

## **Dr. Kirk Cammarata**

Texas A&M University-Corpus Christi  
Science & Engineering, Life Sciences  
Office: Science and Technology 319B, Office Phone: (361) 825-2468, Email:  
kirk.cammarata@tamucc.edu

### **Education**

Post-Doctoral Research Training, University of Georgia, 1992.

PhD, University of Kentucky, 1987.

BA, University of Maryland-Baltimore County, 1979.

### **Licensures and Certifications**

Certificate of Professional Development in Best practices for Online Course Development (40 Hr Training), ODELT, TAMU-CC, Jan 2014, TAMU-CC - ODELT. (2014 - Present).

Texas Parks and Wildlife Department Boating Safety Certification, Texas Parks & Wildlife Department. (2009 - Present).

Certificate of Online Course Development, ODELT, TAMU-CC, Jan 2014, TAMU-CC - ODELT. (2016).

### **Professional Employment**

Associate Professor of Biology, TX A&M University-Corpus Christi. (August 2000 - Present).

Assistant Professor of Molecular Biology, Salem-Teikyo University. (August 1992 - July 2000).

Associate R&D Specialist, Martin-Marietta Laboratories. (June 1978 - July 1982).

### **Professional Memberships**

American Society of Plant Biologists  
Coastal and Estuarine Research Federation  
Gulf and Estuarine Research Section  
Gulf of Mexico Alliance  
Seagrass Monitoring Workgroup  
Seagrass Working Group  
Sigma Xi  
Southern Section-American Society of Plant Biologists  
Texas Academy of Science  
Genome Consortium for Active Teaching  
Texas Association of Advisors for the Health Professions

## **TEACHING**

### **Teaching Experience**

BIMS 3403, MOLECULAR BIOLOGY  
BIMS 4590, Special Topics: Humans and Their Genomes  
BIOL 1407, BIOLOGY II  
BIOL 2472, PRINCIPLES OF BOTANY

BIOL 3403, MOLECULAR BIOLOGY  
BIOL 3410, CELL BIOLOGY  
BIOL 3455, PLANT FORM AND FUNCTION  
BIOL 4292, BIOL 4292 Special Topics: Field Biology (Co-taught)  
BIOL 4299, Directed Independent Research  
BIOL 4340, GENOMICS,PROTEOMICS,BIONFORM  
BIOL 4396, DIS: Molecular Lab Techniques in Population Genetics  
BIOL 5102, GRADUATE DEFENSE SEMINAR  
BIOL 5340, GENOMICS,PROTEOMICS,BIOINFORM  
BIOL 5392, THESIS PROPOSAL  
BIOL 5393, THESIS RESEARCH  
BIOL 5394, THESIS SUBMISSION  
BIOL 5396, DIS: Evaluation of fluorescent microsphere attachment to Redfish Bay  
BIOL 5397, DIRECTED RESEARCH  
BIOL 5940, PROJECT RESEARCH  
ESCI 4498, INTERNSHIP IN ENVIRO SCIECE  
ESCI 5294, THESIS III: THESIS SUBMISSION  
MARB 6102, GRADUATE RESEARCH SEMINAR  
MARB 6392, DISSERTATION PROPOSAL  
MARB 6590, Special Topics: Genomics, Proteomics, and BioInforMatics  
MARB 6596, DIS: Reassessment of Seagrass Distribution and Biomass in the Lower Laguna Madre, Texas  
MARB 6940, DISSERTATION PROJECT RESEARCH

## Non-Credit Instruction

(2015).

## Teaching Awards and Honors

Who's Who Among America's Teachers.  
Travel Award to participate in the "GCAT-SEEKquence Bioinformatics Workshop 2014" at Lycoming College, GCAT-SEEK (NSF). (2014).  
Mary B. Bailey Teaching Excellence Award, Salem-Teikyo University. (1997).

## SCHOLARLY AND CREATIVE ACTIVITIES

### Publications

#### Refereed

##### Conference Proceedings

Cammarata, K., Cheniae, G. M. (1987). In J. Biggins (Ed.), *PS2 Ca Abundance and Interaction of the 17,24 kD Proteins With The Cl/Ca Essential For Oxygen Evolution*. (vol. I, pp. 617-620). Proceedings of the 7th International Congress on Photosynthesis.

Cammarata, K., Tamura, N., Sayre, R., Cheniae, G. M. (1984). In C. Sybesma (Ed.), *Identification of Polypeptides Essential for Oxygen Evolution by Extraction and Mutational Analyses* (vol. 1, pp. 311-320). Advances in Photosynthesis Research, Proceedings of the 6th International Congress on Photosynthesis.

##### Journal Articles

Ray, B. R., Johnson, M. W., cammarata, k., Smee, D. L. (2014). Expansion of tropical seagrasses into Northwestern Gulf of Mexico estuaries: Effects on associated fauna. *PLoS One*(9).

Mehrubeoglu, M., McLauchlan, L., Trombley,, C., Shanks, S. E., cammarata, k., Simons, J., Zimba, P. (2014). "Empirical Mode Decomposition of Hyperspectral Images for Segmentation of Seagrass Coverage," , Santorini, Greece, October 14-17, 2014. *Proceedings of the 2014 IEEE International Conference on Imaging Systems and Techniques*. 7602 Impala Dr

Teng, M. Y., Mehrebeoglu, M., King, S., cammarata, K., Simons, J. (2013). Investigation of Epifauna Coverage on Seagrass Blades Using Spatial and Spectral Analysis of Hyperspectral Images. *Proceedings of the 5th Workshop on Hyperspectral Image and Signal Processing: Evolution in Remote Sensing (WHISPERS '13), Gainesville, Florida, June 25-28, 2013.*, Submission 167:1-4. 7602 Impala Dr

Scmid, V., Cammarata, K., Bruns, B. U., Schmidt, G. W. (1997). Reconstitution of the PSI light-harvesting complex LHCl-730: Heterodimerization is required for antenna pigment organization. *Proceedings of the National Academy of Sciences*, 94, 7667-7672.

