

Dr. Eugene J. Billiot

Texas A&M University-Corpus Christi
Science & Engineering, Physical & Environmental Sciences
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Education

St. Joseph Seminary College.

PhD, Louisiana State University, 1998.

BS, Nicholls State University, 1992.

Professional Employment

Research Assistant, Teaching Assistant, Postdoctoral Research Associate, Louisiana State University.

Teaching assistant one semester for CHEM 4552. Responsibilities included repairing and installing donated equipment for the teaching lab.

Teaching assistant for CHEM 2002. Responsibilities included supervising and helping the students with their experiments, grading lab reports, tutoring students and maintaining equipment and supplies.

Research Assistant and Postdoctoral Research Associate under Dr. I. M. Warner. Main focus of research is the development, synthesis, characterization, and utilization of novel pseudo-stationary phases for chiral separations in capillary electrophoresis.

Research Assistant, Nicholls State University.

Two years undergraduate researcher working on two projects. The first project involved investigating the effect of water treatment (chlorination) on the formation of certain known halogenated carcinogens. Also tested the drinking water of certain areas in Louisiana and surrounding states for those same halogenated carcinogens. The second project involved the testing of mother's milk for the presence of certain carcinogens and trying to correlate this to their diet, environment, drinking water, and smoking habits.

Assistant Environmental Laboratory Manager, Marine Shale Processors, Inc. (MSP). (October 1988 - 1995).

Supervised a staff of ~ 20 chemists and laboratory technicians in analysis and characterization of hazardous waste. Used EPA SW-846 second and third editions. Performed NPDES analyses of plant effluents using EPA 600 methodology. Assisted in the QA/QC for the production of vitrified aggregate using Method 1311 in SW-846, the TCLP procedure, and digestion of extracts by Method 6010 for seven of the eight T.C. metals. Analyzed mercury by Methods 7470 and 7471.

Supervised the "fingerprint" laboratory, where samples of incoming hazardous waste were analyzed for BTU, ash, acid scrub, and halogen content. Characterized incoming samples for ignitability, corrosivity, and reactivity. Provided support for operations, technical, and sales staffs. Familiar with RCRA, CWA, and OSHA as each applies to the laboratory.

Established MSP's Organic Lab, from selecting all necessary equipment to developing and implementing a QA/QC program. This included the installation of a Hewlett Packard GC (5890)/MS(5970) and the establishment of detection limits, as well as proving the precision and accuracy of the method and training laboratory technicians in the preparation of samples. Principal operator of GC/MS. Trainer and backup operator for Thermo Jarrell Ash ICAP 61E, Perkin Elmer 40 ICAP, and GBC 902 AA with a GBC 2000 Graphite Furnace.

Administrative Appointments

Department

Program Coordinator (2008 - 2016)

Coordinate scheduling and other activities for the chemistry program.

Professional Memberships

American Chemical Society

Council of Undergraduate Researchers

Registered Member of the United Houma Indian Tribe

Society for the Advancement of Chicanos and Native Americans in Science

TEACHING

Teaching Experience

CHEM 1111, GENERAL CHEMISTRY LAB I
CHEM 1112, GENERAL CHEMISTRY LAB II
CHEM 1305, INTRODUCTORY CHEMISTRY
CHEM 3418, INSTRUMENTAL ANALYSIS
CHEM 4696, Computational Approach to Chiral Selection
ESCI 4498, INTERNSHIP IN ENVIRO SCIECE
ESCI 5397, DIRECTED RESEARCH
ESCI 5940, PROJECT RESEARCH.

SCHOLARLY AND CREATIVE ACTIVITIES

Publications

Refereed

Journal Articles

Lewis, C., Hughes, B., Vasquez, M., Wall, A., Northrup, V., Witzleb, T., Billiot, E. J., Billiot, F. H., Fang, Y., Morris, K. (2016). Effect of pH on the Binding of Sodium, Lysine, and Arginine Counterions to l-Undecyl Leucinate Micelles. *Journal of Surfactants and Detergent*, 19(6), 1175-1188.

Morris, K. F., Billiot, E. J., Billiot, F. H., Hoffman, C. B., Gladis, A. A., Lipkowitz, K. B., Southerland, W. M., Fang, Y. (2015). Molecular Dynamics Simulation and NMR Investigation of the Association of the β -Blockers Atenolol and Propranolol with a Chiral Molecular Micelle. *Chemical Physics*.

Morris, K. F., Billiot, F. H., Billiot, E. J., Lipkowitz, K., Southerland, W., Fang, Y. (2013). A Molecular Dynamics Simulation Study of Two Dipeptide Based Molecular Micelles: Effect of Amino Acid Order. *Journal of Physical Chemistry*. www.scirp.org/journal/ojpc/

Morris, K. F., Billiot, F. H., Billiot, E. J., Lipkowitz, K., Southerland, W., Fang, Y. (2012). Investigation of Chiral Molecular Micelles by NMR Spectroscopy and Molecular Dynamics Simulation. *Journal of Physical Chemistry*. www.scirp.org/journal/ojpc/

