

Dr. Joe M. Fox

Texas A&M University-Corpus Christi
Science & Engineering, Life Sciences

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Education

PhD, Texas A&M University-College Station, 1992.

BS, Texas State University, 1978.

Professional Employment

Chair, Dept. of Life Sciences, Texas A&M University-Corpus Christi. (December 2011 - Present).
Management of department, representative of faculty to Dean, serve at pleasure of Dean

Professor (tenured), Texas A&M University-Corpus Christi. (2006 - Present).
Professor (tenured) in Department of Life Sciences

Adjunct graduate faculty member, Dept. of Wildlife and Fisheries Sciences, Texas A&M University-College Station. (2004 - Present).
Membership, graduate PhD committees

Research Associate, Harte Research Institute for Gulf of Mexico Studies. (1996 - Present).
Research in the area of aquatic animal nutrition, fisheries, physiology of aquatic organisms, disease and parasitology

Interim Chair, Department of Life Sciences, Texas A&M University-Corpus Christi. (August 2011 - December 2011).
Management of department, faculty representative to the Dean

Associate Professor, Texas A&M University-Corpus Christi. (August 1998 - 2006).
Lecture professor, research, graduate student committees, various service to university

visiting graduate faculty, Texas A&M University-Kingsville. (2003 - 2005).
Membership, one graduate committee

Technical Advisor, Sahlman Seafoods, Inc. (1996 - 1998).
Technical advisor and manager for shrimp farming and processing operations in Nicaragua.
Oversaw daily operations, technical issues, project development.

Technical director, Ladex, Inc. (1989 - 1996).
Advisor to the company in terms of shrimp farming and seafood operations in Guatemala.
Operation of seafood processing plants, farms, hatchery, feed mill.

technical director, Water Management, Inc., Pte. Ltd. (1987 - 1989).
Development of water treatment/production systems for aquaculture applications.

project submanager, Development Alternatives, Inc. (1985 - 1987).
Managed project to develop shrimp farming industry in Central Java, Indonesia. Involved hatchery construction, feed manufacture, pond construction, training

Research Associate, Texas Agriculture Experiment Station. (January 1981 - 1982).
In charge of NMFS shrimp hatchery in Galveston. Overview of all activities, design of research, training, etc.

technician, University of Texas Marine Science Institute. (January 1979 - December 1979).
algae culture in U.S. Virgin Islands for aquaculture research project

Administrative Appointments

Department

Department Chairperson (2011 - Present)
Management of Department of Life Sciences, represent faculty to Dean, serve at pleasure of Dean

College

PhD faculty, MARB (2006 - Present)
Mentor graduate students

PhD faculty, CMSS (2003 - Present)
Mentor students in programs, classes, committee service

Professional Memberships

The Nature Conservancy
World Aquaculture Society
Aquacultural Engineering

TEACHING

Teaching Experience

BIOL 4396, DIS: Potential for Development of Algae Biofuels in the Corpus Christi Area
BIOL 5102, GRADUATE DEFENSE SEMINAR
BIOL 5392, THESIS PROPOSAL
BIOL 5393, THESIS RESEARCH
BIOL 5394, THESIS SUBMISSION
BIOL 5940, PROJECT RESEARCH
FAMA 5102, GRADUATE DEFENSE SEMINAR
FAMA 5314, AQUATIC ANIMAL NUTRITION
FAMA 5322, AQUACULTURE BUSINESS PLANNING
FAMA 5392, THESIS PROPOSAL
FAMA 5393, THESIS RESEARCH
FAMA 5394, THESIS SUBMISSION
FAMA 5397, PROFESSIONAL PAPER SUBMISSION
FAMA 5398, INTERNSHIP
FAMA 5399, MARICULTURE RESEARCH
FAMA 5432, AQUATIC SYSTEM DESIGN
FAMA 5596, DIS: Aquatic Animal Nutrition
FAMA 5940, PROJECT RESEARCH
MARB 6392, DISSERTATION PROPOSAL
MARB 6393, DISSERTATION RESEARCH
MARB 6394, DISSERTATION SUBMISSION
MARB 6596, DIS: APPLICATION OF GIS IN ECOSYSTEM SERVICES
MARB 6940, DISSERTATION PROJECT RESEARCH
MARI 5102, GRADUATE RESEARCH SEMINAR

