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(a) Professional Qualifications

Tianjin Agricultural College (China)	Aquaculture	B.S., 2001
Institute of Oceanology, Chinese Academy of Sciences	Marine Biology	M.S., 2004
Michigan State University, College of Veterinary Medicine	Pathology	Ph.D., 2009
Northwestern University	Surgery Postdoc fellow	2010-2014

(b) Appointments

2018 – Present. Assistant Professor, Texas A&M University, Corpus Christi
2015 – 2018. Assistant Professor, Louisiana State University Agricultural Center

(c) Publications

1. **Wei Xu***, Emily N. Vebrosky, and Kevin L. Armbrust. Potential risk to human skin cells from exposure to dicloran photodegradation products in water. 2018. *Environ Int.* 121 (1): 861-870.
2. Mackenzie Richards, **Wei Xu***, Amy Mallozzi, Reagan M. Errera, and John Supan, Production of Calcium-Binding Proteins in *Crassostrea virginica* in response to Increased Environmental CO₂ Concentration. June 2018. *Front Mar Sci.*
3. **Wei Xu***, Emily N. Vebrosky, Mackenzie L. Richards, and Kevin L. Armbrust. Evaluation of Dicloran Phototoxicity using Primary Cardiomyocyte Culture from *Crassostrea virginica*. 2018. *Sci Total Environ.* 628–629: 1-10.
4. **Wei Xu***, Brittney A. Foster, Mackenzie Richards, Kenneth R Bondioli, Girish Shah, and Christopher C. Green. Characterization of Prostate Cancer Cell Progression in Zebrafish Xenograft Model. 2018. *Int J Oncol.* 52: 252-260.
5. Shuxia Xue, Jinsheng Sun, **Wei Xu**, Identification and Detection of the Pathogenic Bacteria Responsible for Swollen Abdomen Disease in Cultured Turbot, *Scophthalmus maximus*, and Flounder, *Paralichthys olivaceus*. 2017. *J World Aquacult Soc.* doi: 10.1111/jwas.12435.
6. Shuxia Xue, **Wei Xu**, Junli Wei, Jinsheng Sun. Impact of environmental bacterial communities on fish health in marine recirculating aquaculture systems. 2017. *Vet Microbiol.* 203: 34-39.
7. Yina Shao, Chenghua Li, **Wei Xu**, Pengjuan Zhang, Weiwei Zhang and Xuelin Zhao. miR-31 Links Lipid Metabolism and Cell Apoptosis in Bacteria-Challenged *Apostichopus japonicus* via Targeting CTRP9. 2017. *Front Immunol.* 8: 263. PMID: 5346533.
8. Chenghua Li, Mengru Zhao, Chi Zhang, Weiwei Zhang, Xuelin Zhao, Xuemei Duan, and **Wei Xu***: miR210 modulates respiratory burst in *Apostichopus japonicus*

coelomocytes via targeting Toll-like receptor, 2016 *Dev Comp Immunol*. 65:377-81. PMID: 27545641.

9. Aimei Zhong, **Wei Xu**[#], Jingling Zhao, Ping Xie, Shengxian Jia, Jiaming Sun, Robert D. Galiano, Thomas A. Mustoe, and Seok Jong Hong: S100A8 and S100A9 are induced by decreased hydration in the epidermis and promote fibroblast activation and fibrosis in the dermis, 2016 *Am J Pathol*. 186 (1):109-122. PMID: 26597884 (**Co-first author**).

10. Yina Shao, Chenghua Li, Weiwei Zhang, **Wei Xu**, Xuemei Duan, Ye Li, Qiongfeng Qiu, and Chunhua Jin: Cloning and comparative analysis the proximal promoter activities of arginase and agmatinase genes in *Apostichopus japonicus*, 2016 *Dev Comp Immunol*. 65:299-308. PMID: 27497871.

11. Ping Xie, Shengxian Jia, Ross Tye, **Wei Xu**, Aimei Zhong, Seok Jong Hong, Robert D. Galiano, and Thomas A. Mustoe: Topical Administration of Oxygenated Hemoglobin Improved Wound Healing in an Ischemic Rabbit Ear Model. 2016 *Plast Reconstr Surg*. 137 (2):534-43. PMID: 26818288.

