. 11B:45. (Contributed Poster Abstract).
- Straub, P. F., and J. L. Gallagher.** (1986). Soluble protein patterns in salt (NaCl) treated and control suspension cultures of *Distichlis spicata* and *Kosteletzkya virginica*. **American Journal of Botany** Suppl. 73: 723-724. (Contributed Oral Presentation Abstract).
- Straub, P. F. and J. L. Gallagher.** (1985). The response of respiration rate, TTC reduction and regrowth of tissue cultures and rhizome sections of *Sporobolus virginicus* (L.) Kunth, robust form, to low temperature exposure. **American Journal of Botany** Suppl. 72:910. (Contributed Oral Presentation Abstract).
- Straub, P. F. and J. L. Gallagher.** (1984). Callus cultures of *Sporobolus virginicus* for selection of cold tolerant cell lines. **American Journal of Botany**. 71: Part 2: 127. (Oral Presentation)
- *undergraduate authors

PENDING EXTERNAL SUPPORT

New Jersey Space Grant Consortium, (Rutgers/NASA): (\$4000) “Student Spaceflight Experiments Program: Mission 14.” PI: **P. Straub**

New Jersey Department of Environmental Protection (NJDEP): (\$226,564) “Biological Monitoring at Ring Island.” **PIs: P. Straub** (Stockton), L. Tedesco (Wetlands Institute), L. Ferguson (Wetlands Institute). 1/19-12/21. Approved, awaiting funding agreement.

National Science Foundation, DBI-Major Research Instrumentation: (\$353,700) “MRI-Acquisition of a multibeam and sub-bottom instrument package for coastal resources and habitat mapping.” PIs: P. Straub, S. Evert, K. McKenna, A. Pfeiffer-Herbert and M. Sullivan. 7/2019-6/30-2022. (#1919961)

CURRENT EXTERNAL SUPPORT

National Oceanic and Atmospheric Administration, (NOAA): Marine Debris (\$226,299) “Next generation marine debris removal: pairing emerging leaders and technology for restoration success. PIs: M. Sullivan, S. Evert, **P. Straub** (Stockton) and K. Gannon (JCNERR and Rutgers). 8/1/2018-7/31/2021.

New Jersey Space Grant Consortium, (Rutgers/NASA): (\$4000) “Student Spaceflight Experiments Program: Mission 13.” PI: **P. Straub**

National Institutes of Health, National Institute of Neurological Disorder and Stroke (NIH-NINDS) \$380,133 Akt-mTOR Pathway Impact on Neural Stem Cell Fate. PI: N. Hartmann, Co-Investigator **P. Straub**. 1R15NS092026-01A1, 8/2016-7/31/2019.

PREVIOUS EXTERNAL SUPPORT

Natural Resources Conservation Service, USDA (\$2350) Haplotyping of *Uniola paniculata* (sea oats) strains by DNA sequencing. 7/17-6/18. **P. Straub**

National Oceanic and Atmospheric Administration, (NOAA): Marine Debris (\$119,625) “Derelict crab trap removal and prevention on southern New Jersey coastal bays: transferring a sustainable marine debris program. PIs: M. Sullivan, S. Evert, **P. Straub** (Stockton) and M. Reding (JCNERR and Rutgers). 9/1/2015-7/31/2017.

National Oceanic and Atmospheric Administration, (NOAA); Marine debris prevention through education and outreach. (\$115,706) “WeCrab Marine Debris Project” PIs M. De Luca, M. Reding (Rutgers University/JCNERR), S. Evert, M. Sullivan and **P. Straub** (Stockton). 9/2015-8/2017. <http://www.wecrabnj.org/>

Barnegat Bay Partnership/USEPA “Barnegat Bay oyster reefs: biological and cost benefit analyses for scale up efforts” (**\$51,992**) PI Steve Evert, co-PIs A. Modjeski and D. Parsons, **P. Straub**, M. Sullivan, H. Henderson and C. Thompson. 6/15 to 12/17 (30 months).