MARI 5314, AQUATIC ANIMAL NUTRITION
MARI 5322, AQUACULTURE ECONOMICS
MARI 5398, INTERNSHIP
MARI 5399, MARICULTURE RESEARCH
MARI 5421, CHEMISTRY OF NATURAL WATERS
MARI 5432, AQUATIC SYSTEM DESIGN
MARI 5596, DIRECTED IND STUDY: An examination of Amino Acid Profiles of Enriched Rotifers and Artemia

SCHOLARLY AND CREATIVE ACTIVITIES

Presentations

Scarpa, J. (Author & Presenter), Fox, J. M. (Author), Balboa, W. (Author), "Potential for Oyster Culture in Texas," Aquaculture 2016, World Aquaculture Society, National Shellfisheries Association, American Fisheries Society - Fish Culture Section, Las Vegas, NV. (February 26, 2016).

Fox, J. M., "Summary of research potential at TAMUCC," Meeting of the Gulf Coast Marine Life Center, Gulf Coast Marine Life Center, Destin, Florida. (November 12, 2013).

Fox, J. M., "Apparent dry matter, protein and energy digestibility of corn products fed to the Pacific white shrimp, *Litopenaeus vannamei*," Aquaculture America, U.S. Aquaculture Society, New Orleans, Louisiana. (February 28, 2012).

Fox, J. M., "Effect of methionine source and dietary inclusion level on growth and survival of juvenile *Litopenaeus vannamei*," Aquaculture America, U.S. Aquaculture Society, Las Vegas, Nevada. (February 28, 2012).

Fox, J. M., "The use of algae co-products as feed ingredients in aquaculture feeds," Aquaculture America, U.S. Aquaculture Society, New Orleans, Louisiana. (February 28, 2012).

Fox, J. M., "Apparent dry matter, protein and energy digestibility of wheat products fed to the Pacific white shrimp, *Litopenaeus vannamei*," Aquaculture America 2011, New Orleans Marriott, New Orleans, Louisiana. (2011).

Fox, J. M., "Retention of tags and associated stress in the post-release survival of hatchery-reared juvenile spotted seatrout *Cynoscion nebulosus*," Aquaculture America 2011, New Orleans Marriott, New Orleans, Louisiana. (2011).

Fox, J. M., "Reducing feed costs without compromising nutrition," World Aquaculture Society Conference, Firenze (Florence), Italy. (May 8, 2011).

Fox, J. M., "Apparent dry matter, protein and energy digestibility of wheat products fed to the Pacific white shrimp, *Litopenaeus vannamei*," Aquaculture America, U.S. Aquaculture Society, New Orleans, Louisiana. (February 28, 2011).

Fox, J. M., "Apparent dry matter, protein and energy digestibility of corn products fed to the Pacific white shrimp, *Litopenaeus vannamei*," Aquaculture America 2011, New Orleans Marriott, New Orleans, Louisiana. (February 28, 2011).

Fox, J. M., "Novel live prey enrichments for improved growth in marine fish larvae," Aquaculture America 2011, New Orleans Marriott, New Orleans, Louisiana. (February 28, 2011).

Fox, J. M., "The use of algae co-products as feed ingredients in aquaculture feeds. Aquaculture America 2011 – aquaculture on parade.," Aquaculture America 2011, New Orleans Marriott, New Orleans, Louisiana. (February 28, 2011).

Fox, J. M., Lawrence, A. L., Zimba, P. V., "The use of algae co-products as feed ingredients in aquaculture feeds," Aquaculture America 2011 – Aquaculture on Parade, New Orleans, LA. (February 2011).

Fox, J. M., "The effect of short and long -term exposure to boat noise on cortisol levels in red drum, *Sciaenops ocellatus* and spotted seatrout, *Cynoscion nebulosus*., " Second International Conference on the Effects of Noise on Aquatic Life, Cork, Ireland. (2010).