Cammarata, K., Schmidt, G. W. (1992). In Vitro Reconstitution of a light-harvesting Gene Product: Deletion Mutagenesis and Analyses of Pigment Binding. *Biochemistry*, 31, 2779-2789.

Cammarata, K., Plumley, F. G., Schmidt, G. W. (1992). Pigment and Protein Composition of Reconstituted Light-Harvesting Complexes and Effects of Some Protein Modifications. *Photosynthesis Research*, 33, 235-250.

Cammarata, K., Plumley, F. G., Schmidt, G. W. (1990). Reconstitution of Light Harvesting Complexes: A Single Apoprotein Binds Chl a, Chl b, and Xanthophylls. *Current Research In Photosynthesis, II*, 341-344.

Cammarata, K., Cheniae, G. M. (1987). Studies on 17,24 kD Depleted Photosystem 2 Membranes: I. Evidences For High And Low Affinity Calcium Sites. *Plant Physiology*, 84, 587-595.

Radmer, R., Cammarata, K., Tamura, N., Ollinger, O., Cheniae, G. M. (1986). Depletion of Photosystem 2 Extrinsic Proteins: I. Effects on O<sub>2</sub> and N<sub>2</sub> Flash Yields and Steady State O<sub>2</sub> Evolution. *Biochemica Biophysica Acta*, 850, 21-32.

Tamura, N., Radmer, R., Lantz, S., Cammarata, K., Cheniae, G. M. (1986). Depletion of Photosystem 2 Extrinsic Proteins: II. Analysis of the PS2/Water Oxidizing Complex by Measurements of TMPD Oxidation Following an Actinic Flash. *Biochemica Biophysica Acta*, 850, 369-379.

Golbeck, J. H., Cammarata, K. (1981). Spinach Thylakoid Polyphenol Oxidase: Isolation, Activation, and Properties of the Native Chloroplast Enzyme. *Plant Physiology*, 67, 977-984.

#### Technical Reports

Contreras, C., Whisenant, A., Bronson, J. M., Radloff, P. L., Cammarata, K. (2011). *Final Report for Seagrass Response to Wastewater Inputs: Implementation of a Seagrass Monitoring Program in Two Texas Estuaries* (pp. 59 pp.). Austin, TX: Texas Parks and Wildlife Department. [www.tpwd.state.tx.us/landwater/water/enviroconcerns/water\\_quality/](http://www.tpwd.state.tx.us/landwater/water/enviroconcerns/water_quality/)

#### Non-Refereed

## Other Publications

Dovalina, Cammarata, K. (2011). *Nine Halodule beaudettei* GAPC mRNA sequences (JF775769-JF775777).

Radloff, P. L., Cammarata, K. (2010). *Quality Assurance Project Plan (QAPP) for Seagrass Response to Wastewater Inputs: Implementation of a Seagrass Monitoring Program in Two Texas Estuaries* (pp. 105).

Ray, B. R., Johnson, M. W., Cammarata, K., Smee, D. L. (2014). Expansion of tropical seagrasses into Northwestern Gulf of Mexico estuaries: Effects on associated fauna. *PLoS One*(9).

## Technical Reports

Halcomb, J., Cammarata, K., et al. (2011). *Final Report for USDA-HSI "STELLAR"*.

Cammarata, K., Buck, G. W., Larkin, P. D., Lehman, R. L., Mott, J. B., Waldbeser, L. S. (2005). *Final Report: "Acquisition of a Digital Imaging System to Support Research and Research Training in Applications of Molecular Biology" NSF-MRI*.

## Web Publications

Dovalina, S., Fuentes, N. R., Cammarata, K. (2011). *Halodule beaudettei* Actin Genomic DNA Sequence (JF714883). GenBank.

Dovalina, S., Dupnik, M., Dearing, M., Cammarata, K. (2011). *Seven Thalassia, Halophila and Ruppia Seagrass Actin Genomic DNA Gene Sequences* (JF412035-JF412039 & JF519825-JF519826). GenBank.

Chilton, V., Cammarata, K. (2011). *173 Environmental 16S rRNA sequences from Bacterial Epiphytes on Halodule beaudettei Seagrass* (JN232203-JF232376). GenBank.

Dovalina, S., Fuentes, N. R., Cammarata, K. (2011). *Four Cymodocea filiforme Seagrass Actin Genomic DNA Gene Sequences* (JF342678-JF342681). GenBank.

Dovalina, S., Cammarata, K. (2011). *Four Halodule beaudettei Seagrass Actin Genomic DNA Gene Sequences* (JF326857-JF326860). GenBank.  
[www.ncbi.nlm.nih.gov/nuccore/JF326857](http://www.ncbi.nlm.nih.gov/nuccore/JF326857)

Dovalina, S., Fuentes, N. R., Cammarata, K. (2011). *Seventeen Halodule beaudettei Seagrass Actin & GAPDH cDNA Gene Sequences* (JF775761-JF775777). GenBank.  
[www.ncbi.nlm.nih.gov/nuccore/JF775761](http://www.ncbi.nlm.nih.gov/nuccore/JF775761)

Cammarata, K. (2008). *Sequences of Two Differentially Expressed Genes in Typha latifolia*. GenBank. [www.ncbi.nlm.nih.gov/nucest/165979123?report=genbank](http://www.ncbi.nlm.nih.gov/nucest/165979123?report=genbank)

Cammarata, K. (2006). *Website developed to disseminate genomics curricula for "Genomics-Based Curriculum Development and Integration for South Texas HSIs" (USDA-HSI)* [See [www.sci.tamucc.edu/genomed](http://www.sci.tamucc.edu/genomed)]. TAMU-CC. [www.sci.tamucc.edu/genomed](http://www.sci.tamucc.edu/genomed)

## Presentations

Cammarata, K. (Author & Presenter), Roberson, W. (Author), Cuvelier, A. (Author), Mehrubeoglu, R. (Author), Simons, J. (Author), Shanks, S. (Author), Zimba, P. (Author), Chilton, V. (Author), Fisher, M. (Author), Kavandi, A. (Author), Hare, S. (Author), "Characterization of epiphyte accumulation on seagrasses as an indicator of community change," Society of Wetland Scientists 2016 Annual Meeting, Society of Wetland Scientists, Corpus Christi, TX. (June 6, 2016).

