

Michael Gregory Janech
Curriculum Vitae

Medical University of South Carolina
Division of Nephrology, Department of Medicine
96 Jonathan Lucas St. 829 CSB
Charleston, South Carolina 29425
Tel. 843.792.4123
Fax. 843.792.8399

Born: Rochester, Michigan
Citizenship: United States of America

Appointments

2010 – present Associate Professor – Medicine, Division of Nephrology
Medical University of South Carolina

2005 - 2010 Assistant Professor – Medicine, Division of Nephrology
Medical University of South Carolina

2005 - present Associate Director – Nephrology Proteomics Facility
Medical University of South Carolina

2005 - present Graduate Faculty
Medical University of South Carolina

2005 - present Graduate Faculty, Grice Marine Lab
College of Charleston, SC

2003 - 2005 NSF – International Research Fellow, IFREMER
University of Montpellier II, France

Education

Ph.D. 2003 Medical University of South Carolina, Charleston, SC
Molecular and Cellular Biology - Marine Biomedicine Track

M.S. 1998 College of Charleston, Charleston, SC
Marine Biology

B.S. 1994 Oakland University, Rochester, MI
Biology

Undergraduate, Graduate, Post-Doctoral Research Experience

2003 – 2005 NSF – International Research Fellow
University of Montpellier II, France
Sponsor: Evelyne Bachere, Ph.D.

Ontogeny of immune effector expression and discovery of genes by cDNA array involved in the acquisition of susceptibility to Vibrio penaeicida in post-larval Pacific blue shrimp (Station de St. Vincent, New Caledonia).

1998 - 2003 Doctoral Research
Medical University of South Carolina
Advisor: David W. Ploth, M.D.

Identification and regulation of facilitated urea transporters in the kidney of the euryhaline

elasmobranch, Dasyatis sabina.

2002 – 2003 Research Assistant
University of Nevada Las Vegas
Principal Investigator: James Raymond, Ph.D.
Investigation of ice active substances derived from Antarctic sea ice diatoms - McMurdo Station, Antarctica.

1995 - 1998 Masters Research
University of Charleston, SC
Advisor: Donald H. Miller, Ph.D.
*Measurements of renal excretory function in the euryhaline elasmobranch, *Dasyatis sabina*, following dilution and in fresh water.*

1993 - 1994 Senior Research Project
Oakland University, MI
Advisor: R. Douglas Hunter, Ph.D.
*Low temperature tolerance of the non-indigenous bivalve, *Corbicula fluminea*.*

Teaching Experience

2008-09 Proteomics Tools, SPCTR lecture, MUSC
2008-10 Systems biology, Proteomic Tools and Kidney Disease, MUSC
2007-10 Oral Exam preparation lecture, CofC
2006-10 Medicine/Nephrology Fellows Lecture, Transgenics, MUSC
2006 Cytology Graduate Lecture, Proteomics methods and concepts, MUSC
1997 – 1998 Graduate Teaching Assistant College of Charleston, SC Ecology Lab
(Biol 341)
1995 – 1996 Graduate Teaching and Outreach Program Assistant South Carolina
Department
of Natural Resources Marine Education Department.
1995 – 1997 Guest Lecturer Mason Prep Elementary, Introduction to Elasmobranch Biology
(Lecture and Lab).
1995 Graduate Teaching Assistant College of Charleston, SC Introductory
Biology Lab for Majors (Biol 112).