Fox, J. M., "The effects of boat noise on growth, survival and nutrient retention of juvenile red drum, *Sciaenops ocellatus* and spotted seatrout, *Cynoscion nebulosus*., " Second International Conference on the Effects of Noise on Aquatic Life, Cork, Ireland. (2010).

Fox, J. M., "food for the future?," State of world aquaculture, Harte Research Institute. (2009).

Fox, J. M., "Effect of feed rate on food consumption by the sea urchin, *Lytechinus variegatus*., " World Aquaculture America 2009, Washington State Convention Center, Seattle, Washington. (2009).

Fox, J. M., "Preliminary nutritional investigations of the spotted seatrout, *Cynoscion nebulosus*., " World Aquaculture America 2009, Washington State Convention Center, Seattle, Washington. (2009).

Fox, J. M., "The effect of prebiotic short chain fructooligosaccharide (scFOS) on the growth, survival, and immune response of adult Pacific white shrimp *Litopenaeus vannamei* under conditions of primary productivity," World Aquaculture America 2009, Washington State Convention Center, Seattle, Washington. (2009).

Fox, J. M., "Effects of anthropogenic noise on growth and survival of red drum, *Sciaenops ocellatus* and spotted seatrout, *Cynoscion nebulosus*., " World Aquaculture Society Conference, World Trade Center, Veracruz, Mexico. (September 25, 2009).

Fox, J. M., "Estimation of methionine requirement by juvenile *Litopenaeus vannamei* using protein-bound and crystalline sources., " World Aquaculture Society Conference, World Trade Center, Veracruz, Mexico. (September 25, 2009).

Fox, J. M., "Practical uses of *Sargassum* sp., " Sargassum Symposium, Holiday Inn Sea Spray, Corpus Christi, Texas, USA. (2008).

Fox, J. M., "Texas Sea Grant Shrimp Farming Shortcourse., " Shrimp pond production, University of Texas Marine Science Institute, Port Aransas Marine Laboratory Port Aransas, Texas. (2007).

Fox, J. M., "Harte Research Institute for Gulf of Mexico Studies Seminar Series., " The fishmeal dilemma., Harte Research Institute Texas A&M University-Corpus Christi, Corpus Christi, Texas. (2007).

Fox, J. M., "A report on environmental presence of catastrophic shrimp viruses and necrotizing hepatopancreatitis in south Texas shrimp farms and other environs, post-2004," World Aquaculture Society Conference, San Antonio, Texas. (2007).

Fox, J. M., "An update on amino acid requirement research with marine penaeid shrimp., " World Aquaculture Society Conference, San Antonio, Texas. (2007).

Fox, J. M., "Apparent digestibility and leaching characteristics of mineral-bound and polymeric forms of synthetic methionine incorporated into practical shrimp feeds.," World Aquaculture Society Conference, San Antonio, Texas. (2007).

Fox, J. M., "Apparent digestibility of selected minerals from purified and semi-purified feed ingredients offered to marine penaeid shrimp, *Litopenaeus vannamei*., " World Aquaculture Society Conference, San Antonio, Texas. (2007).

Fox, J. M., "Comparison of grape extract and squid liver meal as potential attractants in plant-based, fishmeal-free practical feeds for *Litopenaeus vannamei*., " World Aquaculture Society Conference, San Antonio, Texas. (February 26, 2007).

Fox, J. M., "Development of field methodology for evaluating chemoattractants and feed stimulants in commercial feeds for the Pacific white shrimp (*Litopenaeus vannamei*).," World Aquaculture Society Conference, San Antonio, Texas. (February 26, 2007).

Fox, J. M., "Nutrient availability of soybean meal, wheat middlings and rice bran in shrimp feeds using commercial sources of phytase," World Aquaculture Society Conference, San Antonio, Texas. (February 26, 2007).

Fox, J. M., "Optimization of cholesterol levels and evaluation of potential use of phytosterol as a cholesterol substitute in plant-based, fishmeal-free practical diets for *Litopenaeus vannamei*," World Aquaculture Society Conference, San Antonio, Texas. (February 26, 2007).

Fox, J. M., "Sustainable aquaculture: the use of simple, appropriate technology for the culture of marine penaeid shrimp—an Indonesian story., " World Aquaculture Society Conference, San Antonio, Texas. (February 26, 2007).