- Billiot, E. J., Billiot, F. H., Warner, I. (2008). Optimization of 12 Chiral Analytes with 8 Polymeric Surfactants. *Journal of Chromatographic Science*, 46(9), 757-763.
- Wauhob, T. J., Nipper, M. G., Billiot, E. J. (2007). Seasonal variation in the toxicity of sediment-associated contaminants in Corpus Christi Bay, TX. *Marine Pollution Bulletin*, 54(8), 1116-1126.
- Billiot, F. H., Billiot, E. J., Ng, Y., Warner, I. M. (2006). Chiral Separation of Norlaudanosoline, Laudanosoline, Laudanisone, Chlorothalidone, and three Banzoin Derivatives Using Amino Acid Based Molecular Micelles. *Journal of Chromatographic Science*, 44(2), 64-69.
- Billiot, F. H., McCarroll, M. C., Billiot, E. J., Warner, I. M. (2004). Chiral recognition of binaphthyl derivatives using electrokinetic chromatography and steady-state fluorescence anisotropy: effect of temperature. *Electrophoresis*, 25(4-5), 753-757.
- Billiot, F. H., McCarroll, M. E., Billiot, E. J., Warner, I. M. (2004). Effect of Temperature on Chiral Recognition of Binaphthyl Derivatives in Electrokinetic Chromatography and Steady State Fluorescence Anisotropy. *Electrophoresis*, 25, 753-757.
- Thibodeaux, S. J., Billiot, E. J., Torres, E., Valle, B. C., Warner, I. M. (2003). Enantiomeric Separations using Polymeric L-glutamate Surfactant Derivatives: Effect of Increasing Steric Factors. *Electrophoresis*, 24(6), 1077-1082.
- Harrell, C. W., McCarroll, M. E., Morris, K. F., Billiot, E. J., Warner, I. M. (2003). Fluorescence and Nuclear Magnetic Resonance Spectroscopic Studies of the Effect of Polymerization Concentration on the Properties of an Amino Acid Based Polymeric Surfactant. *Langmuir*, 19(26), 10684-10691.
- Billiot, F. H., McCarroll, M. E., Billiot, E. J., Rugutt, J. K., Warner, I. M. (2002). Comparison of the Aggregation Behavior of 15 Polymeric and Monomeric Dipeptide Surfactants in Aqueous Solution. *Langmuir*, 18(8), 2993-2997.
- Billiot, F. H., Billiot, E. J., Warner, I. M. (2002). Depth of Penetration of Binaphthyl Derivatives into the Micellar Core of Sodium Undecanoyl Leucyl-Leucinate Surfactants. *J. Chrom. A*.
- Thibodeaux, S. J., Billiot, E. J., Warner, I. M. (2002). Enantiomeric Separations using Poly(-valine) and Poly(-leucine) Surfactants; Investigation of Steric Factors Near the Chiral Center. *Journal of Chromatography A*, 966(1-2, 9), 179-186.
- Billiot, F. H., Billiot, E. J., Warner, I. M. (2002). Site of Interaction of Binaphthyl Derivatives with Sodium N-undecanoyl leucyl-leucinate. *Chromatogr. A*, 2002, 950, 233.
- Billiot, F. H., Billiot, E. J., Warner, I. M. (2002). Site of Interaction of Binaphthyl Derivatives with Sodium N-undecanoyl leucyl-leucinate. *Chromatogr. A*, 2002, 950, 233.
- Billiot, F. H., McCarroll, M., Billiot, E. J., Rugutt, J. K., Morris, K., Warner, I. M. (2002). Study of the Fifteen Polymeric and Monomeric Dipeptide Surfactants in Aqueous Solution. *Langmuir*, 18(8), 2993-2997.
- Billiot, F. H., Billiot, E. J., Warner, I. M. (2001). Comparison of monomeric and polymeric amino acid based surfactants for chiral separations. *J. Chromatography A*, 922(1-2), 329-338.
- Haynes, J., Billiot, E. J., Yarabe, H. H., Shamsi, S. A., Warner, I. M. (2000). Chiral Separations with Dipeptide Terminated Polymeric Surfactants: The Effect of an Extra Heteroatom On the Polar Head Group. *Electrophoresis*, 21, 1597-1605.

Yarabe, H., Billiot, E. J., Warner, I. M. (2000). Enantiomeric Separations By Use Of Polymeric Surfactant Electrokinetic Chromatography. *Journal of Chromatography A*, 875, 179-206.

Billiot, E. J., Warner, I. M. (2000). Examination of Structural Changes of Polymeric Amino Acid-Based Surfactants on Enantioselectivity: Effect of Amino Acid Order, Steric Factors, and Number and Position of Chiral Centers. *Analytical Chemistry*, 72, 1740-1748.

Rugett, J. K., Billiot, E. J., Warner, I. M. (2000). NMR Study of Interaction of Monomeric and Polymeric Chiral Surfactants with (R)- and (S)- 1-1'-binaphthyl-2-2'-diyl hydrogen phosphate. *Langmuir*, 3022-3029.

Rugutt, J. K., Fronczek, F. R., Yarabe, H. H., Henry III, C. W., Billiot, E. J., Warner, I. M. (1999). A Racemic Strigol Analogue at 100K. *Acta Crystallographica, Section C. Cryst. Struct. Commun*, C55(5), 759-761.

Billiot, E. J., Agbaria, R., Thibodeaux, S. J., Shamsi, S. A., Warner, I. M. (1999). Amino Acid Order in Polymerized Dipeptide Surfactants: Effect on Physical Properties and Enantioselectivity. *Analytical Chemistry*, 71, 1252-1256.

Billiot, F. H., Billiot, E. J., Shamsi, S. A., Warner, I. M. (1999). Chiral Separations Using Polymeric Dipeptide Surfactants: Effect of Number of Chiral Centers and Steric Centers. *Journal of Chromatography*, 858, 219-227.

Billiot, F. H., Billiot, E. J., Shamsi, S. A., Warner, I. M. (1999). Effect of Steric Factors and Number of Stereogenic Centers on Chiral Recognition of Polymeric Dipeptide Surfactants. *J. Chromatog. A*, 858, 219.

Billiot, E. J., Thibodeaux, S. J., Macossay, J., Shamsi, S. A., Warner, I. M. (1998). Chiral Separations Using Dipeptide Polymerized Surfactants: Effect of Amino Acid Order. *Analytical Chemistry*, 70, 1375-1381.

Billiot, E. J., Thibodeaux, S. J., Shamsi, S. A., Warner, I. M. (1998). Evaluating Chiral Separation Interactions by Use of Diastereomeric Polymeric Dipeptide Surfactants. *Analytical Chemistry*, 71, 4044-4049.

Manuscripts

Morris, K., Billiot, E., Billiot, F. H., C. H., A. G. (2015). *Molecular dynamics simulation and NMR investigation of the association of the b-blockers atenolol and propranolol with a chiral molecular micelle* (vol. 457, pp. 133-146). Elsevier. www.elsevier.com/locate/chemphys

Morris, K. F., Billiot, E. J., Billiot, F. H., Garcia, A., Lipkowitz, K. B., Southerland, W. M., Fang, Y. (2014). *A molecular dynamics simulation study of the association of 1,1'-binaphthyl-2,2'-diyl hydrogenphosphate enantiomers with a chiral molecular micelle* (vol. 439, pp. 36-43). Chemical Physics.