Publications

- 1. Janech, M.G.** and R.D. Hunter. 1995. *Corbicula fluminea* in a Michigan river: implications for low temperature tolerance. *Malacological Review*. vol. 28, p. 119-124.
- 2. Bagnasco, S.M., T. Peng, M.G. Janech, A. Karakashian, and J.M. Sands.** 2001. Cloning and characterization of the human urea transporter UT-A1 and mapping of the human Slc14a2 gene. *American Journal of Physiology - Renal Fluid & Electrolyte Physiology*. vol. 281(3), p. F400-406.
- 3. Janech, M.G., R. Chen, J. Klein, M.W. Nowak, W. McFee, R.V. Paul, W. R. Fitzgibbon, and D.W. Ploth.** 2002. Molecular and functional characterization of a urea transporter from the kidney of a short-finned pilot whale. *American Journal of Physiology - Regulatory, Integrative, and Comparative*. vol. 282, p. R1490-1500.
- 4. Janech, M.G., and P.M. Piermarini.** 2002. Urine flow rate and composition of the euryhaline elasmobranch, *Dasyatis sabina* from a freshwater lake. *Journal of Fish Biology*. vol. 61(4), p. 1053-1057

5. Cabrera, D. M., **M.G. Janech**, T.A. Morinelli and D.H. Miller. 2003. A thromboxane A₂ system in the Atlantic stingray, *Dasyatis sabina*. *General and Comparative Endocrinology*. vol. 130(2), p. 157-164.
6. **Janech, M.G.**, R. Chen, M.W. Nowak, D. Miller, R.V. Paul, W. R. Fitzgibbon, and D.W. Ploth. 2003. Molecular and functional characterization of a renal urea transporter from the euryhaline elasmobranch, *Dasyatis sabina*. *American Journal of Physiology – Renal Physiology*. vol. 284, p. F996-1005.
7. Raymond, J.A., and **M.G. Janech**. 2003. Cryoprotective property of diatom ice-active substance. *Cryobiology*. vol. 46(2), p. 203-204.
8. de Lorgeril, J., D. Saulnier, **M.G. Janech**, Y. Gueguen and E. Bachère. 2005. Identification of genes that are differentially expressed in hemocytes of the Pacific blue shrimp (*Litopenaeus stylirostris*) surviving an infection with *Vibrio penaeicida*. *Physiological Genomics* vol. 21, p. 174-183.
9. Gueguen Y., J. Garnier, L. Robert, J. de Lorgeril, **M. Janech**, E. Bachère, I. Mougenot, M-P. Lefranc, M. A. Barracco, P. Bulet, P. Gross, G. Warr, A. Tassanakajon, J. Xiang and B. Dong. 2006. PenBase, the shrimp antimicrobial peptide penaeidin database: sequence-based classification and recommended nomenclature. *Developmental & Comparative Immunology*, vol. 30(3), p. 283-288.
10. **Janech M.G.**, A. Krell, T. Mock, J-S Kang, J.A. Raymond. 2006. Ice binding proteins from sea-ice diatoms. *Journal of Phycology*, vol. 42, p. 410-416.
11. Bland, A.M., Louis R. D'Eugenio, Melissa A. Dugan, **Michael G. Janech**, Jonas S. Almeida, Michael Zile and John M. Arthur. 2006. Comparison of Variability Associated with Sample Preparation in Two-Dimensional Gel Electrophoresis of Cardiac Tissue. *Journal of Biomolecular techniques*, vol. 17, p.195 - 199.
12. **Janech, M.G.**, R. Chen, R.V. Paul, M.W. Nowak, D.H. Miller, D.W. Ploth and W.R. Fitzgibbon. 2006. A second urea transporter isoform (strUT-2) from the kidney of the euryhaline, Atlantic stingray, *Dasyatis sabina*. *American Journal of Physiology - Regulatory, Integrative, and Comparative*, vol. 291, p. R844 - R853.
13. **Janech, M.G.**, W. R. Fitzgibbon, D. Miller, E.R. Lacy, and D.W. Ploth. 2006. Effect of dilution on renal excretory function in the euryhaline elasmobranch, *Dasyatis sabina*. *American Journal of Physiology – Renal*, vol. 291, p. F770 - F780.
14. **Janech, M.G.**, J.R. Raymond, and J.M. Arthur. 2007. Proteomics in renal research. *American Journal of Physiology - Renal* vol. 292, p. F501 - F512.
15. Velez J.C., A.M. Bland., J.M. Arthur, J.R. Raymond, **M.G. Janech**. 2007. Characterization of Renin-Angiotensin-System Enzyme Activities in Cultured Mouse Podocytes *American Journal of Physiology-Renal*. vol. 293, p. F398-F407.
16. **Janech, M.G.** H.A. Gefroh, E.E. Cwengros, J.A. Sulikowski, D.W. Ploth and W.R. Fitzgibbon. 2008. Cloning of urea transporters from the kidneys of two batoid elasmobranchs: evidence for a common elasmobranch urea transporter isoform. *Marine Biology*, vol. 153(6), p. 1173-1179.
17. Arthur, J.M., **M.G. Janech**, S.A. Varghese and T.B Powell. 2008. Diagnostic and prognostic Biomarkers in acute renal failure. *Contrib. Nephrol.* 160, 53-64
18. Raymond, J.A., **M.G. Janech**, and C.H. Fritsen. 2009. Novel ice-binding proteins from a