Barnegat Bay Partnership/USEPA (\$40,000) “Modeling *Zostera marina* restoration potential in Barnegat Bay.” PIs Jessie Jarvis, Peter **Straub**, Steve Evert. 5/2012-3/2015.

National Oceanic and Atmospheric Administration, (NOAA) Fisheries: Community restoration (**\$100,000**). “Derelict crab trap removal in the Mullica River–Great Bay Estuary (NJ): a sustainable, community-based effort engaging commercial crabbers, undergraduate / graduate marine science students, and NOAA national estuarine research reserve volunteer” PI M.C. Sullivan, co-PI’s, S. Evert, P.F. **Straub**, M. Reding. 9/2012-8/2014.

Barnegat Bay Partnership/USEPA (\$19,938). “Derelict crab trap identification and removal in Barnegat Bay, New Jersey.” PIs M. Sullivan, **P. Straub** and S. Evert. 11/2012-9/2013.

National Science Foundation. DBI-Major Research Instrumentation. # 0959426 (\$120,126) “MRI-R2: Acquisition of a Remotely Operated Vehicle (ROV) for Coastal Underwater

Research” PI. P.F. **Straub**, co-PIs T.L. Luke, S. Evert, W. Phoel, M.C. Sullivan. 12/2010-11/2013.

New Jersey Sea Grant- Development grant (**\$5000**) - Underwater survey and mapping of temperate artificial and natural reef habitats for modeling of productivity and trophic linkage to black sea bass and tautog fisheries. PI. **P.F. Straub**, co-PIs T.L. Luke, S. Evert, M.C. Sullivan. 3/2010-2/2011.

National Science Foundation, Major Research Instrumentation. #0619611 (\$61,874)
“Acquisition of a Core Microarray Printing and Analysis Center.” PIs: R. Hutchinson, P.F. **Straub**, K. York, B. Rogerson and D. Burleigh. 9/1/2006-8/31/2009

National Science Foundation. Major Research Instrumentation. #0420639. \$104,186.
“Acquisition of Instrumentation for Quantitative Gene Expression.” PI. B. Rogerson, co-PI’s, **P.F. Straub**, K. York. 8/2004-8/2007.

New Jersey Sea Grant College Program R/BT-2004. \$109,634. “Functional Genomics Based Indicators of Fish Habitat Quality.” 3/1/2004-2/28-2006. PI. P.F. Straub, co-PI. W. Phoel.

Mt Desert Island Biological Laboratory, New Investigator Award. \$9000. "Functional Genomics in Aquatic Environmental Health." NIEHS Center for Membrane Toxicity Studies, Mt Desert Island Biological laboratory, Salisbury Cove, ME. 8/1/2005-10/1/2005. PI. **P. F. Straub**

National Science Foundation, Major Research Instrumentation. \$102,182 “Acquisition of a core automated DNA sequencing facility.” PI’s **P.F. Straub**, B. Rogerson, K. York. 9/1/2001-8/31/2004.

Mt Desert Island Biological Laboratory, New Investigator Award. \$6,800. "Genomic Biomarkers of Environmental Disturbance in Marine Fish." . NIH/NIEHS Center for Membrane Toxicity Studies, Mt Desert Island Biological Laboratory, Salisbury Cove, ME. 8/1/2004-10/1/2004. PI. **P. F. Straub**

NJ Sea Grant College Program/NOAA. \$5000. Microarrays for the study of habitat / environment related gene expression in winter flounder. 8/1-2003 – 10/1/2003. PI. **P. F. Straub**

Mt Desert Island Biological Laboratory, New Investigator Award. \$8,500. Microarrays for the study of habitat/environment related gene expression in winter flounder. NIEHS Center for Membrane Toxicity Studies, Mt Desert Island Biological laboratory, Salisbury Cove, ME. 8/1-2003 – 10/1/2003. PI. **P. Straub**