Presentations

Lovato, D. (Author & Presenter), glesias, J. (Author), Turner, J. (Author), Billiot, E. J. (Author), Billiot, F. H. (Author), Buck, G. W. (Author), "Antibacterial Analysis of an Isoleucine Based Surfactant," 251 ACS National Meeting, American Chemical Society, San Diego. (March 13, 2016).

Vera, S. (Author & Presenter), Ramos, Z. (Author & Presenter), Billiot, E. J., Billiot, F. H., Lewis, C. (Author), Morris, K. (Author), "Effect of pH on Physical Properties of an Amphiphilic Leucine Valine Molecule," 251 ACS National Meeting, American Chemical Society, San Diego. (March 13, 2016).

Lewis, C. (Author), Billiot, E. J. (Author), Billiot, F. H. (Author), Morris, K. (Author), Fang, Y. (Author), "Investigation of Polymerized Molecular Micelle Formation With Molecular Modeling and NMR," 251 ACS National Meeting, American Chemical Society, San Diego. (March 13, 2016).

Ingle, J. (Author), Billiot, E. J. (Author), Billiot, F. H. (Author), Morris, K. (Author), Fang, Y. (Author), "Molecular Dynamics Simulation Study of the Binding of Chlorothalidone Enantiomers to a Chiral Molecular Micelle," 251 ACS National Meeting, American Chemical Society, San Diego. (March 13, 2016).

Wizleb, T. (Author), Billiot, E. J. (Author), Billiot, F. H. (Author), Morris, K. (Author), Fang, Y. (Author), "NMR Investigation of Micelle Formation by a Chiral Dipeptide Surfactants, 251 th ACS National, " 251 ACS National Meeting, American Chemical Society, San Diego. (March 13, 2016).

Hughes, 5.Burgoyne (Author), Billiot, E. J. (Author), Billiot, F. H. (Author), Morris, K. (Author), Fang, Y. (Author), "NMR Investigation of the Effect of pH on aggregation, Counterion binding, and Amide Proton Exchange in Amino Acid Based Surfactants," 251 ACS National Meeting, American Chemical Society, San Diego. (March 13, 2016).

Subniak, S. (Author & Presenter), Lewis, C. (Author), Georgiadis, J. (Author), Billiot, E. J. (Author), Billiot, F. H. (Author), Georgiadis, D. (Author), Morris, K. (Author), "Physical Properties of Mixed CTAB/Octyl-Valine based Surfactants," 251 ACS National Meeting, American Chemical Society, San Diego. (March 13, 2016).

Georgiadis, D., Billiot, F. H., Billiot, E. J., "Effect of pH on isocyanate amino acid based surfactants," 249 American Chemical Society, American Chemical Society, Denver Colorado. (March 20, 2015).

Hoffman, C., Billiot, E. J., Billiot, F., "Investigation of β -blocker association with a chiral molecular micelle by means of molecular dynamics simulations," 249 American Chemical Society, American Chemical Society, Denver Colorado. (March 20, 2015).

Lewis, C. (Author & Presenter), Billiot, F. H., Billiot, E. J., "NMR Investigation of the effect of pH on aggregation, counterion binding, and amide proton exchange in amino-acid-based surfactants," 249 American Chemical Society Meeting, American Chemical Society, Denver Colorado. (March 20, 2015).

Lewis, C. (Author & Presenter), Billiot, F. H., Billiot, E. J., "Investigation of the aggregation and amide proton exchange in monomeric amino-acid-based surfactants." (March 20, 2015).

Georgiadis, D. (Author & Presenter), Billiot, F. H., Billiot, E. J., Georgiadis, J., "Synthesis and Characterization of Isocyanate Amino Acid Based Surfactants," SACNAS 2014, Los Angeles California. (October 20, 2014).

Lewis, C. (Author & Presenter), Billiot, F. H., Billiot, E. J., Wall, A., Morris, K., "Effect of pH on Aggregation and Amide Proton Exchange in Amino-Acid-based Surfactants," 2014 UTSA College of Science Conference, UTSA, San Antonio, Texas. (October 4, 2014).

Billiot, E. J. (Author), Billiot, F. H. (Author), Morris, K. (Author), Lewis, C. (Author & Presenter), Heller, W. (Author), Turner, J., Vasquez, M., Apacible, S., "Characterization of Amino Acid Based Surfactants (effect of pH, and concentration)," 247th ACS National Meeting & Exposition, American Chemical Society, Dallas, TX. (March 16, 2014).

Billiot, E. J. (Author), Billiot, F. H. (Author), Morris, K. (Author), Fang, Y. (Author), Northrop, V. (Author & Presenter), "Investigation of chiral amino acid-based micelles by means of NMR spectroscopy," 247th ACS National Meeting & Exposition, American Chemical Society, Dallas, TX. (March 16, 2014).

Billiot, E. J. (Author), Flanigan, M. (Author & Presenter), Billiot, F. H. (Author), Morris, K. (Author), Fang, Y. (Author), "Molecular dynamics simulation study of β -blocker binding to a chiral molecular micelle," 247th ACS National Meeting & Exposition, American Chemical Society, Dallas, TX. (March 16, 2014).

Billiot, E. J. (Author), "NMR investigation of the effect of pH on the aggregation of an amino acid-based surfactant," 247th ACS National Meeting & Exposition, American Chemical Society, Dallas, TX. (March 16, 2014).

Billiot, E. J. (Author), Billiot, F. H. (Author & Presenter), Morris, K. (Author), Turner, J. (Author), Vasquez, M. (Author), Olson, M. A. (Author), "Effect of pH on Physical and Chemical Properties of Undecylenic and Undecanoic Amino Acid Based Surfactants," 2014 Pittsburgh Conference, Chicago, IL. (March 3, 2014).

Billiot, E. J. (Author), Billiot, F. H. (Leader), "pH and Physical properties of Amino Acid Based Surfactant," San Antonio, Texas. (September 2013).