psychrophilic Antarctic alga (Chlamydomonadaceae). *Journal of Phycology*. vol. 45(1), p. 130-136.

19. Raymond, J.A. and **M.G. Janech**. 2009. Ice-binding proteins from enoki and shiitake mushrooms. *Cryobiology*, vol. 58(2), p. 151-156.
20. Nazeer, K., **M. G. Janech**, J. J-C Lin, K. J. Ryan, J. M. Arthur, and M.N. Budisavljevic 2009. Changes in protein profiles during the course of experimental glomerulonephritis. *Am J Physiol Renal Physiol*, vol. 296, p.F186-F193.
21. Velez J.C., K.J. Ryan, C.E. Harbeson, C.L. Woodworth, A.M. Bland, M.N. Budisavljevic, J.M. Arthur, W.R. Fitzgibbon, J.R. Raymond, **M.G. Janech**. 2010. Angiotensin-1 is largely converted to angiotensin-(1-7) and angiotensin-(2-10) by isolated rat glomeruli. *Hypertension*, vol. 53, p. 790 - 797.
22. Bland AM, **MG Janech**, JS Almeida and JM Arthur. Sources of variability among replicate samples separated by two-dimensional gel electrophoresis *J. Biomol. Tech.* In Press.
23. Velez, JCQ and **MG Janech**. A case of lactic acidosis induced by linezolid and review of the literature. *Nature Reviews Nephrology*, vol. 6, p. 236-242
24. Varghese, SA, TB Powell, **MG Janech**, MN Budisavljevic, RC Stanislaus, JS Almeida, and JM Arthur. 2010. Identification of Diagnostic Urinary Biomarkers for Acute Kidney Injury. *J. Investigatory Medicine*, vol. 58, p. 612-620.

Chapters in Scholarly Books and Monographs:

Hunter, R.D., S.A. Toczykowski, and **M.G. Janech**. 1997. Zebra mussels in a small river: impact on unionids. In: *Zebra Mussels and Aquatic Nuisance Species*. (Ed) Frank M. D'Itri. Ann Arbor Press, Chelsea, MI. p. 161-186.

Non Peer-Reviewed Articles

1. Brooks BM, Sieg A, Budisavljevic M, and **M.G. Janech** 2007. A Case Study: Analysis of the Mitochondrial trna-ile Gene for a Mutation Linked to Renal Magnesium Wasting. *Ethnicity & Disease*: Vol. 17, No. sp5 pp. 14–15.
2. Brooks BM, JA. Raymond, **MG Janech**. 2008. Can Ice-binding proteins enhance survival of human embryonic kidney cells after freezing? *Ethnicity and Disease* – vol. 18, S1-17.