New Jersey Sea Grant College Program. \$7000 “Environmental Effects on Gene Expression in Winter Flounder” PI: **P. Straub**, Co-PI’s: W. Phoel, S. Hales, K. Erstfeld. 3/1/2002-2/28/2003

New Jersey Sea Grant College Program. \$5000. “Pollution Effects on Gene Expression in Winter Flounder” PI: **P. Straub**, Co-PI’s: W. Phoel, K. Erstfeld, J. Pierce. 3/1/2000-2/28/2001

National Science Foundation, Research Opportunity Award. \$6,900. Cloning genes of the Pentose Phosphate Pathway. **P.F. Straub**, supplement to D.H. Kohl and G.S. Shearer NSF Award. 7/1995-6/1996.

INTERNAL COMPETITIVELY FUNDED AWARDS

- Stockton University (\$10,000) “Student Spaceflight Experiments Program Learning Community.”** Stockton 2020 Strategic planning grants, learning committee. 7/1/2016-6/30/2018
- Stockton University 2020 Strategic planning initiative- Stockton STEM Center: Pipelines to Success: (\$32,353).** Pilot project to develop a STEM Center to support community engagement and education in the STEM fields and to enhance recruitment of underrepresented groups into the STEM fields at Stockton. 3/2016-6/2018.
- Stockton University, Research & Professional Development Award,** “Course Release for completion of externally funded projects and to complete manuscripts” **P.F. Straub.** Fall 2015/AY16- declined for interim position.
- Stockton University, Research & Professional Development Award, \$5000.** "Ecology and nutrient dynamics of underwater habitats." PI. **P.F. Straub.** 7/13-6/14
- Stockton University, Study Abroad Fellowship Award, \$2500.** "Caribbean Biology Learning abroad fellowship." PI. **P.F. Straub.** 6/2013-5/2014.
- Stockton University, Provost Opportunity Fund Award, \$2000.** "Conference travel AY 2013/2014: AAUS Curacao." PI. **P.F. Straub.** 10/2013
- Stockton University, Research & Professional Development Award, \$4000** "Argentina Conference Participation- Coastal and Estuarine Research Federation." PI. **P.F. Straub.** 7/12-6/13
- Stockton University, Research & Professional Sabbatical/Subvention Award, \$4000.** "The ecology of temperate natural and artificial reefs." PI. **P.F. Straub.** 2 semesters 7/11-6/12.
- Stockton University, Research & Professional Development Award, \$5000.** "Underwater survey and mapping of temperate artificial and natural reef habitat." PI. **P.F. Straub.** 7/10-6/11
- Stockton University Research and Professional Development. \$4000.** Genetics of Winter Flounder and Bluefish. Sabbatical Award-2 semester/subvention. 7/04-6/05
- Stockton University Research and Professional Development Fund Award. \$3200.** Microarrays for the study of habitat/environment related gene expression in winter flounder. 8/1-2003 – 10/1/2003. PI. **P. Straub**
- Stockton University, Distinguished Faculty Fellowship. \$5000** “Pollution Effects on Gene Expression in Winter Flounder” PI: **P. Straub.** 7/2002-6/2003.
- Stockton University Distinguished Faculty Fellowship.** “Establishing a Scientific Diving Program: Great Bay Eelgrass Project.” **\$5000.** 7/1/99-76/30/00. "PI. - P. F. Straub
- Stockton University Research and Professional Development Fund Award. \$2,250.** 7/1/98-6/30/99. "Continued molecular characterization of the Pentose Phosphate pathway in soybeans." PI - P. F. Straub
- Stockton University Research and Professional Development Fund Award. \$2,000.** 7/1/97-6/30/98. "Population biology of American Beachgrass." PI - P. F. Straub
- Stockton University Distinguished Faculty Fellowship. \$5000.00** 7/1/96-6/30/97. "Cloning and Expressing Genes of the Pentose Phosphate Pathway from Soybean to Test for Metabolic Integration. PI. - P. F. Straub
- Stockton University Research and Professional Development Fund Award. \$2,500.** 7/1/95-6/30/96. "Regulation of environmentally expressed genes in tissue culture and in the saltmarsh." PI - P. F. Straub