Fox, J. M., "Apparent dry matter and energy digestibility of ingredients for Pacific white shrimp, *Litopenaeus vannamei*," World Aquaculture Society Conference, Las Vegas, Nevada. (2006).

Fox, J. M., "Apparent dry matter and protein digestibility of ingredients for Pacific white shrimp, *Litopenaeus vannamei* diets," World Aquaculture Society Conference, Las Vegas, Nevada. (2006).

Fox, J. M., "Digestible protein and energy requirements for growth and maintenance of sub-adult Pacific white shrimp, *Litopenaeus vannamei*," World Aquaculture Society Conference, Las Vegas, Nevada. (January 21, 2006).

Fox, J. M., "Growth and survival of Pacific white shrimp, *Litopenaeus vannamei*, fed grain-based feeds., " World Aquaculture Society Conference, Las Vegas, Nevada. (January 21, 2006).

Fox, J. M., "Phosphorus, zinc, protein and amino acid digestibility of Pacific white shrimp, *Litopenaeus vannamei*, fed grain-based feeds," World Aquaculture Society Conference, Las Vegas, Nevada. (January 21, 2006).

Fox, J. M., "Effect of three commercial shrimp diets (30%-ECO, 31% and 41% crude protein) on selected water quality indicators and performance of *Litopenaeus vannamei* under limited water exchange in membrane-lined ponds," Aquaculture 2005, New Orleans, Louisiana. (2005).

Fox, J. M., "Current status of phytase research on marine penaeid shrimp., " World Aquaculture Society Conference, Nusa Dua, Bali, Indonesia. (May 9, 2005).

Fox, J. M., "The current status of nutrient requirements and availability data for marine penaeid shrimp," World Aquaculture Society Conference, Nusa Dua, Bali, Indonesia. (May 9, 2005).

Fox, J. M., "A survey of Taura Syndrome Virus intermediate hosts in south Texas shrimp farms.," Aquaculture 2005, New Orleans, Louisiana. (January 17, 2005).

Fox, J. M., "TSV in Texas during 2004: summary of a collaborative program involving commercial shrimp farms, state and federal institutions/agencies, 2005," Aquaculture 2005, New Orleans, Louisiana. (January 17, 2005).

Fox, J. M., "Current status of protein:energy ratio in penaeid shrimp nutrition.," Aquaculture 2004, Honolulu, Hawaii. (2004).

Fox, J. M., "Evaluation and ranking of practical ingredients as chemoattractants in feeds for Pacific white shrimp, *Litopenaeus vannamei*," Aquaculture 2004, Honolulu, Hawaii. (2004).

Fox, J. M., "Effect of phytase on phosphorus digestibility and growth of the Pacific white shrimp, *Litopenaeus vannamei*, fed phosphorus-limited feeds." (2004).

Fox, J. M., "Production of Farfante aztecus postlarvae under closed recirculating and multiple water reuse conditions.." (2004).

Fox, J. M., "A quantitative method of evaluating feed consumption by *Litopenaeus vannamei*, in feed attraction studies.," Aquaculture 2004, Honolulu, Hawaii. (March 1, 2004).

Fox, J. M., "A quantitative method of evaluating feed consumption by *Litopenaeus vannamei*, in feed attraction studies.," Aquaculture 2004, Honolulu, Hawaii. (March 1, 2004).

Fox, J. M., "Development of a fish meal substitute diet for growth and survival of *Litopenaeus vannamei*," Aquaculture 2004, Honolulu, Hawaii. (March 1, 2004).

Fox, J. M., "Ecomorphology and trophically-induced phenotypic variation in red drum, *Sciaenops ocellatus*," Aquaculture 2004, Honolulu, Hawaii. (March 1, 2004).

Fox, J. M., "Low and reduced impact aquaculture: the role of chemoattraction in aquatic feed management," Aquaculture 2004, Honolulu, Hawaii. (March 1, 2004).

Fox, J. M., "A comparison of nutrient removal efficiency of *Ulva fasciata* vs. *Gracilaria tikvahiae* in a recirculating shrimp production system using *Litopenaeus vannamei*," Aquaculture America, Louisville, Kentucky. (February 18, 2003).