Fisher, M. (Author & Presenter), Martinez, L. (Author), Miller, C. (Author), Roberson, W. (Author), cammarata, k. (Author), "Community characterization of algal epiphytes of seagrasses in proximity to coastal wetlands," Texas Bays and Estuaries Meeting, University of Texas, Port Aransas, TX. (April 2016).

Fisher, M. (Author & Presenter), Martinez, L. (Author), cammarata, k. (Author), "Identification and Quantification of Seagrass Algal Epiphytes," Texas Bays and Estuaries Meeting, University of Texas, Port Aransas, TX. (April 2016).

Kowalski, J. (Author & Presenter), cammarata, k. (Author), DeYoe, H. (Author), "Effects of Rapid Salinity Decrease on Photosynthetic Performance in the Seagrasses, *Thalassia testudinum*, *Syringodium filiforme*, and *Halodule wrightii* using PAM Fluorescence," Texas Academy of Science Annual Meeting 2016, Texas Academy of Science, Junction, TX. (March 2016).

Gomez, G. (Author & Presenter), Trujillo, O. (Author), cammarata, k. (Author), DeYoe, H. (Author), Parsons, J. (Author), Kowalski, J. (Author & Presenter), "Laboratory Based Primary Productivity and Respiration in the Seagrass *Halodule wrightii* Under Low Salinity," Texas Academy of Science Annual Meeting 2016, Texas Academy of Science, Junction, TX. (March 2016).

Fisher, M. (Author & Presenter), Martinez, L. (Author), Miller, C. (Author), Roberson, W. (Author), cammarata, k. (Author), "Identification and Quantification of Seagrass Algal Epiphytes of Redfish Bay," MSGSO Student Research Symposium, TAMU-CC Marine Science Graduate Student Organization, TAMU-CC. (December 4, 2015).

Kavandi, A. (Author & Presenter), Alejandro, L. (Author), Poor, L. (Author), Cuvelier, A. (Author), cammarata, k. (Author), "Effects of Grazer Inhibitors on Grazer Abundance and Diversity in Seagrass," 15th Annual TAMUS Pathways Student Research Symposium, TAMUS, TAMU-CC. (October 23, 2015).

Fisher, M. (Author & Presenter), Martinez, L. (Author), Miller, C. (Author), Roberson, W. (Author), cammarata, k. (Author), "Identification and Quantification of Seagrass Algal Epiphytes of Redfish Bay," 15th Annual TAMUS Pathways Student Research Symposium, TAMUS, TAMU-CC. (October 23, 2015).

Smith, D. K. (Author & Presenter), Mehrebeoglu, M. (Author), cammarata, k. (Author), Shanks, E. (Author), "Investigation of Seagrass Under Hyperspectral Imaging Systems," 15th Annual TAMUS Pathways Student Research Symposium, TAMUS, TAMU-CC. (October 23, 2015).

Miller, C. (Author & Presenter), Roberson, W. (Author), Fisher, M. (Author), cammarata, k. (Author), "Molecular Fingerprinting to Characterize the Diversity of Epiphytic Life on Seagrass," 2015 Del Mar College Student Research Symposium, Del Mar College, Del Mar College, Corpus Christi, TX. (September 2015).

cammarata, k. (Author & Presenter), "Genomics Approaches to Understand Seagrass: Preliminary Transcriptome Analysis of *Halodule wrightii*," TX Seagrass Monitoring Workgroup Semi-Annual Meeting, TX Parks and Wildlife, Corpus Christi, TX. (October 2014).

cammarata, k. (Author & Presenter), Mozzachiodi, R. (Author), "A Marine Microbiome Application for the Undergraduate Molecular Biology Laboratory," Coastal and Estuarine Research Conference 2013, Estuarine Research Federation, San Diego, CA. (November 2013).

Kowalski, J. (Author & Presenter), DeYoe, H. (Author), Zimba, P. (Author), cammarata, k. (Author), Parsons, J. (Author), "Effects of Hyposalinity on Photosynthesis, Respiration, and Ion Concentrations on the Seagrass *Halodule wrightii* in a Microcosm Study.," Coastal and Estuarine Research Conference 2013, Estuarine Research Federation, San Diego, CA. (November 2013).

cammarata, k. (Author & Presenter), Fuentes, N. (Author), Fonseca, F. (Author), "Preliminary Transcriptome Analysis of a Seagrass Toward Development of Functional Genomic Tools," Coastal and Estuarine Research Conference 2013, Estuarine Research Federation, San Diego, CA. (November 2013).

cammarata, k. (Author & Presenter), ""Seagrass Interactions with the Environment: Insights from Field Experiments, Imaging and Genomics", " TAMU-K Environmental Engineering Dept Seminar, TAMU-K Environmental Engineering Dept, TAMU-K. (November 13, 2013).

Cammarata, K., Mozzachiodi, R., "USDA-PROMPT: Agriculture-related careers and research opportunities at TAMU-CC," Houston Community College. (2012).

Teng, M. Y., Mehrubeoglu, R., King, S. A., Cammarata, K., Simons, J., "Determining Percent Epiphyte Coverage of Seagrass using Hyperspectral Imaging and Parallel Programming," 11th Annual TAMUS Pathways Symposium, Galveston, TX. (November 2012).

Fuentes, N., Cammarata, K., "Preliminary Transcriptome Analysis of a Seagrass Toward the Development of Functional Genomic Tools," 11th Annual TAMUS Pathways Symposium, Galveston, TX. (November 2012).

Cammarata, K., Mozzachiodi, R., Durnovo, M., "PROMPT: Promoting Research Opportunities for Minorities in Texas," USDA-HSI Annual Project Director's Meeting, Edinburg, TX. (June 2012).