Billiot, E. J. (Author & Presenter), "Understanding chiral recognition of amino acid based molecular micelles," 246th ACS National Meeting & Exposition, American Chemical Society, Indianapolis, IN. (September 8, 2013).

Billiot, E. J. (Author), Turner, J. (Author & Presenter), Vasquez, M. (Author), Apacible, S. (Author), Billiot, F. H. (Author), Morris, K. (Author), "Effect of pH on micellization of amino acid based surfactants," 245th ACS National Meeting & Exposition, American Chemical Society, New Orleans, LA. (April 7, 2013).

Morris, K. F. (Author), Billiot, E. J. (Author), Billiot, F. H. (Author), Lipkowitz, K. (Author), Fang, Y. (Author), Southerland, W., "Investigation of chiral molecular micelles by means of molecular dynamics simulation and NMR spectroscopy," 245th ACS National Meeting & Exposition, New Orleans, LA, American Chemical Society, New Orleans, LA. (April 7, 2013).

Billiot, F. H. (Author & Presenter), Billiot, E. J. (Author), Garza, M. (Author), Apacible, S. (Author), Right, A., Georgiadis, J., "Synthesis and Characterization of Branched Amino Acid Based Surfactants for the Separation of Chiral Compounds in Capillary Electrophoresis," 2012 Southeastern Regional Meeting, American Chemical Society, Raleigh, North Carolina. (November 17, 2012).

Billiot, F. H. (Author & Presenter), Billiot, E. J. (Author), Garza, M. (Author), Apacible, S. (Author), Right, A., Georgiadis, J., 2012 SACNAS. (October 17, 2012).

Billiot, F. H. (Author & Presenter), Billiot, E. J. (Author), Garza, M. (Author), Apacible, S. (Author), Right, A., Georgiadis, J., 2012 SACNAS. (October 17, 2012).

Villarreal, O. (Author & Presenter), Bortley, S. (Author), Garza, M. (Author), Kraiouchkine, N. (Author), Billiot, F. H. (Author), Billiot, E. J. (Author), "Synthesis Characterization and Utilization of Branched Amino Acid Based Surfactants as Pseudostationary Phases for the Enantiomeric Separation of Chiral Compounds with Capillary Electrophoresis," Penn State Summer Research Conference. (2009).

De Santos, J. L. (Author & Presenter), Clark, A. (Author), Corpus, C. (Author), Billiot, F. H. (Author), Billiot, E. J. (Author), "Effect of pH on physical properties of amino acid-based surfactants," ACS National Meeting, Salt Lake City, UT. (March 2009).

De Santos, J. L. (Author & Presenter), Van Dellan, M. (Author), Keeling, L. (Author), Garcia, A. (Author), Billiot, E. J., Billiot, F. H., "Synthesis and Characterization of "Branched" Amino Acid Based Surfactants," SACNAS National Conference. (2008).

Trevino, A. L. (Author & Presenter), Garza, G. (Author), Heinhold, J. (Author), Billiot, E. J., Billiot, F. H. (Author), "An examination of chiral interactions with amino acid based surfactants.," 231st ACS National Meeting, Atlanta, GA. (March 2006).

Garza, G. (Author & Presenter), Croft, M. (Author), Billiot, E. J. (Author), Billiot, F. H. (Author), "Characterization of amino acid based surfactants," 231st ACS National Meeting, Atlanta, GA. (March 2006).

Gonzales, C. (Author & Presenter), Arambide, G. (Author), Billiot, E. J. (Author), Billiot, F. H. (Author), "Development of a rapid, low cost, semiquantitative, ultratrace GC/MS method for endocrine disruptors.," 231st ACS National Meeting, Atlanta, GA. (March 2006).

Boyd, C. (Author & Presenter), Miles, C. (Author), Billiot, F. H. (Author), Billiot, E. J. (Author), "Examination of the distribution of heavy metals in sediment and water in south Texas.," 231st ACS National Meeting, Atlanta, GA. (March 2006).

Heinold, J. (Author & Presenter), Ping, J. (Author), Lipkowitz, K. (Author), Billiot, E. J. (Author), Billiot, F. H. (Author), "Molecular dynamics simulations of poly-(L,L) sodium undecyl valine-leucine and poly-(L,L) sodium undecyl leucine-valine in water.," 231st ACS National Meeting, Atlanta, GA. (March 2006).

Ping, J. (Author & Presenter), Lipkowitz, K. (Author), Billiot, E. J. (Author), Billiot, F. H. (Author), "Molecular dynamics simulations of poly-sodium undecyl (L,L)-alanine-leucine and poly-sodium undecyl (L,L)-leucine-alanine in water.," 231st ACS National Meeting, Atlanta, GA. (March 2006).

Trevino, A. L. (Author & Presenter), Watanabe, Y. (Author), Billiot, F. H. (Author), Billiot, E. J. (Author), "Development of a modified air sampling technique for the measurement of PAHs using a PUF/cyclodextrin sorbent," 229th ACS National Meeting, San Diego, CA. (March 2005).

Gonzales, C. M. (Author & Presenter), Swargam, S. (Author), Billiot, E. J. (Author), Billiot, F. H. (Author), "Qualitative analysis of endocrine disrupting chemicals (EDCs) in water bodies of southeastern parts of Texas using retention time locking technique (RTL) on GC/MS," 229th ACS National Meeting, San Diego, CA. (March 2005).

Olson, M. (Author & Presenter), Frost, M. (Author), Faybyshev, M. (Author), Billiot, E. J. (Author), Billiot, F. H., "Characterization and Comparison of the Physical Properties of a Novel Class of Branched Amino Acid Based Surfactants Versus Their Linear Counterparts," Council of Undergraduate Research Posters on the Hill. (April 2004).

Watanabe, Y. (Author & Presenter), Billiot, F. H. (Author), Billiot, E. J. (Author), "Investigation of Modified High Volume Air Sampling Technique for PAHs with Cyclodextrins," 227th ACS National Meeting, Anaheim, CA. (March 2004).