12. Eugene Park, Sarah A. Long, Akhil K. Seth, Matthew Geringer, **Wei Xu**, Claudia Chavez-Munoz, Kai Leung, Seok Jong Hong, Robert D. Galiano, Thomas A. Mustoe: The use of desiccation to treat *Staphylococcus aureus* biofilm-infected wounds. 2016, *Wound Repair Regen*. 24(2):394-401. PMID: 26519217.

13. **Wei Xu**, Seok Jong Hong, Aimei Zhong, Ping Xie, Shengxian Jia, Zhong Xie, Michael Zeitchek, Solmaz Niknam-Bienia, Jingling Zhao, D. Marshall. Porterfield, D. James Surmeier, Kai P. Leung, Robert D. Galiano, Thomas A. Mustoe: Sodium channel Nax is a regulator in epithelial sodium homeostasis, 2015 *Sci Transl Med*. 7(312): 312ra177. PMID: 26537257.

14. **Wei Xu**, Seok Jong Hong, Michael Zeitchek, Garry Cooper, Shengxian Jia, Ping Xie, Hannan A. Qureshia, Aimei Zhong, Marshall D. Porterfield, Robert D. Galiano, D. James Surmeier, Thomas A. Mustoe: Hydration status regulates sodium flux and inflammatory pathways through epithelial sodium channel (ENaC) in the skin, 2015 *J Invest Dermatol*. 135 (3):796-806. PMID: 25371970.

15. Matthias D. Hofer, Earl Y. Cheng, Matthew I. Bury, **Wei Xu**, Seok Jong Hong, William E. Kaplan, Arun K. Sharma, Androgen Supplementation in Rats Increases the Inflammatory Response and Prolongs Urethral Healing. 2015, *Urology*. 85 (3): 691-697. PMID: 25733291.

16. **Wei Xu**, Shengxian Jia, Ping Xie, Aimei Zhong, Robert D. Galiano, Thomas A. Mustoe, Seok Jong Hong: The Expression of Proinflammatory Genes in Epidermal Keratinocytes Is Regulated by Hydration Status. 2014, *J Invest Dermatol*. 134 (4): 1044-1055. PMID: 24226202.

17. Seok Jong Hong, Eugene Park, **Wei Xu**, Shengxian Jia, Robert D. Galiano, and Thomas A. Mustoe: Response of human mature adipocytes to hypoxia-reoxygenation. 2014, *Cytotherapy*, 16(12):1656-65. PMID:25231891.

18. Kai P. Leung; Peter D'Arpa; Akhil K. Seth; Matthew R. Geringer; Marti Jett; **Wei Xu**; Seok J. Hong; Robert D. Galiano; Tsute Chen; and Thomas A. Mustoe: Dermal wound transcriptomic responses to Infection with *Pseudomonas aeruginosa* versus *Klebsiella pneumoniae* in a rabbit ear wound model. 2014, *BMC Clin Pathol*. 14:20. PMID: 25035691.