Soliz, J., Cammarata, K., "Can Epiphytic Biofilms of Algae and Bacteria Trap Environmental Contaminants on *Halodule beaudettei* ?", LSAMP Undergraduate Research Symposium, TAMU-CC, Corpus Christi, TX. (February 2012).

Fuentes, N., Dovalina, S., Cammarata, K., "High-Throughput Sequencing and Analysis of a Seagrass Transcriptome Toward the Development of Molecular Stress Markers," LSAMP Undergraduate Research Symposium, TAMU-CC, Corpus Christi, TX. (February 2012).

Cuvelier, A., Maxwell, T., Soliz, J., Cammarata, K., "Algal Pigment Fluorescence to Characterize and Quantify Seagrass Epiphyte Accumulations," Conference on Subtropical Biology, UTPA, Edinburg, TX. (January 2012).

Graham, V., Schroeder, C., Cammarata, K., "Assay of the mer Operon as an Indicator of Bioavailable Mercury in Marine Environments," Conference on Subtropical Biology, UTPA, Edinburg, TX. (January 2012).

Chilton, V. K., Cammarata, K., "Location- and Seagrass-Specific Assemblages of Bacteria in Seagrass Epiphyte Biofilms Along the South Texas Coast," Conference on Subtropical Biology, UTPA, Edinburg, TX. (January 2012).

Cammarata, K., Mozzachiodi, R., "USDA-PROMPT: Agriculture-related careers and research opportunities at TAMU-CC," Houston Community College. (2011).

Cammarata, K. (Author & Presenter), Sweatman, J. (Author), Sterba-Boatwright, B. D. (Author), "Fluorescence Characterization and Nutrient Dose Dependence of Epiphyte Accumulation on *Halodule wrightii*," Seagrass Working Group Quarterly Meeting, Seagrass Monitoring Working Group, TPWD, Corpus Christi, TX. (April 2011).

Cammarata, K. (Author & Presenter), Graham, V. (Author), Schroeder, C. (Author), "Assay of the mer Operon as an Indicator of Bioavailable Mercury," Texas Academy of Science 2011 Annual Meeting, Texas Academy of Science, Austin, TX. (March 2011).

Dovalina, S. (Author & Presenter), Cammarata, K. (Author), "Cloning & Sequencing Housekeeping Genes Towards the Development of Molecular Stress Response Markers in Seagrasses," Texas Academy of Science 2011 Annual Meeting, Texas Academy of Science, Austin, TX. (March 2011).

Chilton, V. (Author & Presenter), Cammarata, K. (Author), "Unique Assemblages of Epiphytic Bacteria on Seagrasses from an Estuary and a Hypersaline Lagoon on the South Texas Coast," Texas Academy of Science 2011 Annual Meeting, Texas Academy of Science, Austin, TX. (March 2011).

Graham, V. (Author & Presenter), Cammarata, K. (Author), "Assay of the mer Operon as an Indicator of Bioavailable Mercury," Benthic Ecology Meeting 2011, Dauphin Island Sealab, Mobile, AL. (March 16, 2011).

Cammarata, K. (Author & Presenter), Chilton, V. (Author), Helander, E. (Author), "Unique Assemblages of Epiphytic Bacteria on Seagrasses from an Estuary and a Hypersaline Lagoon on the South Texas Coast," Benthic Ecology Meeting 2011, Dauphin Island Sealab, Mobile, AL. (March 16, 2011).

Soliz, J. (Author & Presenter), Chilton, V. (Author), Cammarata, K. (Author), "16S rDNA Characterization of Bacterial Diversity on Leaves of the Seagrass *Halodule wrightii*: Community Profiling to Characterize Environmental Conditions," LSAMP Undergraduate Research Symposium, LSAMP, NSF, TAMU-Prairie View, TX. (February 2011).

Fuentes, N. R. (Author & Presenter), Dovalina, S. (Author), Cammarata, K. (Author), "Cloning the Actin Gene of the Seagrass *Syringodium filiforme* for use in Gene Expression Studies," LSAMP Undergraduate Research Symposium, LSAMP, NSF, TAMU-Prairie View, TX. (February 2011).

Shah, R. (Author & Presenter), Cammarata, K. (Author), "Amplification of Nitrite Reductase Genes for Characterization of Nitrogen Metabolism Gene Polymorphisms in Seagrass Epiphytes," Gulf Estuarine Research Society Meeting 2010, Gulf Estuarine Research Society, Port Aransas, TX. (November 2010).

Fuentes, N. R. (Author & Presenter), Cammarata, K. (Author), "Cloning the Putative Actin Gene of the Seagrass *Syringodium filiforme*," Gulf Estuarine Research Society Meeting 2010, Gulf Estuarine Research Society, Port Aransas, TX. (November 2010).

Cammarata, K. (Author & Presenter), Sweatman, J. (Author), Sterba-Boatwright, B. D. (Author), "FLUORESCENCE CHARACTERIZATION AND NUTRIENT DOSE DEPENDENCE OF EPIPHYTE ACCUMULATION ON *HALODULE WRIGHTII*," 2010 Gulf Estuarine Research Society Meeting, The University of Texas Marine Science Institute, Port Aransas, TX. (November 3, 2010).

Chilton, V. (Author & Presenter), Cammarata, K. (Author), "Characterization of Epiphytic Bacteria on Seagrasses from an Estuary and a Hypersaline Lagoon on the South Texas Coast," American Society of Microbiologists-Texas Region Annual Meeting 2010, American Society of Microbiologists-Texas Region, New Braunfels, TX. (April 2010).

Chilton, V. (Author & Presenter), Cammarata, K. (Author), "16S rDNA Characterization of Epiphytic Bacteria on Seagrasses from an Estuary and a Hypersaline Lagoon on the South Texas," Texas Bays & Estuaries Meeting 2010, University of Texas Marine Science Institute, Port Aransas, TX. (April 2010).

Sweatman, J. (Author & Presenter), Cammarata, K. (Author), "Nutrient Dose and Seasonal Dependence of Epiphyte Abundance on *Halodule wrightii*," Texas Bays & Estuaries Meeting 2011, University of Texas Marine Science Institute, Port Aransas, TX. (April 2010).