Referee for the Following Journals

American Journal of Physiology - Renal

American Journal of Medical Science

Marine Biotechnology

Journal of Fish Biology

American Zoologist

Developmental and Comparative Immunology

Proteomics – Clinical Applications

Neurochemistry International

Journal of Proteome Research

BBA – Proteomics

Grant Proposal Referee

- Ministero dell'Istruzione, dell'Università e della Ricerca Programma Nazionale di

Ricerche in Antartide, 2010.

National/Interantional Abstracts Presented (past year 2000)

Barbara R. Lyon, Peter A. Lee, Jennifer M. Stavovy, Alison Bland, Elizabeth Favre, Giacomo R. DiTullio and Michael G. Janech. Proteome Changes associated with Salinity Stress and DMSP Accumulation in *Fragilariopsis cylindrus*. Am. Soc. Limnology and Oceanography, Portland, Oregon, 2010.

JA. Ferrante, JM. Arthur, FM. Gulland, B Hill, J Almeida, and MG. Janech. Serum cytokines as predictors of domoic acid exposure in California sea lions, *Zalophus californianus*. Society of Marine Mammalogy Annual Meeting, Montreal, Canada, 2009.

MG Janech, E. Favre, JM Arthur, S. Steele, R. Reichert, L.M. Guay-Woodford, P.D. Bell. Cilia Movement Increases the Expression of Raf Kinase Inhibitor, a Protein that Suppresses Cell Proliferation. Am. Soc. Nephrology, San Diego, 2009.

MG Janech, EC. Lewis, JS Almeida, and John M. Arthur. Combinations of biomarkers Predict the Need for Renal Replacement Therapy in AKI. Am Soc. Nephrology, San Diego, 2009.

Ryan T. Kendall, Mi-Hye Lee, Hesham M. El-Shewy, Michael G. Janech, Deirdre K. Luttrell, Louis M. Luttrell. Biased agonism reveals new G protein-independent AT1a receptor signals. Am. Soc. of Biochemistry and Molecular Biology, 2009.

Velez JC, Morinelli TA, Walker LA, Bunni M, Arthur JM, Raymond JR, Ullian ME, Janech MG. Angiotensin-(2-10) is Actively Formed by Glomerular Cells and Signals Through the AT1a Receptor. American Society of Nephrology, Philadelphia, 2008.

Lewis EC, TP Taylor, M Mataria, JC Oates, JM Arthur, MG Janech. Urine Composition Alters the Measurement of Urinary Cytokine Concentrations. American Society of Nephrology, Philadelphia, 2008.

Mataria M, A Bland, MG Janech, JM Arthur. Variability of Individual Urine Proteins Associated with Blood Pressure and Medication Differences in Diabetic Nephropathy. American Society of Nephrology, Philadelphia, 2008.

Lewis EC, M Mataria, MN Budisavljevic, TP Taylor, MG Janech, JM Arthur. NGAL, NAG and Urine Cystatin C Predict the Future Requirement for Renal Replacement Therapy in Patients with Acute Kidney Injury. American Society of Nephrology, Philadelphia, 2008.

Janech, MG, A Bland, T Taylor, JM Arthur. Reproducibility of Proteominer® Columns for Depleting High Abundance Urine Proteins. NHLBI Proteomics Meeting, Chraleston, SC. 2008.

J. Raymond, **M. Janech**, C. Fritsen. Novel ice-binding proteins from a psychrophilic Antarctic alga (Chlamydomonadaceae). Scientific Committee on Antarctic Research / International Arctic Science Committee, St. Petersburg, Russia, 2008

Kendall RT, M-H Lee, HM El-Shewy, **MG Janech**, DK Luttrell, LM Luttrell. Activation of G Protein-independent Angiotensin AT1a Receptor Signaling Pathways Elicits a Distinct Protein Phosphorylation Profile. Endocrine Society Annual Meeting, 2008.