Fox, J. M., "Production challenge: aquaculture commercialization of endemic penaeid shrimp.," Aquaculture America, Louisville, Kentucky. (February 18, 2003).

Fox, J. M., "The effects of dietary carnitine on growth and survival of the Pacific white shrimp, *Litopenaeus vannamei*," Aquaculture America, Louisville, Kentucky. (February 18, 2003).

Fox, J. M., "Culture of *Litopenaeus vannamei* under limited water exchange using two commercial test diets with 25 and 35% crude protein.," Aquaculture America 2002, San Diego, California. (January 27, 2002).

Fox, J. M., "Evaluation of the depuration of Galveston Bay oysters, *Crassostrea virginica*, against *Vibrio vulnificus* under semi-commercial conditions using probiotic bacteria.," Aquaculture America 2002, San Diego, California. (January 27, 2002).

Fox, J. M., "Larval rearing of the brown shrimp, *Farfantepenaeus aztecus*, using complete and 50% replacement of live microalgae and artemia.," Aquaculture America 2002, San Diego, California. (January 27, 2002).

Fox, J. M., "Spawning characteristics and evaluation of early larval rearing of *Callinectes sapidus* (Rathbun) fed live natural diets.," Aquaculture America 2002, San Diego, California. (January 27, 2002).

Fox, J. M., "Evaluation of oyster (*Crassostrea virginica*) filtration of suspended solids in effluent from closed recirculating shrimp tanks.," Aquaculture America 2002, San Diego, California. (January 27, 2001).

Fox, J. M., "Depuration of Galveston Bay Oysters *Crassostrea virginica* against *Vibrio vulnificus* using probiotic bacteria: a preliminary investigation.," Aquaculture America 2002, San Diego, California. (January 22, 2001).

Fox, J. M., "Preliminary evaluation of the depuration of Galveston Bay oysters, *Crassostrea virginica*, against *Vibrio vulnificus* using probiotic bacteria: inherent variability of autochthonous levels.," World Aquaculture, Lake Buena Vista, Florida. (January 21, 2001).

Fox, J. M., "Depuration of Galveston Bay Oysters *Crassostrea virginica* against *Vibrio vulnificus* using probiotic bacteria: Progress Report to National Sea Grant College Program.," World Aquaculture 2001, Lake Buena Vista, Florida. (January 21, 2001).

Fox, J. M., "The culture of *Litopenaeus vannamei* under biosecured and zero exchange conditions.," World Aquaculture 2001, Lake Buena Vista, Florida. (January 21, 2001).

Contracts, Grants and Sponsored Research

McKee, David Albert, Fox, Joe M, Dobbs, M, "Improvement of commercial holding facilities for the Blue Crab (*Callinectes sapidus*) and investigation of shedding techniques," Sponsored by Texas Sea Grant Program, State, \$35,000.00. (1999 - 2000).

Contract

Fox, Joe M (Co-Principal), "Research contract with Evonik Degussa (Germany).," Private, \$47,000.00. (2013).

Grant

Lehman, Roy Lee (Co-Principal), Mott, Joanna Bridget (Co-Principal), Fox, Joe M (Co-Principal), Strychar, Kevin B. (Co-Principal), Zimba, Paul, "Acquisition of equipment for development of local species of microalgae for production of biofuels and their co-products," Sponsored by National Science Foundation - MRI, Federal, \$547,905.00. (January 2010 - Present).

Pollack, Jennifer, Montagna, Paul A., Fox, Joe M, "Shell Bank: An Oyster Shell Reclamation, Storage and Recycling Program for Oyster Reef Restoration," Sponsored by Texas General Land Office Coastal Management Program, Texas A&M University-Corpus Christi, \$97,034.00. (2009 - 2011).

Larkin, Patrick D (Co-Principal), Fox, Joe M (Principal), "A Survey of Taura Syndrome Virus Intermediate Hosts in South Texas Shrimp Farms," Sponsored by United States Department of Agriculture, Federal, \$50,000.00. (September 1, 2005 - August 31, 2006).