Sweatman, J. (Author & Presenter), Cammarata, K. (Author), "Nutrient Dose and Seasonal Dependence of Epiphyte Abundance on *Halodule wrightii*," Benthic Ecology Meeting 2010, Wilmington, NC. (March 2010).

Fuentes, N. R. (Author & Presenter), Cammarata, K. (Author), Hatherill, J. R. (Author), "Cloning the Putative Actin Gene of the Seagrass *Syringodium filiforme*," AAAS 2010 Annual Meeting, AAAS, San Diego CA. (February 2010).

Figgs, R. (Author & Presenter), Cammarata, K. (Author), "Correlations of Measured Water Depths With TCOON Water Levels at Seagrass Study Sites in the Laguna Madre and East Flats of Corpus Christi Bay," LSAMP Undergraduate Research Symposium 2010, LSAMP, NSF, TAMUS, TAMU-College Station. (February 2010).

Cammarata, K. (Author & Presenter), Sweatman, J. (Author), Helander, E. (Author), Chilton, V. (Author), Dovalina, S. (Author), Graham, V. (Author), "Seagrasses Under Stress: Linkages With Epiphytic Biofilms and Eutrophication ?," Coastal and Estuarine Research Federation (CERF) 2009, Coastal and Estuarine Research Federation (CERF), Portland, OR. (November 2009).

Chilton, V. (Author & Presenter), Cammarata, K. (Author), "16S rDNA Characterization of Epiphytic Bacteria on Seagrasses from an Estuary and a Hypersaline Lagoon on the South Texas Coast: Site- and Host-Specific Taxa," Sigma Xi National Conference 2009, Sigma Xi, Houston, TX. (November 2009).

Graham, V. (Author & Presenter), Cammarata, K. (Author), "Amplification of *mer* Genes as an Indicator of Bioavailable Mercury," SACNAS 2009 Annual Conference (Society for the Advancement of Chicanos and Native Americans in Science), Society for the Advancement of Chicanos and Native Americans in Science, Dallas, TX. (October 2009).

Cammarata, K., "Environmental Biotech: Biofuels to Bioremediation," Biotech Summit: Biotechnology for High School Teachers, NSF- and USDA-Funded Workshop, Del Mar College, Corpus Christi, TX. (September 18, 2009).

Cammarata, K. (Author & Presenter), Sweatman, J. (Author), Helander, E. (Author), Chilton, V. (Author), Dovalina, S. (Author), Graham, V. (Author), "Seagrasses Under Stress: Linkages With Epiphytic Biofilms and Eutrophication ?," Plant Biology 2009, American Society of Plant Biologists (ASPB), Honolulu, HI. (July 2009).

Cammarata, K., "Seagrasses Under Stress: Linkages With Epiphytic Biofilms and Eutrophication ?," Del Mar College Friday Seminar Series, Del Mar College, Del Mar College, Corpus Christi, TX. (April 24, 2009).

Chilton, V. (Author & Presenter), Helander, E. (Author), Graham, V. (Author), Cammarata, K. (Author), "Bacterial Epiphytes on Seagrass Blades as Indicators of Environmental Conditions," Benthic Ecology Meeting 2009, TAMU-CC, Corpus Christi, TX. (March 2009).



Sweatman, J. (Author & Presenter), Ufkes, F. (Author), Cammarata, K. (Author), "Epiphyte Accumulation on *Halodule wrightii* at Different Depths in the Upper Laguna Madre of Texas.," Benthic Ecology Meeting 2009, TAMU-CC, Corpus Christi, TX. (March 2009).

Cammarata, K. (Author & Presenter), "Improved Spatiotemporal Resolution of Accumulation Patterns of Seagrass Photosynthetic Epiphytes: A New Fluorescence Imaging Method with Application to Monitoring, Modeling and Data Archiving," Benthic Ecology Meeting 2009, Corpus Christi, TX. (March 2009).

Dovalina, S. (Author & Presenter), Cammarata, K. (Author), "Development of Molecular Stress Response Markers in *Halodule wrightii*," Southern Section-American Society of Plant Biologists 2009 Annual Meeting, Southern Section-American Society of Plant Biologists, Austin, TX. (March 2009).

Cammarata, K. (Author & Presenter), "Medium to Molecular Scale Technologies for Seagrass Monitoring: Do Epiphytes Mediate Seagrass Response to Eutrophication?," Harte Research Institute Seminar, Harte Research Institute, Corpus Christi, TX. (November 21, 2008).

Cammarata, K., "Genomes, Sequences & Molecular Identification," Biotechnology Summit: Biotechnology for High School Teachers, NSF- and USDA-Funded Workshop, Del Mar College & TAMU-CC, Corpus Christi, TX. (September 19, 2008).

Cammarata, K. (Author & Presenter), Ufkes, F. (Author), Blandon, I. (Author), Helander, E. (Author), Medlock, J. (Author), "Methods for Characterization of Seagrass Epiphyte Organisms and Coverage," Benthic Ecology Meeting 2008, Providence, R.I. (April 2008).

Cammarata, K. (Author & Presenter), "Imaging, Quantification and Comparison of Seagrass Epiphytes," Seagrass Working Group Quarterly Meeting, Seagrass Monitoring Working Group, TPWD, Corpus Christi, TX. (April 2, 2008).

Cammarata, K., "Imaging, Quantification and Comparison of Seagrass Epiphytes," Exploration of Estuarine Linkages Symposium Presentation, Texas Academy of Science Annual Meeting, Texas Academy of Science, Corpus Christi, TX. (March 6, 2008).

Blandon, I. (Author & Presenter), Vega, R. (Author), Ward, R. (Author), Cammarata, K. (Author), "Utilization of Microsatellite Markers for a Preliminary Analysis of Southern Flounder Genetic Resources on the TX Coast," TX Chapter American Fisheries Society 2007 Annual Meeting, TX Chapter American Fisheries Society, Lake Jackson, TX. (March 2007).