- Velez JC, Ryan K, Bland A, Budisavljevic MN, Fitzgibbon WR, Raymond JR, Arthur, JA, **Janech MG**. Generation of Angiotensin-(1-7) and Angiotensin-(2-10) in Intact Rat Glomeruli Analyzed by MALDI-TOF MS. American Heart Association. 62nd High Blood Pressure Research Conference 2008.
- A. Dempsey, E. Lacy, **M. Janech**, D. Miller, D. Ploth, and W. Fitzgibbon. Localization of Facilitated Urea Transporters to Tubular Segments in the Bundle and Sinus Zones of the Kidney of the Euryhaline Stingray, *Dasyatis sabina*. FASEB, 2008.
- J.C.Q. Velez, J.M. Arthur, A. Bland, M. Budisavljevic, W.R. Fitzgibbon, Z. Amani, J.R. Raymond, and **M.G. Janech**. Angiotensin metabolite formation identified by mass spectrometry in isolated glomeruli. American Society of Nephrology, San Francisco, CA. 2007.
- M. Budisavljevic, J.C.Q. Velez, J.M. Arthur, and **M.G. Janech**. Differences in neprilysin, ACE, and renin expression in isolated glomeruli from anti-THY-1 treated rats. American Society of Nephrology, San Francisco, CA. 2007.
- T.B. Powell, J.A. Tumlin, M.Gupta, **M.G. Janech**, J.S. Almeida, and J.M. Arthur. Multiplexed Measurement of Urine Cytokines Predicts the Need for Renal Replacement Therapy (RRT) in Acute Renal Failure. American Society of Nephrology, San Francisco, CA. 2007.
- A. Dempsey, ER Lacy, **M.G. Janech**, D. Miller, D.W. Ploth, and W.R. Fitzgibbon, Localization of facilitated urea transporters to tubular segments in the bundle zone and sinus zones of the kidney of the Euryhaline stingray, *Dasyatis sabina*. American Society of Ichthyology and Herpetology, St. Louis, MO, 2007.
- J.C.Q Velez, A.M. Bland, J.R. Raymond, **M.G. Janech**. Differential pattern of peptide generation from angiotensin substrates in resident glomerular cells. American Society of Nephrology, San Diego, CA. 2006.
- M.N. Budisavljevic, **M.G. Janech**, W.R. Fitzgibbon, A.M. Bland, M. Dugan, J.M.Arthur. Differences in protein expression between sieved and pipette isolated glomeruli. American Society of Nephrology, San Diego, CA. 2006.
- T. Powell, T.P. Taylor, **M.G. Janech**, J.M. Arthur. Changes in the apparent urine proteome with repeated freeze-thaw cycles. American Society of Nephrology, San Diego, CA. 2006.
- M.G. Janech**, L. D'eugenio, A.Bland, M. Dugan, J.M. Arthur. A novel technique for the depletion of high abundance proteins from cardiac tissue using oil. World Human Proteome Meeting, Long Beach, CA. 2006.
- J. deLongeril, **M. Janech**, C. Goarant, E. Goayard, B. Dong, J. Xiang, A. Tassanakajon, K Somboonwiwat, E. Bachere, and D. Piquemal. Analyse of immune gene expression in shrimps: a tool for health monitoring or genetic selection. Aquaculture Europe – Biotechnologies for Quality, Spain, 2004.
- M.G Janech**, E. Cwengros, H. Gefroh, M.W. Nowak, D.H. Miller, D.W. Ploth, and W.R. Fitzgibbon. Identification of urea transporter isoforms in the elasmobranch kidney. International Congress on Fish Biology, Vancouver, Canada, 2002.
- M.G. Janech**, R. Chen, R.V. Paul, M.W. Nowak, D.H. Miller, D.W. Ploth and W.R. Fitzgibbon. A second urea transporter isoform (strUT-2) from the kidney of the

euryhaline, Atlantic stingray, *Dasyatis sabina*. International Union of Physiological Sciences, Christchurch, New Zealand, 2001.