19. Matthias D. Hofer, Earl Y. Cheng, Matthey I. Bury, Eugene Park, **Wei Xu**, Seok Jong Hong, William E. Kaplan, Arun K. Sharma. Analysis of primary urethral wound healing in the rat. 2014, *Urology*. 84 (1): 246.e1-7. PMID: 24976234.
20. Claudia Chavez-Munoz, Khang Nguyen, **Wei Xu**, Seok-Jong Hong, Thomas A. Mustoe, and Robert D. Galiano: Transdifferentiation of Adipose-derived Stem Cells into Keratinocyte-like cells: Engineering a Stratified Epidermis. 2013, *Plos One*, 8(12): e80587. PMID: 24312483.
21. Seok Jong Hong, Sheng-Xian Jia, Ping Xie, **Wei Xu**, Kai Leung, Thomas Mustoe, and Robert Galiano: Topically Delivered Adipose Derived Stem Cells Show an Activated-Fibroblast Phenotype and Enhance Granulation Tissue Formation in Skin Wounds. 2013, *Plos One*, 8(1): e55640. PMID: 23383253.
22. **Wei Xu**, Seok Jong Hong, Shengxian Jia, Yanan Zhao, Robert Galiano, and Thomas Mustoe: Application of a partial thickness human ex vivo skin culture model in cutaneous wound healing study. 2012, *Lab Invest*, 92:584-599. PMID: 219478584.
23. Thomas Loch, Rakesh Kumar, **Wei Xu**, and Mohamed Faisal: Carnobacterium Maltaromaticus infections in Feral Oncorhynchus spp. (Family Salmonidae) in Michigan. 2011, *J Microbiol*. 49 (5): 703-713. PMID: 22068485
24. **Wei Xu** and Mohamed Faisal: Factorial microarray analysis of zebra mussel (*Dreissena polymorpha*: Dreissenidae, Bivalvia) adhesion. 2010. *BMC Genomics*. 11: 341-357. PMID: 20509938.
25. **Wei Xu** and Mohamed Faisal: Gene expression profiling during the byssogenesis of zebra mussel (*Dreissena polymorpha*). 2010. *Mol Genet Genomics*. 283 (4): 327-339. PMID: 20148265.
26. **Wei Xu** and Mohamed Faisal: Defensin of the zebra mussel (*Dreissena polymorpha*): molecular structure, in vitro expression, antimicrobial activity, and potential functions. 2010. *Mol Immunol*. 47(11-12):2138-2147. PMID: 20537393.
27. **Wei Xu** and Mohamed Faisal: Development of a cDNA microarray of zebra mussel (*Dreissena polymorpha*) foot and its use in understanding underwater adhesion. 2009. *Gene* 436 (1-2): 71-80. PMID: 19393183.
28. **Wei Xu** and Mohamed Faisal: Identification of the molecules involved in zebra mussel (*Dreissena polymorpha*) hemocytes host defense. 2009. *Comp Biochem Physiol B*. 154 (1): 143-149. PMID: 19482094.
29. Lingling Wang, Linsheng Song, Jianmin Zhao, Limei Qiu, Huan Zhang, **Wei Xu**, Honglei Li, Chenghua Li, Longtao Wu, and Ximing Guo: Expressed sequence tags from the zhikong scallop (*Chlamys farreri*): discovery and annotation of host-defense genes. *Fish Shellfish Immunol*. 2009. 26(5):744-750. PMID: 19328855.
30. Ling Zhu, Linsheng Song, **Wei Xu**, and Peiyuan Qian: Identification of a C-type lectin from the bay scallop *Argopecten irradians*. *Mol Biol Rep*. 2009. 36(5):1167-1173. PMID: 18622759
31. **Wei Xu** and Mohamed Faisal: Putative identification of expressed genes associated with attachment of zebra mussel (*Dreissena polymorpha*). 2008. *Biofouling* 24: 157-161.
32. **Wei Xu** and Mohamed Faisal: Matrilin-like molecules produced by circulating hemocytes of the zebra mussel (*Dreissena polymorpha*) upon stimulation. 2007. *Dev Comp Immunol* 31: 1205-10. PMID: 17555814.
33. Thomas P. Loch, **Wei Xu**, Scott M. Fitzgerald, and Mohamed Faisal: Isolation of a *Carnobacterium maltaromaticum*-like bacterium from systemically infected Lake

Whitefish (*Coregonus clupeaformis*). 2008. *FEMS Microb Lett.* 288 (1): 76-84. PMID: 18793198.

(d) Conference Abstract (*Presenter)