Cammarata, K. (Author & Presenter), Riis-Due, S. (Other), Markley, L. (Other), Sippel, K. (Other), Campos, A. (Other), "Induced Tolerance: An Alternative Strategy for Phytoremediation ? Experiences With Arsenic and Sunflowers," Environmental Sustainability: U.S-Mexico Border Issues, TAMU-K and NSF, Monterrey, Mexico. (November 10, 2006).

Sippel, K. (Author & Presenter), Cammarata, K. (Author), "Inducing Arsenic and Molybdenum Tolerance in Sunflowers Using Cysteine and Glutamate Amino Acid Treatments," Sigma Xi Student Research Conference 2005, Sigma Xi, Seattle, WA. (November 2005).

Cammarata, K. (Author & Presenter), Markley, L. (Author), Campos, A. (Author), Riis-Due, S. (Author), McBee, S. (Author), "Acid-Induced Tolerance to Arsenic and Molybdenum in Sunflowers: Mechanisms Relevant to Phytoremediation ?," Emerging Technologies for a Sustainable Environment, TAMU-K, South Padre Island, TX. (October 20, 2005).

Cammarata, K. (Author & Presenter), "Integration of Genomics into the Undergraduate Biology Curriculum," Plant Biology 2005, American Society of Plant Biologists, Seattle, WA. (July 16, 2005).

Cammarata, K. (Author & Presenter), "Genomics-Based Curriculum Development for HSIs in S. Texas," USDA/CSREES Project Director's Meeting 2005, USDA, New Orleans, LA. (March 28, 2005).

Sippel, K. (Author & Presenter), Cammarata, K. (Author), "Optimization of Protein Solubilization from Cattail Tissue for 2-D PAGE," Sigma Xi Student Research Conference 2002, Sigma Xi, Galveston, TX. (November 2002).

Cammarata, K. (Author & Presenter), Kosub, D. (Author), Vorhees, J. (Author), Garcia, T. (Author), Palacios, D. (Author), Markley, L. (Author), "Cattail Genes Differentially Expressed in Response to High Environmental Concentrations of Iron," Plant Biology 2002 Annual Meeting, American Society of Plant Biologists, Denver, CO. (August 2002).

Vorhees, J. (Author & Presenter), Kosub, D. (Author), Garcia, T. (Author), Palacios, D. (Author), Cobb, M. (Author), Markley, L. (Author), Cammarata, K. (Author), "Construction of Fusion Proteins to Test a Protein Targeting Strategy for Phytoremediation," 57th Southwest Regional American Chemical Society Meeting 2001, Southwest Regional American Chemical Society, San Antonio, TX. (October 2001).

Spears, D. (Author & Presenter), Guzman, E. (Author), Cobb, M. (Author), Cooper, B. (Author), Cammarata, K. (Author), "Antisense Polyphenoloxidase Gene Construction for Downregulation of PPO Activity in Apple," West Virginia Academy of Science, 73rd Annual Meeting, 1998, West Virginia Academy of Science, Wheeling, WV. (October 1998).

Cammarata, K. (Author & Presenter), Fortney, R. (Author), Edinger, B. (Author), Miller, R. L. (Author), Dorsey, B. (Author), Ott, J. (Author), Loman, K. (Author), "Monitoring Natural Waters to Assess Impacts of Highway Construction," Connections '98: Transportation, Wetlands, and the Natural Environment, Department of Transportation, New Bern, North Carolina. (September 1998).

Cammarata, K. (Author & Presenter), Tamura, W. (Author), Schmid, V. (Author), Schmidt, G. W. (Author), "Reconstitution of Partially-Assembled Light-Harvesting Complexes," 1997 Annual Meeting of the American Society of Plant Physiologists, American Society of Plant Physiologists, Vancouver, Canada. (August 1997).

Cammarata, K. (Author & Presenter), "Measurement of the Xanthophyll Cycle Pigment Zeaxanthin as an Indicator of Photoinhibition and Water Stress in *Lemna minor*," West Virginia Academy of Science, 70th Annual Meeting, 1995, West Virginia Academy of Science, Huntington, WV. (October 1995).

Cammarata, K. (Author & Presenter), Plumley, F. G. (Author), Schmidt, G. W., "Reconstitution of PS2 Light-Harvesting Complexes," Gordon Research Conference, Photosynthesis, Colby-Sawyer, New London, NH. (August 1990).

Cammarata, K. (Author & Presenter), Cheniae, G. M. (Author), "PS2 Ca Abundance and Interaction of the 17,24 kD Proteins With The Cl/Ca Essential For Oxygen Evolution," VII International Congress on Photosynthesis, Providence, RI. (July 1986).

## **Contracts, Grants and Sponsored Research**

Cammarata, Kirk (Principal), "Amplification of Bacterial Mercury Resistance Genes as an Indicator of Bioavailable Mercury," Sponsored by TAMU-CC College Research Enhancement Grant, \$1,647.00. (2012 - 2013).

Cammarata, Kirk (Principal), "Effects of Freshwater Inflows on Seagrass Ecosystem Sustainability," Sponsored by TRDF Proposal Resubmission Grant, \$2,500.00. (2012 - 2013).

Cammarata, Kirk (Principal), "Effects of Pulsed Freshwater Inflows on Seagrass Ecosystem Sustainability," Sponsored by TAMU-CC University Research Enhancement Grant, \$5,000.00. (2012 - 2013).

Cammarata, Kirk (Co-Principal), "Seagrass/Epiphyte Hyperspectral Imaging: Integrated Measurement of Water Quality," Sponsored by NOAA-TGLO-TX Coastal Management Program, \$111,617.00. (2012 - 2013).

## Contract

Cammarata, Kirk (Principal), "Seagrass Response to Wastewater Inputs: Implementation of a Seagrass Monitoring Program in Two Texas Estuaries," Sponsored by Texas Parks & Wildlife (TX General Land Office - Coastal Management Program), \$18,810.00. (September 2009 - August 2011).