W.R. Fitzgibbon, H. Gefroh, **M.G. Janech**, J. Sulikowski, and D.W. Ploth. Identification of a putative urea transporter (skUT) from the kidney of the winter skate, *Leucoraja ocellata*. International Union of Physiological Sciences, Christchurch, New Zealand, 2001.

M.G. Janech, R. Chen, R.V. Paul, M.W. Nowak, D.H. Miller, D.W. Ploth and W.R. Fitzgibbon. Identification of a putative urea transporter in the euryhaline stingray, *Dasyatis sabina*. *FASEB Abstracts*, 2000.

M.G. Janech, R. Chen, R.V. Paul, D.W. Ploth and W. McFee. Cloning of a putative renal urea transporter in the pilot whale, *Globicephala macrorhynchus*. *FASEB Abstracts*, 2000.

M.G. Janech, R. Chen, R.V. Paul, M.W. Nowak, D.H. Miller, D.W. Ploth and W.R. Fitzgibbon. A putative renal urea transporter cloned from the euryhaline stingray, *Dasyatis sabina*. American Society of Ichthyologists and Herpetologists, 2000.

Honors

Antarctic Service Medal (2006)

Distinguished Graduate Student Award – Medical University of South Carolina (2004)

Council of Southern Graduate Schools, Outstanding Masters Thesis Award (2000)

American Elasmobranch Society - Carrier Award (best student poster, 2000)

American Physiological Society Caroline tum Suden Student Research Award (1998)

University of Charleston Outstanding Graduate Student Award (1998)

American Federation of Medical Research Student Research Award (1998)

Golden Key National Honor Society (1993-94)

Oakland University Dean's List (1991-1994)

Grants

Office of Naval Research, Identification and Validation of Plasma Biomarkers in California Sea Lions. PI. (2010-2013, \$739,883).

National Science Foudation. A proteomic approach to biogenic sulfur production in sea-ice algae. PI (2008-2011; \$283,000)

NephCure Foundation Young Investigator Award. Discovery of Urine Biomarkers in patients with Glomerular Disease. PI. (2008-2011; \$299,199)

Dept. of Veterans Affairs Career Development Award (CDA-2). Discovery of Urine Biomarkers in patients with Glomerular Disease. PI. (2008-2011; \$297,500)

Office of Naval Research, N000140810341, Identification and Validation of Plasma Biomarkers in California Sea Lions. PI. (2008-2010; \$99,600)

NSF International Research Fellowship, Ontogeny of Immune Gene Expression in Juvenile Shrimp. University of Montpellier II, France (2003-2005; \$107,000)

Deans Fellowship (1998 - 2000), MUSC

Society of Integrative and Comparative Biology Student Research Grant (1999)

Joanna Deep Water Fellowship (1997)

Slocum Lunz Research Grant (1995 & 1996)

Sigma Xi Grant-In-Aid of Research (1995 & 1999)

Travel Awards

International Congress on Fish Biology (2002)

International Union of Physiological Sciences Travel Award (2001)

American Elasmobranch Society Student Travel Award (1997, 2000)
Society of Integrative and Comparative Biology Travel Award (1998)

Professional Memberships

American Elasmobranch Society (since 1996)
American Physiological Society (since 1998)
Human Proteome Organization (HUPO) (since 2006)

Student Thesis/Dissertation Committees

Jillian Lynch – MUSC, Ph.D. candidate
Nikole Kimes – MUSC, Ph.D candidate
Jason Ferrante (major advisor) - College of Charleston, M.S. candidate
Amanda Mclenon - College of Charleston, M.S. candidate – graduated 2010
Juliana Miller - College of Charleston, M.S. candidate – graduated 2009
Adair Dempsey - College of Charleston, M.S. candidate – graduated 2009
Barbara Lyon - MUSC, Ph.D. student
Stephanie Brunell - MUSC, Ph.D. student
Eileen Roy - College of Charleston, M.S. candidate.- graduated 2007.