HONORS and AWARDS

The Explorers Club, NYC, NY, National Fellow (FN-2014). Inducted October 2014.
National Research Council, Research Associates Program Award at the National Oceanic and Atmospheric Administration. “Functional Genomics and Population Genetics of Winter Flounder and Bluefish. PI. **P.F. Straub.** 7/1/2004-6/30/2005. (Sabbatical).

PROFESSIONAL ASSOCIATIONS

Coastal and Estuarine Research Federation, Board member (2009-2012)
Atlantic Estuarine Research Society: President (2010-2012), past service: membership chair, student endowments chair, local meeting host 2010 Atlantic City, NJ; 2014 Galloway, NJ.
Botanical Society of America, past service: Program chair, Treasurer, and Chair of Physiological section
Pan-American Society for Marine Biotechnology
Member of the Corporation, Mt Desert Island Biological Laboratory
American Academy of Underwater Scientists
Professional Association of Dive Instructors (PADI) Master Scuba Diver Trainer-170025
National Association of Underwater Instructors (NAUI) Instructor-48296
AAUS/TDI Scientific Diving Instructor #18739
Divers Alert Network

Reviewer: For the Journals: Gene, Marine Biotechnology, American Journal of Botany, Wetlands, Plant Cell & Environment, Comparative Biochemistry and Physiology, Sea Grant-Invasive Species Symposium Proceedings, Mangroves and Salt marshes, Theriogenology, Bulletin of Environmental Contamination and Toxicology, International Journal of Phytoremediation, Marine Environmental Research

Grant Reviewer: National Science Foundation- ad Hoc, Hudson River Foundation, ad hoc and panel, French National Research Agency (ANR) ad hoc, William Paterson University Faculty Fund.

TEACHING AND LEARNING ASSESSMENT

Over twenty-five years teaching and learning assessment experience in higher education including standard lecture and lab, field courses, study abroad and hybrid/distance learning modalities. Have developed and taught a number of novel courses, particularly using biotechnology and marine technology. Have developed general science education courses designed to foster science literacy in non-major students.

Program Courses- Majors science courses.
BIOL 1200/1205 Cells & Molecules with Laboratory
BIOL 2110/2115 Genetics with Laboratory
BIOL 2030 Prep for Caribbean Biology-study abroad
BIOL 2175 Scientific Diving
BIOL 2711 Underwater Survey Methods

BIOL 2120	General Botany with Laboratory
BIOL 3465	Tide Marsh Ecology with Laboratory- (hybrid course)
BIOL 3365	Economic Botany
BIOL 3370	Medical Botany
BIOL 3180	Plant Physiology with Laboratory
BIOL 3367	Marine Survey Methods (hybrid course)
BIOL/MARS 3416	Tropical Marine Biology (also support Marine Science Program)- including, multiple Florida field trips, Everglades, scuba- reefs of the keys
BIOL 4030	Caribbean Biology-study abroad
BIOL 4215	Biotechnology with Laboratory (also supports Biochemistry & Molecular Biology Program)
BIOL 4899	SIRE: NJ Benthic Studies
BIOL/BCMB 4800	Independent Study
BIOL/BCMB 4900	Internship

General Natural Sciences & Math (GNM) science courses for non-majors.

GNM 2206 Herbal Medicine

GNM 2207 Life in the Salt Marsh

GNM 2230 Plant Science

GNM 2132 Underwater Science & Exploration- includes scuba training

GNM 2800 Student Spaceflight Experiments Program (SSEP)-linked to national SSEP program for actual microgravity research on the International Space Station (ISS), one Stockton experiment flew to the ISS in August, 2017 and another is set for June 2018

Masters and PhD committees: PhD, B.J Landau, Rutgers University, MS, Samantha Covert and Marnie Niedemeyer, Georgian Court University, PSM, Stephen Nagiewicz, Sean McLaughlin, Stockton University.