Cammarata, Kirk (Co-Principal), Fortney, Ronald (Principal), (Co-Principal), "Strategic Assessment of Roadway Runoff Research Needs," Sponsored by West Virginia Division of Highways, State, \$97,000.00. (1999 - 2000).

Cammarata, Kirk (Co-Principal), Fortney, Ronald (Co-Principal), "Stream Monitoring Study For Corridor H," Sponsored by West Virginia Division of Highways, State, \$385,000.00. (1997 - 2000).

## Grant

cammarata, kirk, Mozzachiodi, Riccardo, "University Betterment Grant to Upgrade Cell/Molecular Biology Laboratory," Sponsored by TAMU-CC SOAR Betterment Program, \$22,000.00. (2015 - 2016).

cammarata, kirk (Principal), "Transfer of Typhoon Trio Plus Imaging Instrumentation from Stephen F. Austin University," Sponsored by Stephen F. Austin University, State. (2015).

Mehrubeoglu, Ruby (Principal), Simons, James (Co-Principal), Cammarata, Kirk (Co-Principal), Zimba, Paul V. (Co-Principal), "Seagrass and Epiphyte Hyperspectral Imaging for Efficient Integrated Measurement of Water Quality," Sponsored by Texas General Land Office, State, \$60,604.00. (October 12, 2012 - March 31, 2015).

Mozzachiodi, Riccardo (Principal), Cammarata, Kirk (Co-Principal), Durnovo, Maya (Co-Principal), "PROMPT, Providing Research Opportunities for Minority Populations in Texas," Sponsored by USDA, Federal, \$245,000.00. (September 1, 2010 - August 31, 2014).

Cammarata, Kirk (Co-Principal), Hatherill, John Robert (Principal), Halcomb, Jonda (Co-Principal), "South Texas Undergraduate Curriculum Consortium for Environmental and Biological Science Students (SUCCESS)," Sponsored by NSF-ATE, Federal, \$36,934.00. (2007 - August 2012).

Cammarata, Kirk (Co-Principal), Halcomb, Jonda (Principal), Hatherill, John Robert (Co-Principal), "South Texas Educational Liaison of Laboratories for Agricultural Research (STELLAR)," Sponsored by USDA, Federal, \$39,966.00. (2007 - 2011).

Cammarata, Kirk (Principal), Buck, Gregory W. (Co-Principal), Larkin, Patrick D (Principal), Overath, Regina D. (Co-Principal), "DNA Sequencers for Education: Beckman Genomics Education/Research Matching Funds Program," Sponsored by Beckman-Coulter Inc, Private, \$49,450.00. (2005 - 2008).

Larkin, Patrick D (Principal), Cammarata, Kirk (Co-Principal), Billiot, Eugene J (Co-Principal), Billiot, Fereshteh H (Co-Principal), Louchouart, Patrick, "Acquisition of Instrumentation for the Chemical and Biological Characterization of Factors Affecting the Distribution of Seagrasses in Coastal Bays and Estuaries," Sponsored by National Science Foundation, Federal, \$180,710.00. (September 1, 2004 - December 31, 2007).

Cammarata, Kirk (Principal), Buck, Gregory W. (Co-Principal), Larkin, Patrick D (Co-Principal), Waldbeser, Lillian S (Co-Principal), Lehman, Roy Lee (Co-Principal), "Acquisition of a Digital Imaging System to Support Research and Research Training in Applications of Molecular Biology," Sponsored by USDA, Federal, \$130,000.00. (2001 - 2006).

Larkin, Patrick D (Co-Principal), Cammarata, Kirk (Principal), Chopin, Suzzette Rita (Co-Principal), Price-Blount, Kit (Co-Principal), Lehman, Roy Lee (Co-Principal), "Acquisition of a digital imaging system to support research and research training in applications of molecular biology," Sponsored by National Science Foundation, Federal, \$150,000.00. (January 1, 2002 - December 31, 2005).

Cammarata, Kirk (Co-Principal), Larkin, Patrick D (Principal), Lehman, Roy Lee (Co-Principal), "Acquisition of Instrumentation for the Chemical and Biological Characterization of Factors Affecting the Distribution and Phytoremediation of Seagrasses in Coastal Bays and Estuaries," Sponsored by NSF-MRI, Federal, \$181,000.00. (2001 - 2004).

Cammarata, Kirk (Principal), "USEPA/ORD HSI Faculty Development Program - Visiting Research Position in Phytoremediation," Sponsored by USEPA/ORD and HACU, Federal, \$20,000.00. (2003).

Cammarata, Kirk (Principal), "Atomic Absorption Training for Advanced Applications in Environmental Science and Biotechnology," Sponsored by West Virginia EPSCoR, State, \$13,500.00. (1999 - 2000).

Cammarata, Kirk (Principal), "NASA/West Virginia Space Grant Consortium Research Capability Enhancement Mini-Grants: Conference Travel Grant," Sponsored by NASA/West Virginia Space Grant Consortium, State, \$500.00. (1999).

Cammarata, Kirk (Principal), "Novel Metal-Binding Peptides for Phytoremediation," Sponsored by NASA/West Virginia Space Grant Consortium Research Initiation Grant, State, \$750.00. (1998).

Cammarata, Kirk (Principal), "Phytoremediation in Artificial Wetlands," Sponsored by NASA/West Virginia Space Grant Consortium Research Capability Enhancement Mini-Grants, State, \$2,000.00. (1997 - 1998).

Cammarata, Kirk (Principal), "Vertical Integration of Fluorescence Measurements into Student Laboratories," Sponsored by Spectroscopy Society of Pittsburgh, Private, \$5,000.00. (1997 - 1998).

Cammarata, Kirk (Co-Principal), Rogers, Suzanne D (Principal), "Plant Growth Chambers for Biotechnology," Sponsored by NSF-ARI, Federal, \$27,765.00. (1995 - 1998).

Cammarata, Kirk (Principal), "ACA Project CheMIST (Chemical/Waste Management Information System Tool): Computer System/Software: Chemical/Waste Inventory Management," Sponsored

by ACA Project CheMIST (Chemical/Waste Management Information System Tool) (NSF Sponsored), Other. (1995 - 1997).