Mentored Highschool/Undergraduate summer students

Adam Sieg - Charleston Southern University - 2006
Brittany M. Brooks – NIH/NHSSSRAP – Burke High School - 2006, First Place Award.
Brittany M. Brooks – NIH/NHSSSRAP – Burke High School – 2007, First Place Award,
First Place Award (Vanderbilt University Student Research Day), First
Place Award (MUSC Student Research Day)

Invited Seminars

“Proteomics: Medical and Diagnostic Applications”. Navy Marine Mammal Program /ONR
Clinical Research Workshop, Hubbs-Sea World Research Institute, March 2010.

“Evolution of Ice-binding proteins in sea-ice diatoms”. Department of Public Health Seminar
Series, University of South Carolina. 2009.

“Ice binding proteins in sea-ice diatoms”. Departmental Seminar Series, College of
Charleston, SC – 2007.

“Ice binding proteins and Antarctic diatoms”. Sage Hill High School, CA - 2006

“Joys and pitfalls of an international post-doc”. Medical University of South Carolina,
Student Research Day Career Workshop – November 2005.

“Searching for Candidate Genes in Shrimp Post-larvae: Why are late post-larval shrimp
susceptible to *Vibrio penaeicida*?” University of Montpellier II, France – Population
Genetics Equipe – February 2005.

“Navigating Graduate School” Liz Chesterman annual seminar - Medical University of
South Carolina. August 2004.

“Immune Gene Expression in Post-larval Shrimp; a Proposal for the Discovery of Novel
Susceptibility Factors in *L. stylirostris*”. Station de St. Vincent, IFREMER, New Caledonia -
February 2004

“Molecular Characterization of Urea Transporter Isoforms Identified from the Kidney of a Euryhaline Elasmobranch”. University of Montpellier II, France - September 2003

“Molecular Characterization of Urea Transporter Isoforms Identified from the Kidney of a Euryhaline Elasmobranch”. Symposium *Metabolism and Transport of Xenobiotic and Endogenous Molecules*, MUSC, Charleston, SC - May 2003

“Urea Transporters in Elasmobranchs” Marine Resources Research Institute, Fort Johnson Seminar Series, Charleston, SC - September 2002

“Skates and Rays” South Carolina Aquarium, Charleston, SC - September 2000

Service Memberships

Ft. Johnson Seminar committee, MUSC, 2007 - present

MBES Student Research Open House seminar committee (2007-2008)

Marine Biology Council, Grice Marine Lab, CofC, (2006 - 2009)

Nomination Committee, Grice Marine Lab (2005 - 2006)

Marine Biology Graduate Student Association CofC [MBGSA] (1995 -1998)

MBGSA CofC, Charleston, SC. Vice President (1996)

Drayton Plains Nature Center, Waterford, MI (1991 - 1997)

Board of Trustees (1991-1994), Executive Committee (1992 - 1994)

Clinton River Watershed Council, Rochester, MI (1991 - 1994) Volunteer Site Coordinator.

Synergistic Activities

POPSICLE – HS teacher polar outreach coordinator - 2009

Sigma Xi student research day judge, 2006, 2009

Guest Speaker Sage Hill High School, CA, Biology class 2006.

MUSC student research day judge, 2005,2006

Guest speaker Academic Magnet High School, North Charleston, SC 2003.

Consultant: “Rays”, Sally Walker, Carolrhoda books, Minneapolis

Savannah Christian prep science judge, Savannah, GA 2002.

Regional High School science fair judge, Charleston, SC 1999.

Buist Middle School science fair judge, Charleston, SC 1996.

Adopt-A-Highway Volunteer

Specialty Courses Completed

ThermoFisher Scientific – LTQ Biotech Operations Course - 2008

Institute of Systems Biology - Proteomics Informatics Course - 2006

Johns Hopkins - Difference Gel Electrophoresis Course - 2005

Univ. of Louisville - Kentucky Proteomics Training Program - 2005