Olson, M. (Author & Presenter), Frost, M. (Author), Faybyshev, M. (Author), Billiot, E. J. (Author), Billiot, F. H. (Author), "Characterization of Novel Linear and Branched Amino Acid Based Surfactants Using Steady State Fluorescence Spectroscopy," Society for the Advancement of Chicanos and Native Americans in Science National Conference, 2003. (2003).

Lowry, R. (Author & Presenter), Lowe, R. (Author), Billiot, F. H. (Author), Billiot, E. J. (Author), "An Examination of the Interactions of Endocrine Disruptors with the Human Chorionic Growth using Fluorescence Spectroscopy," The University of Texas Medical Branch Undergraduate Research Symposium. (2003).

Olson, M. (Author & Presenter), Frost, M. (Author), Faybyshev, M. (Author), Billiot, E. J. (Author), Billiot, F. H. (Author), "Characterization of Novel Linear and Branched Amino Acid Based Surfactants Using Steady State Fluorescence Spectroscopy," 2nd South Texas American Chemical Society Research Symposium at Texas A&M-Kingsville. (November 21, 2003).

Lowry, R. J. (Author & Presenter), Billiot, F. H. (Author), Lowe, R. (Author), Billiot, E. J. (Author), "Examination of the Interactions of Endocrine Disruptors with the Human Chorionic Growth Hormone using Fluorescence Spectroscopy," 225th ACS National Meeting, New Orleans, LA. (March 2003).

Muniz, S. (Author & Presenter), Baker, A. (Author), Bokhary, S. (Author), Perkins, A. (Author), Moury, D. (Author), Billiot, F. H. (Author), Billiot, E. J. (Author), "Development of a Zebrafish Endocrine Disruption Bioassay," Sigma Xi Undergraduate Research Symposium, Galveston, TX. (2002).

Perez, J. (Author & Presenter), Quesnel, J. (Author), Guerrero, J. (Author), Billiot, F. H. (Author), Billiot, E. J. (Author), "Method Development of Quantitative and Qualitative Identification of Endocrine Disruptors in Environmental Samples," Society for the Advancement of Chicanos and Native Americans in Science National Conference. (2002).

Perkins, T. (Author & Presenter), Muniz, S. (Author), Moury, D. (Author), Billiot, F. H. (Author), Billiot, E. J. (Author), "The Development of Bioassays for Endocrine Disruptors Using Zebrafish," Society for the Advancement of Chicanos and Native Americans in Science National Conference. (2002).

Koekemoer, M. (Author & Presenter), Silvas, J. (Author), Quesnel, J. (Author), Landgraf, R. (Author), Billiot, F. H. (Author), Billiot, E. J. (Author), "Analysis of Endocrine Disruptor Chemicals in Sediment Samples along the Texas Gulf Coast.," Pittsburgh Conference in New Orleans Louisiana. (2001).

Silvas, J. (Author & Presenter), Quesnel, J. (Author), Koekemoer, M. (Author), Billiot, F. H. (Author), Billiot, E. J. (Author), "Endocrine Disruptors Found in Sediment Samples Along the Texas Gulf Coast and Rio Grande Regions," Regional American Chemical Society meeting in San Antonio. (2001).

Quesnel, J. (Author & Presenter), Silvas, J. (Author), Koekemoer, M. (Author), Billiot, F. H. (Author), Billiot, E. J. (Author), "Gas Chromatography/Mass Spectrometry Analysis of Endocrine Disruptor Chemicals Found in Sediment Samples along the Texas Gulf Coast.," Regional American Chemical Society meeting in San Antonio. (2001).

Perez, J. (Author & Presenter), Quesnel, J. (Author), Guerrero, J. (Author), Billiot, F. H. (Author), Billiot, E. J. (Author), "Method Development of Quantitative and Qualitative Identification of Endocrine Disruptors in Sediment Samples," The University of Texas Medical Branch Undergraduate Research Symposium. (2001).

Landgraf, R. (Author & Presenter), Koekemoer, M. (Author), Waldbeser, L. S. (Author), Billiot, F. H. (Author), Billiot, E. J. (Author), "Testing for Estrogenic Activity in the Environment via a Yeast Bioassay.," The University of Texas Medical Branch Undergraduate Research Symposium. (2001).

Koekemoer, M. (Author & Presenter), Billiot, E. J. (Author), Waldbeser, L. S. (Author), Silvas, J. E. (Author), Garmon, E. (Author), "Environmental endocrine disruptors in south Texas sediment samples.," 222nd ACS National Meeting, Chicago, IL. (August 2001).

Koekemoer, M. (Author & Presenter), Silvas, J. (Author), Quesnel, J. (Author), Landgraf, R. (Author), Waldbeser, L. S. (Author), Billiot, F. H. (Author), Billiot, E. J. (Author), "Endocrine Disruptors in South Texas Sediment Samples," American Chemical Society National meeting in Chicago, Illinois. (2000).

Yarabe, H. H. (Author & Presenter), Billiot, E. J. (Author), Rugutt, J. K. (Author), Shamsi, S. A. (Author), Warner, I. M. (Author), "Characterization of Two Polymerized Chiral Surfactants and Their Applications to Chiral Separation of Phenylthiohydantoin Amino Acids," ACS convention in Boston. (1998).

Billiot, E. J. (Author & Presenter), Thibodeaux, S. J. (Author), Shamsi, S. A. (Author), Warner, I. M. (Author), "Determination of Chiral Separation Interactions by Use of Diastereomeric Dipeptide Surfactants," ACS convention in Boston. (1998).

Harrell, C. W. (Author & Presenter), Billiot, E. J. (Author), Yarabe, H. M. (Author), Russo, P. S. (Author), Warner, I. M. (Author), "Synthesis, Characterization, and Application of Chiral Polymerized Surfactants and Dipeptides in Electrokinetic Capillary Chromatography," ACS convention in Boston. (1998).

Billiot, E. J. (Author & Presenter), Macossay, J. (Author), Shamsi, S. A. (Author), Warner, I. M. (Author), "Chiral Separations Using Dipeptide Polymerized Surfactants: Effect of Amino Acid Order," Pittsburgh Conference in Atlanta. (1997).