1. Emily N. Vebrosky*, **Wei Xu**, Kevin L. Armbrust, Pesticide Impacts from Louisiana Rice Fields on the Health and Survival of Red Swamp Crayfish. SETAC North America 38th Annual Meeting, November 12-16, 2017, Minneapolis, MN.
2. Emily N. Vebrosky*, **Wei Xu**, Kevin L. Armbrust, Phototoxic Effects of Pesticides Including Dicloran to Juvenile Red Swamp Crayfish and Eastern Oyster. SETAC North America 38th Annual Meeting, November 12-16, 2017, Minneapolis, MN.
3. Mackenzie L. Richards*, Courtney H. Healy, Amy J. Mallozzi, Sandra Casas Liste, Jerome F. La Peyre, John Supan, Reagan M. Errera and **Wei Xu**, Molecular regulation of shell development in eastern oysters (*Crassostrea virginica*) in response to CO₂-related ocean acidification. American Fisheries Society: Louisiana Chapter. May 25-26, 2017. Thibodaux, LA.
4. **Wei Xu***, Mackenzie Richards, Amy Mallozzi, Reagan M. Errera, and John Supan. Genomic Responses of Mollusk Biomineralization to Ocean Acidification. National Shellfisheries Association 109th Annual Meeting. March 26 – 30, 2017. Knoxville, TN.
5. **Wei Xu***, Mackenzie Richards, Amy Mallozzi, Greer Darden, Reagan M. Errera, Illya Tietzel, and John Supan. Impact of Ocean Acidification on Bacterial Communities in Coastal Microbial Biofilms. World Aquaculture Society Meeting 2017. February 19-22, 2017 San Antonio, TX.
6. Mackenzie L. Richards*, Courtney H. Healy, Sara E. King, Jeni L. Ewing, Sandra Casas Liste, Jerome F. La Peyre, John E. Supan, and **Wei Xu**. The impact of CO₂ related ocean acidification on the molecular regulation of shell development in eastern oyster (*Crassostrea virginica*). World Aquaculture Society Meeting 2017. February 19-22, 2017 San Antonio, TX.
7. **Wei Xu***: Genomic adaptation of shellfish larval development and host defense to stress of ocean acidification. World Aquaculture Society Meeting 2016. February 23-26, 2016 Las Vegas, NV.
8. Mackenzie L. Richards*, Sara E. King, Sandra Casas Liste, Jerome F. La Peyre, John E. Supan, and **Wei Xu**. Molecular regulation of shell development of Eastern oyster (*Crassostrea virginica*) under the stress of ocean acidification. American Fisheries Society: Louisiana Chapter. May 25-26, 2016. Baton Rouge, LA.
9. **Wei Xu***, Elodi Dielubanza, Amenda Maisel, Aimei Zhong, Eugene Park, Khang T. Nguyen, Seok Jong Hong, Thomas A. Mustoe, and Robert D. Galiano: Staphylococcus aureus impairs cutaneous wound healing by inducing the expression of gap junction protein Connexin-43 in keratinocytes. The 24th Annual Meeting of the Wound Healing Society with the Symposium of Advanced Wound Care. April 23-26, 2014 Orlando, FL.
10. **Wei Xu***, Aimei Zhong, Adam Jakus, Shengxian Jia, Ping Xie, Claudia Chavez-Munoz, Seok Jong Hong, Robert D. Galiano, and Thomas A. Mustoe: Application of a Three Dimensional Human Keratinocyte-Fibroblast Cell Culture Model in the Study of Cutaneous Wound Healing. The 24th Annual Meeting of the Wound Healing Society with the Symposium of Advanced Wound Care. April 23-26, 2014 Orlando, FL.

11. **Wei Xu**, Seok Jong Hong, Shengxian Jia, Yanan Zhao, Robert Galiano, Thomas Mustoe: Hydration regulates gene expression profile of wounds in the rabbit ear and human skin culture model. 2011 Gordon Research Conference - Barrier Function of Mammalian Skin. August 7-12, 2011, Waterville Valley, NH.
12. **Wei Xu***, Seok Jong Hong, Shengxian Jia, Yanan Zhao, Robert Galiano, and Thomas Mustoe: Gene Expression Profile is Altered in Cutaneous Superficial Injury by Hydration. 2011 Gordon Research Conference and Seminar – Tissue Repair and Regeneration. June 4-10, 2011, New London, NH.
13. **Wei Xu**, Seok Jong Hong, Shengxian Jia, Yanan Zhao, Robert Galiano, and Thomas Mustoe: Application of an ex vivo Human Skin Culture in Cutaneous Wound Healing Study. The 21st Annual Meeting of the Wound Healing Society with the Symposium of Advanced Wound Care. April 14-17, 2011. Dallas, TX.
14. **Wei Xu*** and Mohamed Faisal: The Antimicrobial Peptides In Zebra Mussel (*Dreissena Polymorpha*) Underwater Adhesion. 34th Eastern Fish Health Workshop, April 27 – May 1, 2009 at Lake Placid, NY. Charleston, SC.
15. **Wei Xu** and Mohamed Faisal: A zebra mussel (*Dreissena polymorpha*) byssus gland cDNA microarray developed with ESTs from a suppression subtractive hybridization cDNA library. Experimental Biology 2008, April 5-9, 2008 at San Diego, CA.
16. **Wei Xu*** and Mohamed Faisal: Antimicrobial peptides from the suppression subtractive hybridization cDNA library of zebra mussel (*Dreissena polymorpha*) byssus glands. 32nd Eastern Fish Health Workshop, June 18-21, 2007 at Gettysburg, PA.
17. **Wei Xu*** and Mohamed Faisal: A genomic approach to decipher multiple exocrine functions of the zebra mussel (*Dreissena polymorpha*) foot. 2nd International Symposium on Animal Functional Genomics. May 16-19, 2006 at Lansing, MI.
18. **Wei Xu*** and Mohamed Faisal: Putative identification of expressed genes associated with attachment of the zebra mussel (*Dreissena polymorpha*) using suppression subtractive hybridization cDNA library. 31st Eastern Fish Health Workshop, March 27-31, 2006 at Charleston, SC.