Cammarata, Kirk (Principal), "Travel for Fermentation Workshop," Sponsored by University of Kentucky Faculty Scholars Conference Travel Grant, State, \$500.00. (1995).

## Sponsored Research

cammarata, kirk (Principal), "Stress Gene Expression Patterns as Indicator of Seagrass Decline," Sponsored by TAMU-CC College Research Enhancement Grant, \$2,990.16. (September 2015 - August 2016).

Cammarata, Kirk (Principal), "Changes in Seagrass epiphyte microbial community structure in response to nutrients," Sponsored by TRDF, Texas A&M University-Corpus Christi, \$25,200.00. (2010 - 2011).

Cammarata, Kirk (Principal), "Advanced Imaging Technology to Develop Rapid Assessment Protocols for Levels and Patterns of Epiphyte Loading in Relation to Seagrass Status," Sponsored by TAMU-CC Research Enhancement Grant Program, Texas A&M University-Corpus Christi, \$8,185.00. (September 2009 - August 2010).

Cammarata, Kirk (Principal), "Development of Rapid Assessment Protocols for Levels and Patterns of Epiphyte Loading," Sponsored by TRDF, State, \$34,000.00. (September 2009 - August 2010).

## Scholarly and Creative Awards and Honors

Travel Award to participate in the "Bioinformatics Summer Institute 2014" at the Pittsburgh Supercomputing Center (Funded by NIH-MARC), Univ of Pittsburgh and NIH-MARC. (2014).

ELITE Travel award for faculty development participation in bioinformatics workshop at UC Davis, TAMU-CC ELITE Program and UC-Davis. (2013).

Travel award for participation in "EU-US 2013 Bioinformatics Workshop" at Univ of DE, Univ of Delaware. (2013).

Faculty Development Leave, Fall Semester 2013; "Bioinformatics Training", TAMU-CC. (2013).

Sigma Xi Scientific Research Society, Sigma Xi. (2002).

Beta Beta Beta Biological Honor Society, Neta Beta Beta. (1996).

## SERVICE

### Department

Faculty Hearing Committee.

Genomics Core Facility Advisory Committee. (2013 - Present).

Committee Member, Ad Hoc LSCI Core Facility Advisory Committee. (November 2012 - Present).

Manager, Manage multi-user instruments: DNA Sequencer, Typhoon Imager, Bioinformatics Server, 12 Laptop Computers. (2005 - Present).

Promotion & Tenure/3-Yr Review Committee. (2004 - Present).

Special Assignment, Development of 5 Yr BS-MS Degree Program. (2015 - 2016).

Environmental Health and Safety Committee. (2011 - 2016).

Committee Member, Botanist Search Committee. (2015).

Faculty Advisor, Research & Design Course Proposal Review Panel. (2015).

Assistant MS Biology Program Coordinator, Assistant MS Biology Program Coordinator. (2014 - 2015).

Committee Chair, LSCI Graduate Committee. (2009 - 2012).

Committee Member, Advisory Committee for DelMar Collge Biotechnology Program. (2007 - 2012).  
Outside Member, Mathematics Program Review Committee. (2008 - 2009).  
College of Science & Technology Library Committee. (2007 - 2009).  
Committee Member, Faculty Senate. (2007 - 2009).  
Intercollegiate Athletic Council. (2006 - 2008).  
Biomedical Faculty Search Committee. (2006 - 2007).  
Committee to Develop and obtain approval of Freshman Science Honors Curriculum. (2006 - 2007).  
LSCI Facilities and Equipment Committee. (2006 - 2007).  
University IACUC committee. (2005 - 2007).  
ESCI Graduate Admissions Committee. (2003 - 2006).  
Judge and Hospitality Committee, Coastal Bend Science Fair. (2001 - 2006).  
Committee Chair, Committee to write CMSS PhD Program Graduate Student Manual. (2004 - 2005).  
Department Mission and Goals Committee. (2003 - 2004).  
Recreational Sports Advisory Board. (2002 - 2004).  
Committee Chair, College Research Enhancement Committee. (2001 - 2004).  
Committee Chair, Biology Search Committee - Physiology Position. (2002 - 2003).  
Committee Chair, Marine Biology Search Committee. (2002 - 2003).

## College

Committee Member, Graduate Advisory Committe-MARB IDP. (2014 - 2016).  
Faculty Advisor, Honors Project Committee - Dustin Smith (Engineering). (2015).

## University

Faculty Mentor, Co-Advisor to New Environmental Green Team Student Group. (April 2016 - Present).  
University Senate Service, Faculty Senate-Executive Committee. (2015 - 2016).  
Committee Member, Environmental Health and Safety Committee. (2014 - 2016).  
University Senate Service, Faculty Senate. (2014 - 2016).  
University Senate Service, Faculty Senate-ABE Committee. (2014 - 2016).  
Faculty Advisor, Advisor to Botany Club. (2015).  
Momentum 2020 Committee for Sustainability. (August 2014 - June 2015).

## Professional

Reviewer, Grant Proposal, Texas Academy of Science Student Research Grants Program. (2014 - Present).  
Board of Advisors of a Company, Del Mar College, Biotechnology Degree and Certificate Programs Advisory Board. (2010 - Present).  
Reviewer, Ad Hoc Reviewer, Del Mar College, Biotechnology Degree and Certificate Programs. (2015).  
Reviewer, Journal Article, Journal: Bioprocess and Biosystems Engineering. (2015).

## Public

Partnered with USFWS to Attract Pollinators, Community Gardening - Pollinator Partnership w/ USFWS. (2015 - Present).  
Initiated & maintain garden at Bill Witt Park, Community Gardening. (2009 - Present).  
Tapper, KEDT-TV/Radio Classic Brew. (2009 - Present).  
Corker, KEDT-TV/Radio Food & Wine Classic. (2009 - Present).

Volunteer, KEDT-TV/Radio Pledge Drives. (2003 - Present).