Yarabe, H. H. (Author & Presenter), Billiot, E. J. (Author), Rugutt, J. K. (Author), Shamsi, S. A. (Author), Warner, I. M. (Author), "Characterization of Two Polymerized Chiral Surfactants and Their Applications to Chiral Separation of Benzoin Derivatives," Pittsburgh Conference in New Orleans. (1997).

Billiot, E. J. (Author & Presenter), Macossay, J. (Author), Shamsi, S. A. (Author), Warner, I. M. (Author), "Effect of Amino Acid Order on Chiral Separations Using Dipeptide Surfactants," Pittsburgh Conference in New Orleans. (1997).

Haynes, J. L. (Author & Presenter), Billiot, E. J. (Author), Shamsi, S. A. (Author), Warner, I. M. (Author), "Understanding Chiral Separations with Polymeric Surfactants in Micellar Electrokinetic Chromatography: The Role of Chiral Centers in Enantiomeric Separation," Pittsburgh Conference in New Orleans. (1997).

Billiot, E. J. (Author & Presenter), Wang, J. (Author), Warner, I. M. (Author), "Improved Chiral Separation of Propranolol Using Achiral Modifiers in Cyclodextrin Modified Capillary Zone Electrophoresis," ACS convention in New Orleans. (1996).

Billiot, E. J. (Author & Presenter), Thibodeaux, S. (Author), Boussert, C. (Author), Warner, I. M. (Author), "Detection of NO₂ by Open Path FTIR During the Glassblowing Process," Symposium on the Art of Glassblowing, American Scientific Glassblowers Society Meeting. (1996).

Contracts, Grants and Sponsored Research

Grant

Billiot, Eugene J (Principal), Billiot, Fereshteh H (Co-Principal), Murgulet, Dorina (Co-Principal), Olson, Mark Anthony (Co-Principal), "Acquisition of a Capillary Electrophoresis Instrument for the

Enhancement of Research and Teaching at Texas A&M University-Corpus Christi," Sponsored by NSF, Federal, \$61,137.00. (September 15, 2016 - 2018).

Billiot, Fereshteh H (Principal), Larkin, Patrick D (Co-Principal), Billiot, Eugene J (Co-Principal), Causgrove, Tim P (Co-Principal), Silliman, James E (Co-Principal), Olson, Mark Anthony (Co-Principal), "Chemistry Department Grant," Sponsored by Welch Foundation, State, \$45,000.00. (June 1, 2016 - May 30, 2017).

Chopin, Suzzette Rita (Principal), Billiot, Eugene J (Co-Principal), Mott, Joanna Bridget (Co-Principal), Talley, Sharon P (Co-Principal), "Scholarships in Science, Technology, Engineering, and Science, Scholarships to Enhance Life Sciences (STELS)," Sponsored by NSF, Federal, \$600,000.00. (January 1, 2010 - December 31, 2015).

Billiot, Fereshteh H (Principal), Larkin, Patrick D (Co-Principal), Billiot, Eugene J (Co-Principal), Causgrove, Tim P (Co-Principal), Silliman, James E (Co-Principal), Olson, Mark Anthony (Co-Principal), "Chemistry Department Grant," Sponsored by Welch Foundation, State, \$35,000.00. (June 1, 2014 - May 30, 2015).

Billiot, Eugene J (Co-Principal), "NSF: Scholarships to Enhance Life Sciences (STELS)," Sponsored by National Science Foundation, Federal, \$600,000.00. (2009 - 2014).

Chopin, Suzzette Rita (Co-Principal), Billiot, Eugene J (Principal), "Scholarships to Enhance Physical Sciences," Sponsored by NSF, Federal, \$599,999.00. (September 2009 - August 2014).

Billiot, Fereshteh H (Principal), Larkin, Patrick D (Co-Principal), Billiot, Eugene J (Co-Principal), Causgrove, Tim P (Co-Principal), Silliman, James E (Co-Principal), Olson, Mark Anthony (Co-Principal), "Chemistry Department Grant," Sponsored by Welch Foundation, State, \$35,000.00. (June 1, 2013 - May 30, 2014).

Chopin, Suzzette Rita (Principal), Billiot, Eugene J (Co-Principal), Brouillard, Pamela J. (Co-Principal), Buck, Gregory W. (Co-Principal), Mehrubeoglu, Ruby (Co-Principal), Meyer, Pamela (Co-Principal), Olson, Mark Anthony (Co-Principal), leibowitz, julian (Co-Principal), jones, harlan (Co-Principal), jones, lovell (Co-Principal), niesel, david (Co-Principal), Jorgensen, Daniel J (Supporting), "Integrated Partnership for Education, Training and Mentoring to the Doctorate," Sponsored by NIH, Federal, \$218,687.00. (September 25, 2013 - March 31, 2014).

Billiot, Eugene J (Principal), "NSF: Scholarships to Enhance Physical Sciences (STEPS)," Sponsored by National Science Foundation, Federal, \$599,993.00. (2008 - 2013).

Billiot, Fereshteh H (Principal), Larkin, Patrick D (Co-Principal), Billiot, Eugene J (Co-Principal), Causgrove, Tim P (Co-Principal), Silliman, James E (Co-Principal), Olson, Mark Anthony (Co-Principal), "Chemistry Department Grant," Sponsored by Welch Foundation, State, \$35,000.00. (June 1, 2012 - May 30, 2013).

Billiot, Fereshteh H (Principal), Larkin, Patrick D (Co-Principal), Billiot, Eugene J (Co-Principal), Causgrove, Tim P (Co-Principal), Silliman, James E (Co-Principal), Olson, Mark Anthony (Co-Principal), "Chemistry Department Grant," Sponsored by Welch Foundation, State, \$35,000.00. (June 1, 2012 - May 30, 2013).

Larkin, Patrick D (Co-Principal), Billiot, Fereshteh H (Principal), Billiot, Eugene J (Co-Principal), Causgrove, Tim P (Co-Principal), Olson, Mark Anthony (Co-Principal), Silliman, James E (Co-Principal), "Chemistry Departmental Research Training Grant," Sponsored by Welch Foundation, State, \$25,000.00. (June 1, 2011 - May 31, 2012).