(e) Synergistic Activities

Editorial board of 1) Frontiers in Genetics; 2) International Journal of Oncology.

Reviewer of 1) Molecular Immunology; 2) Fish & Shellfish Immunology; 3) Journal of Fish Biology; 4) Journal of World Aquaculture Society; 5) Microbial Pathogenesis; 6) Open Biology; 7) Invertebrate Survival Journal; 8) BMC Complementary and Alternative Medicine; 9) International Journal of Molecular Sciences; 10) Journal of Applied Aquaculture; 11) Microarray; 12) Frontiers in Immunology; 13) Frontiers in Physiology; 14) Frontiers in Genetics; 15) Frontiers in Pharmacology

Review panel of: NSF Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR)

The National Natural Science Foundation of China

The Sustainable American Aquaculture Panel of the Foundation for Food and Agriculture Research

Graduate student advisory: Mackenzie Richards (M.S., LSU, graduated in Dec 2017)

Thesis/Dissertation Committee: Yue Liu (LSU, Advisor: Terrence Tiersch, graduated 2018); Emily N. Vebrosky (LSU, Advisor: Kevin Armbrust, graduated 2018);

Teaching Experience: BIOL3345-Cell Physiology (Spring every year)

BIOL4301-Embryology (Fall every year)

BIMS4410/5410 Histology (Fall every year)

(f) Grant and Award (Including current, pending, and planned submission):

NAME	SUPPORTING AGENCY	TOTAL \$ AMOUNT	EFFECTIVE AND EXPIRATION DATES	TITLE OF PROJECT
Shah (PI), Xu (Co-PI) , Green (Co-PI)	Completed: Louisiana Campuses Research Initiative	\$65,000 (\$32,500 for LSU)	7/2015 to 6/2016	Establishing a platform to discriminate aggressive prostate cancer from indolent cancer and for anti-cancer drug discovery
Xu (PI) , Lutz (Co-PI)	Completed: LSU Leveraging Innovation for Technology Transfer	\$35,000	6/15/2017 to 6/14/2018	Development of Commercial Prebiotics for Fish Aquaculture
Xu (PI) , Tietzel (Co-PI)	Completed: LA Sea Grant	\$128,000	2/1/2018 to 8/31/2019	Impacts of Marine Bacterial Biofilm Dynamics to the Development of Oyster Larvae under the Stress of Ocean Acidification
Xu (PI)	Funded TAMU-CC Research Enhancement Grant	\$5,000	12/1/2018 to 11/30/2019	Establishment of Zebrafish Embryo Model for the Evaluation of Fungicide Phototoxicities
Xu (Leading PI)	Funded NSF	Total: \$499,875 TAMU-CC: \$208,087	8/1/2019 to 7/31/2023	Collaborative: Synergistic Effects of Petroleum Production and Ocean Environmental Changes on Oyster Health
Xu (PI)	Funded NIH-NIEHS	\$395,061	9/1/2019 to 8/31/2022	Environmental effects on dermatotoxicities of polycyclic aromatic hydrocarbons