Sponsored Research

Fox, Joe M, "Bacterial-algal interactions controlling carbon cycling in bioenergy-producing communities.," Sponsored by DOE-OBBER, Federal, \$1,500,000.00. (September 1, 2014 - August 31, 2017).

Scholarly and Creative Awards and Honors

Ruth Campbell Professor of Marine Biology, Texas A&M University-Corpus Christi. (2007).

SERVICE

Department

Committee Chair, MARB Physiologist Search Committee. (2011 - Present).
Committee Member, FAMA Professional Assistant Professor Search Committee. (2010 - Present).
Committee Member, Mariculture Program Review. (2004 - Present).
Internship, Chair Internship (under Grade Price-Blount). (2003 - Present).
Committee Member, Environmental Science Undergraduate Review Committee. (2003 - Present).
Interim Chair, Interim Chair. (August 2001 - Present).
Committee Member, Biology Undergraduate Review Committee. (2001 - Present).
Committee Chair, Fisheries Economist. (March 2014 - June 2014).
Committee Chair, Fisheries Early Life Cycle Biologist. (February 2014 - May 2014).
Committee Chair, Aquaculturist Search Committee. (February 2014 - May 2014).
Dept. Chair, Functional Genomicist search committee. (December 2013 - April 2014).
Oversee committee as Dept. Chair, Marine Microbial Ecologist. (December 2013 - April 2014).
Committee Member, Policy Advisory Committee. (2010 - 2011).
Committee Chair, 3rd Year Promotion and Tenure Committee. (2009 - 2011).
Committee Chair, Department of Life Sciences Promotion and Tenure Committee. (2009 - 2011).
Committee Member, Biologist Search Committee. (2004 - 2005).
Committee Member, Physiologist Search Committee. (2004 - 2005).
Island Days, Island Days. (2002 - 2003).

College

Committee Member, Assessment Coordinator Search Committee. (April 2014 - May 2014).
Committee Member, College of Graduate Studies, Graduate Enrollment. (December 2013).
Attendee, Meeting, Fisheries collaboration - Indonesia. (May 2013).
Attendee, Meeting, Fisheries collaboration - Indonesia. (January 2012).
Committee Chair, College Promotion and Tenure Committee. (2009 - 2011).
Attendee, Meeting, Fisheries collaboration - Palau. (January 2011).
Space Usage Director, HRI. (2009 - 2010).
Director, Seawater Systems, HRI. (2005 - 2010).
Committee Member, College Promotion and Tenure Committee. (2007 - 2008).
Committee Chair, College Research Enhancement Committee. (2005 - 2006).
Committee Chair, Workload Release Committee. (2005 - 2006).
Committee Chair, Safety Committee. (1997 - 1998).
Committee Member, Student Grievance Committee. (1997 - 1998).

University

Committee Member, Diversity Committee.
Committee Member, University Faculty Enhancement Committee.
Attendee, Meeting, Provost's Chair Developmental Committee. (September 2013 - Present).

Committee Member, Research Hurricane Preparedness Committee. (2011 - Present).
Committee Member, Harte Research Institute Building Committee. (2004 - Present).
Committee Member, Eisenhower Grant Awards Committee. (2001 - Present).

Professional

Attendee, Meeting, Gulf Marine Life Center. (December 2013).
Program Coordinator, U.S. Aquaculture Society. (January 2001 - December 2003).

Consulting

For Profit Organization, SEASA, Jakarta, Indonesia. (January 1985 - January 1987).
For Profit Organization, Pesqueira Campanema, Fortaleza, Brazil. (May 1984 - August 1984).
For Profit Organization, Chipman Enterprises, Nassau, Bahamas. (1980 - 1981).

Public

Judge, Coastal Bend Science Fair. (2001 - Present).
Monitor, National Ocean Science Bowl. (2000 - Present).
Guest Speaker, City of Aransas Pass. (December 2013).
Attendee, Meeting, Gulf Coast Marine Life Center. (October 2013).
Attendee, Meeting, Texas Commission on Environmental Quality. (October 2013).
Member, Water Shore Advisory Committee. (2004 - 2005).
University Outreach Program. (2000 - 2001).