Larkin, Patrick D (Co-Principal), Billiot, Fereshteh H (Principal), Billiot, Eugene J (Co-Principal), Causgrove, Tim P (Co-Principal), Olson, Mark Anthony (Co-Principal), Silliman, James E (Co-

Principal), "Chemistry Departmental Research Training Grant," Sponsored by Welch Foundation, State, \$35,000.00. (June 1, 2011 - May 31, 2012).

Larkin, Patrick D (Co-Principal), Billiot, Eugene J (Principal), Billiot, Eugene J (Co-Principal), Causgrove, Tim P (Co-Principal), Silliman, James E (Co-Principal), "Chemistry Departmental Research Training Grant," Sponsored by Welch Foundation, State, \$25,000.00. (June 1, 2010 - May 31, 2011).

Chopin, Suzzette Rita (Principal), Billiot, Eugene J (Co-Principal), "Summer Undergraduate Research Focus (SURF): Anthropogenic Impacts on the Environment," Sponsored by NSF, Federal, \$448,575.00. (April 2005 - April 2011).

Billiot, Eugene J (Co-Principal), "Welch Foundation Departmental Grant," Sponsored by Welch Foundation, Private, \$75,000.00. (2010).

Billiot, Eugene J (Principal), "CAREER: An Integrated Program of Research Focused on Understanding Chiral Recognition of Branched Amino Acid Based Molecular Micelles, Mentorship, Outreach, and Faculty Development," Sponsored by National Science Foundation, Federal, \$400,000.00. (June 2005 - 2010).

Billiot, Eugene J (Co-Principal), "NSF-REU Site: Summer Undergraduate Research Focus: Anthropogenic Impacts on the Environment," Sponsored by National Science Foundation, Federal, \$220,862.00. (2005 - 2010).

Larkin, Patrick D (Co-Principal), Southard, Jack (Principal), Billiot, Eugene J (Co-Principal), Billiot, Fereshteh H (Co-Principal), Causgrove, Tim P (Co-Principal), Silliman, James E (Co-Principal), "Chemistry Departmental Research Training Grant," Sponsored by Welch Foundation, Private, \$75,000.00. (June 1, 2007 - May 31, 2010).

Billiot, Eugene J (Other), "NSF Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring (PAESMEM) for Suzzette Chopin," Sponsored by National Science Foundation, Federal, \$10,000.00. (2008).

Billiot, Eugene J (Co-Principal), "Welch Foundation Departmental Grant," Sponsored by Welch Foundation, Private, \$75,000.00. (2008).

Billiot, Eugene J (Principal), "MRI: Acquisition of a 300 MHz NMR for the Enhancement of Research/Teaching at Texas A&M University-Corpus Christi," Sponsored by National Science Foundation, Federal, \$223,418.00. (2006 - 2008).

Larkin, Patrick D (Co-Principal), Billiot, Eugene J (Principal), Billiot, Fereshteh H (Co-Principal), Causgrove, Tim P (Co-Principal), Silliman, James E (Co-Principal), "Acquisition of an AA Graphite Furnace and Microwave Digester for the Enhancement of Research/Teaching at Texas A&M University-Corpus Christi," Sponsored by National Science Foundation, Federal, \$98,643.00. (January 1, 2005 - December 31, 2008).

Billiot, Eugene J (Co-Principal), "UMEB: Building Undergraduate ENvironmental Opportunities (BUENO)," Sponsored by National Science Foundation, Federal, \$615,976.00. (2003 - 2008).

Billiot, Eugene J (Principal), "NSF Research Experience for Undergraduates Supplemental Request," Sponsored by National Science Foundation, Federal, \$24,800.00. (2006 - 2007).

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).

Larkin, Patrick D (Co-Principal), Billiot, Eugene J (Principal), Billiot, Fereshteh H (Co-Principal), Causgrove, Tim P (Co-Principal), Silliman, James E (Co-Principal), "Acquisition of a GC/MS for the Enhancement of Research at Texas A&M University-Corpus Christi," Sponsored by National Science Foundation, Federal, \$142,385.00. (January 1, 2004 - December 31, 2007).

Larkin, Patrick D (Principal), Billiot, Eugene J (Co-Principal), Billiot, Fereshteh H (Co-Principal), Causgrove, Tim P (Co-Principal), Silliman, James E (Co-Principal), Morvant, Mark M (Co-Principal), "Chemistry Departmental Research Training Grant," Sponsored by Welch Foundation, Private, \$75,000.00. (September 1, 2004 - August 31, 2007).

Billiot, Eugene J (Principal), "MRI/RUI: Acquisition of an AA Graphite Furnace and Microwave Digestor for the Enhancement of Research/Teaching at Texas A&M University-Corpus Christi," Sponsored by National Science Foundation, Federal, \$98,643.00. (2004 - 2006).

Billiot, Eugene J (Co-Principal), "NSF-REU Site: Summer Undergraduate Research Focus: Anthropogenic Impacts on the Environment," Sponsored by National Science Foundation, Federal, \$448,575.00. (2001 - 2006).

Billiot, Eugene J (Principal), "RUI/MRI: Acquisition of a GC/MS for the Enhancement of Research at Texas A&M University-Corpus Christi," Sponsored by National Science Foundation, Federal, \$142,385.00. (2003 - 2005).

Billiot, Eugene J (Principal), "Environmental Endocrine Disrupters in the Coastal Bend Area," Sponsored by Texas A&M University-Corpus Christi: Faculty Research Enhancement Award, Texas A&M University-Corpus Christi, \$9,452.00. (2004).

Billiot, Eugene J (Principal), "Use of Zebrafish as a Sentinel Species for the Prediction of Birth Defects Due to Endocrine Disruption," Sponsored by Texas A&M University-Corpus Christi: Faculty Research Enhancement Award, Texas A&M University-Corpus Christi, \$12,404.00. (2004).

Billiot, Eugene J (Co-Principal), "Welch Foundation Departmental Grant," Sponsored by Welch Foundation, Private, \$75,000.00. (2004).