INTERNATIONAL PROGRAMS

Curacao study abroad, faculty led experiences: Stockton University study tour to Curacao, Netherlands Antilles. Research Field Station, CARMABI. Marine ecology, scientific diving, xeric habitats and Caribbean culture. December 2014, led undergraduate program.

Curacao, study abroad, planning grant: Curacao, Netherlands Antilles, January 2013, site preparation, scuba operations.

Curacao, SCORE coral workshop, Willemstad, Coral spawning collection and rearing, scuba operations. August 2013

Argentina- Study abroad planning, Buenos Aires, Mar del Plata, Iguazu Falls, Peninsula Valdes, Patagonia. Oct-Nov 2012

Jamaica, University of the West Indies, Discovery Bay Marine Laboratory. Reef resiliency and recovery, scuba operations. July-August 1999

INSTITUTIONAL SERVICE

Program Service

- Biology Program Core Faculty
- Biology Program PRC (Personnel Committees)
- Biochemistry and Molecular Biology sub-Program Core Faculty
- Marine Science Program Associated Faculty
- Chaired and Compiled the Biology Program Self Study and outside evaluation 2006-2007
- Coordinator of the Biology Program 2001-2002
- Chaired and Compiled the Biology Program Self Study and outside evaluation 2001-2002

School of Natural Sciences & Math (NAMS) Service

- NAMS Facilities Planning Committee: New Science Facility/ F-wing Overbuild
- NAMS Facilities Planning Committee: Reynolds Science Building (Nacote Creek)
- NAMS Computational Science Working Group
- NAMS Representative GNM Committee 1996-1999
- Working group to develop and oversee the Stockton Arboretum, 1997-present
- Bio-safety Committee, 2000-present
- Committees for numerous Faculty searches in Biology, Chemistry/Biochemistry, Marine Science and Computational Science.
- Jersey Shore Science Fair-Judge

University-Wide Service

- Stockton University Representative to the New Jersey Space Grant Consortium. 6/17-present.
- Stockton University Senate Task Force on No Test (SAT) options. 9-2017-5-2018
- Stockton University Academic Planning and Programs Committee of the University Senate. 9/2018-present
- Stockton University representative to the Steering Committee of the New Jersey Higher Education Partnership for Sustainability 8/2016-present
- Stockton University Management Union Local Negotiations team, 1/17-current.
- Stockton University Management- Lead Negotiator-11/18-present
- Stockton University representative to NJ Tech Council 8/16-present
- Stockton University representative to the NJ Energy Coalition 9/15-present
- Stockton University Board of Trustees, Academic Affairs and Planning Standing Committee, 7/16-present
- Stockton University Provost Council, 7/15-present
- Stockton University Deans Council, 7/15-present
- Stockton University Leadership Council, 7/15-present
- Stockton University Senior Leadership Council (Rotating Dean) 7/15-present
- Stockton Senate: Task Force on Dual Credit High School Enrollment Programs, 2015-16
- Board of Trustees: Academic Affairs and Planning Committee, 2015-2106
- Post-tenure Review Committee 2013-2014
- Search Committees, Assistant Grants Directors, Grants Executive Director (2014-15)

- Middle States, Stockton Self Study Team: Planning/Resources 2010-2011
- College Wide Personnel Committee (CPC) 9/2006- 5/2007
- Faculty Review Committee (FRC), 9/2007-5/2009
- Board of Trustees, NJ Sea Grant Consortium, NJ State Colleges Representative, 2005-2013
- Stockton Dive Control Board- Dive Safety Officer, 2001-present
- Faculty Assembly Steering Committee, 1999-2004
- Chair, Faculty Assembly General Studies Committee- 1999- 2004
- GNM Convener 1998-1999
- 2010 Planning Committee: General Education 2002-2003
- Faculty Assembly: Administration and Finance Committee, 1998-1999
- Academic Passports Committee, 1997-1998
- QUAD- Summer Institute, 1996
- College Representative: NJ Sea Grant Consortium, 1998-present.

COMMUNITY ENGAGEMENT

Science Enrichment Academy at Stockton (SEAS) – Administrator for two week summer residential STEM experience for rising High School Seniors (18-24 students) focusing on underserved communities and pathways to science majors. <https://stockton.edu/sciences-math/seas.html>

Student Spaceflight Experiments Program (SSEP) Mission 13 Patch Competition: Students from 35 schools in 4 K-12 districts participated in a mission patch design competition. Winning designs from Stockton and K-12 partners flew to the International Space Station with the Stockton SSEP experiment in July, 2019. <https://stocktonspaceflight.org/>

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Student Spaceflight Experiments Program (SSEP) Mission 11 Patch Competition: Students from 35 schools in 4 K-12 districts participated in a mission patch design competition. Winning designs from Stockton and K-12 partners flew to the International Space Station with the Stockton SSEP experiment in August 2017. <https://stocktonspaceflight.org/>

Stockton STEAM Collaborative: The collaborative is coordinating relationships with the School of Education and the local K-12 community to provide expertise in the development of Science, Technology, and Engineering and Mathematics education.

Jersey Shore Science Fair at Stockton- Host, largest regional science fair in New Jersey with 564 projects. And 43 schools represented in 2017. 2016-current.

Atlantic City Historical Waterfront Association/Gardiners Basin and Atlantic City Aquarium, Board Member, 7/1/2015-12/2018.

Science Fair Projects Mentor, Galloway Township Middle School, 2015, Debra Somers
Sea Perch Program- Regionals- Drexel University- demonstration of Stockton University Remotely operated vehicle (ROV). April 30, 2015

Atlantic county (ONR) Sea Perch program- demonstration of Stockton University Remotely operated vehicle (ROV) at the Atlantic City Aquarium. January 24th, 2015

- Deep Shipwrecks-History Revealed-** public presentation at Stockton University of the RJ Walker project and keynote on the Titanic shipwreck, March 19th, 2015- Presenter and host with Steve Nagiewicz and Dr. James Delgado (NOAA office of Maritime History) as featured speaker.
- RJ Walker Expedition: 2014-2015.** Expedition in conjunction with the Explorers Club, NJ Historical Divers Association and Stockton University. Participated in mapping the 1860s wreck of the first iron steamship vessel of the US. Coast Survey (now a part of NOAA).
- Science Research Symposium Keynote speaker** “Ghost crab pot removal in the Mullica River-Great Bay Estuary” Absegami High School (GEHR)- 5/21/2015- 2015
- Science fair mentor** -Galloway Township Middle School- Debra Somers 7th grade class 5/15
- Teach at the Beach 2014.** NJ Marine Educators Association, Professional Development: Marine Technology and the Underwater World: ROV technology and fish counts. w/S. Evert 2014
- Discover Scuba.** Egg Harbor Township High School, Oceanography classes, 2007-2010, 2012-2013.
- Mr B’s Backyard, participation.** Galloway Township Middle School, 2010-2012, teacher Debra Somers
- Side Scan Sonar and remotely operated Vehicles.** NJ Marine Educators Association, Professional Development, 2012
- Teach at the Beach** NJ Marine Educators Association, Professional Development, salt marsh field trip and curriculum. w/ S. Evert 2008.
- Genetic Fruit Fly Project,** Galloway Township, Middle School. 2002-2005, Debra Somers
- Project Wet and Wild.** US Fish and Wildlife Service and Smithville School, Galloway Township, 2000. Teacher Jan Maginella
- Pleasantville Schools Science Enrichment PREP Project,** Rodgers Barlatt & Tim Haresign, Biology Instructor (1999)