Billiot, Eugene J (Principal), "Investigation of the Guest-Host Interactions of Solid Cyclodextrin with Gaseous PAHs: In Search of a Method to Analyze Atmospheric PAHs," Sponsored by Texas A&M University-Corpus Christi Faculty Research Enhancement Award, Texas A&M University-Corpus Christi, \$2,608.00. (2003 - 2004).

Billiot, Eugene J (Principal), "Development and Use of a GC/MS Ultratrace Screening Method for the Semiquantitative Analysis of Pesticides and Endocrine Disruptors," Sponsored by Texas A&M University-Corpus Christi Faculty Research Enhancement Award, Texas A&M University-Corpus Christi, \$9,049.00. (September 2004).

Larkin, Patrick D (Co-Principal), Morvant, Mark M (Principal), Billiot, Eugene J (Co-Principal), Billiot, Fereshteh H (Co-Principal), "Chemistry Departmental Research Training Grant," Sponsored by Welch Foundation, Private, \$75,000.00. (June 1, 2001 - August 31, 2004).

Billiot, Eugene J (Co-Principal), "Sensory and Chemical Assessment of Wild Harvest and Pond Raised Shrimp," Sponsored by The Gulf and South Atlantic Fisheries Foundation, Federal, \$30,000.00. (2002 - 2003).

Billiot, Eugene J (Co-Principal), "MRI: Acquisition of Instrumentation for the Chemical and Biological Characterization of Factors Affecting the Distribution and Phytoremediation of Seagrasses in Coastal South Texas," Sponsored by National Science Foundation, Federal, \$180,710.00. (2001 - 2002).

SERVICE

Department

Committee Chair, Faculty Core Curriculum Committee. (March 2013 - Present).
Faculty Senate. (January 2013 - 2014).

College

Committee Chair, FC3. (March 2013 - Present).
Committee Member, Faculty Seante. (January 2013 - Present).

University

Judge, Coastal Bend Science Fair.
Committee Member, Graduate Student Committees.
Student Recruiter, Island Days Student Recruitment.
Committee Member, McNair Advisory Committee.
Measurement Technologies Expert, Advisory Board of Corpus Christi Air Monitoring Project. (January 2010 - December 2016).
Committee Member, Faculty Core Curriculum Committee. (August 2013 - August 2016).
Program Coordinator, Chemistry Program. (January 2008 - December 2015).
Committee Member, Extramural Associates Research Development Award Advisory Board. (2014).
Science Judge, National Ocean Science Bowl. (2014).
Committee Member, University Core Curriculum Programs Resource Group. (March 2013 - 2014).
Committee Member, College Steering Committee. (2013).
Attendee, Representative for College of Science and Technology, Diversity in the Sciences Symposium hosted by the Howard Hughes Medical Institute (HHMI), NIH, Harvard University, University of Washington, and the University of Louisiana Monroe. (2012).
Committee Chair, Graduate Student Committees. (2012).
Task Force Chair, Student Engagement for Momentum 2015. (2010).
Committee Member, Faculty Renaissance Committee. (2003 - 2010).
Program Organizer, Summer Grant Writing Workshop for Faculty. (2007 - 2009).
Director, Faculty Renaissance Committee. (January 2008 - September 2009).
Attendee, Meeting, Institute of Higher Education Policy Summer Academy. (July 2007).
Committee Chair, Faculty Renaissance Committee. (2004 - 2005).
Guest Speaker, College of Nursing and Health Sciences Meeting. (September 2005).
Committee Chair Elect, Faculty Renaissance Committee. (2003 - 2004).

Professional

Member, NSF. (2015 - 2016).
Committee Member, Advisory Panels for NSF and NASA. (January 2014 - December 2014).
Committee Member, NSF Research Experiences for Undergraduates (REU) Leadership Group. (2010 - 2013).
Attendee, Meeting, Exploring Partnerships Between REU and LSAMP Workshop. (2012).

Guest Speaker and Facilitator, National Science Foundation's Alliance for Graduate Education and the Professoriate (AGEP) Conference. (December 2009).
Committee Member, Texas College Readiness Standards vertical team. (2006 - 2008).
Guest Speaker, Grant Writing Presentation- Texas A&M International. (October 2008).
Guest Speaker and Facilitator, Quality Education for Minorities Network Proposal Development Workshop. (October 2008).
Guest Speaker and Facilitator, Quality Education for Minorities Network Proposal Development Workshop. (March 2008).
Guest Speaker and Facilitator, Quality Education for Minorities Network Proposal Development Workshop. (February 2008).
Presenter, TAMU system NSF TTVN video conference. (2006 - 2007).
Guest Speaker, Quality Education for Minorities (QEM) Network Workshop for a joint NSF/NASA Conference. (February 2007).
Plenary Speaker, Quality Education for Minorities (QEM) Network Workshop. (February 2007).
Panelists, Texas A&M University System Junior Faculty Workshop. (2005 - 2006).
Panelist, Texas A&M University System Junior Faculty Symposium. (November 2006).
Panelist, Louis Stokes Alliance for Minority Participation in Science (LSAMP) Mini-Symposium. (September 2006).
Guest Speaker, Quality Education for Minorities Network Proposal Development Workshop. (October 2005).
Chair, American Chemical Society South Texas Chapter. (2003).
Chair Elect, American Chemical Society South Texas Chapter. (2002).

Consulting

For Profit Organization, BHP Engineering. (May 2014 - September 2014).

Public

Committee Member, City of Corpus Christi Oversight Committee.
Attendee, Meeting, Corpus Christi Community Environmental Workshop.
Measurement Technologies Expert, Advisory Board of Corpus Christi Air Monitoring Project. (2003 - Present).
Committee Member, Advisory Committee for the city of Corpus Christi. (2010 - 2016).
Guest Speaker, College Readiness Science Symposium. (February 2009).
Program Organizer, South Texas Chemistry Collaborative. (2005 - 2008).
Program Coordinator, Corpus Christi Regional College Readiness Standards Meeting. (November 2008).
Chairperson, Emerging Technologies for a Sustainable Environment. (October 2005).