Dr. MD SAYDUR Rahman

The University of Texas Rio Grande Valley
Department of Biology
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Education

PhD, University of Ryukyus , 2001

Major: Marine and Environmental Sciences

MS, University of Ryukyus, 1998

Major: Marine Sciences

MS, Bangladesh Agricultural University, 1987

Major: Fisheries

BS, Bangladesh Agricultural University, 1986

Major: Fisheries

Employment

Professional

Professional, Associate Professor, The University of Texas Rio Grande Valley, (2021)

Professional, Adjunct Professor, The University of Texas at Austin, Marine Science Institute, (2015 - 2022)

Professional, Assistant Professor, The University of Texas Rio Grande Valley, (2015 - 2021)

Professional, Research Scientist, The University of Texas at Austin, Marine Science Institute, (2012 - 2015)

Professional, Research Associate, The University of Texas at Austin, Marine Science Institute, (2007 - 2012)

Professional, Postdoctoral Research Fellow, The University of Texas at Austin, Marine Science Institute, (2003 - 2007)

Professional, Postdoctoral Research Fellow, University of the Ryukyus, Japan, (2001 - 2003)

Professional, Lecturer and Assistant Professor, Khulna University, Bangladesh, (1993 - 1996)

Professional, Scientific Officer, Bangladesh Fisheries Research Institute, (1989 - 1993)

Publications

Journal Article, Academic Journal

Zarina Sheikh and Jamie Langbein and Kevin Ryer and MD Rahman and Christopher Gabler and John Young and Richard Kline. Use and effectiveness of wildlife exits designed for ocelots and other mesocarnivores on a South Texas highway. Lausanne: *Frontiers in Ecology and Evolution*. (October (4th Quarter/Autumn)) 11,

Sakib Rishan and Richard Kline and MD Rahman. Applications of environmental DNA (eDNA) to detect subterranean and aquatic invasive species: A critical review on the challenges and limitations of eDNA metabarcoding.: *Environmental Advances*. (July (3rd Quarter/Summer)): 100370.
https://www.sciencedirect.com/science/article/pii/S2666765723000303

Brittney Lacy and Michelle Rivera and Leinady Flores and MD Rahman. Combined effects of high temperature and pesticide mixture exposure on free-swimming behaviors and hepatic cytochrome P450 1A expression in goldfish, Carassius auratus..: *Journal of Toxicology and Environmental Health, Part A*. . (February) 85, : 144-165.

Mohan Dash and MD Rahman. Molecular and biochemical responses to tributyltin (TBT) exposure in the American oyster: Triggers of stress-induced oxidative DNA damage and prooxidant-antioxidant imbalance in tissues by TBT. Elsevier: *Comparative Biochemistry and Physiology, Part C: Toxicology & Pharmacology*. (February) 264,

Luisiana Morales-Zamudio and Alejandro Fierro Cabo and MD Rahman and Miguel Dominguez-Crespo. Metal contents in house geckos (Squamata: Gekkonidae) from industrial and urban areas of southern Tamaulipas, Mexico and western Andalucía, Spain may reflect airborne metal pollution.: *Journal of Toxicology and Environmental Health, Part A*. (January (1st Quarter/Winter)) 86, : 103-118.

MD Rahman and Mohammad Billah and Richard Kline and MD Rahman. Effects of elevated temperature on 8-OHdG expression in the American oyster (Crassostrea virginica): Induction of oxidative stress biomarkers, cellular apoptosis, DNA damage and γH2AX signaling pathways.: *Fish and Shellfish Immunology Reports*. (December) 4, : 100079.
https://reader.elsevier.com/reader/sd/pii/S2667011922000299?token=CA40AF1B63A9EFAD711A0FDCA5484F9638407567210AC14D97BAF05CBA17FDE922EC783639AA860AB4BD5A11A3F4E8D5&originRegion=us-east-1&originCreation=20230425192554

Brittney Lacy and MD Rahman. Interactive effects of high temperature and pesticide exposure on oxidative status, apoptosis, and renin expression in kidney of goldfish: Molecular and cellular mechanisms of widespread kidney damage and renin attenuation. Wiley: *Journal of Applied Toxicology*. (October (4th Quarter/Autumn)) 42, : 1787-1806.

Brittney Lacy and MD Rahman. Potential mechanisms of Na+/K+ATPase attenuation by heat and pesticides co-exposure in goldfish: role of cellular apoptosis, oxidative/nitrative stress, and antioxidants in gills. .: *Environmental Science and Pollution Research*. (August) 29, : 57376-57394.

Mohammad Billah and MD Rahman. Impacts of anthropogenic contaminants and elevated temperature on prevalence and proliferation of Escherichia coli in the wild-caught American oyster, Crassostrea virginica in the southern Gulf of Mexico coast. .: *Marine Biology Research* . (April (2nd Quarter/Spring)) 17, : 775-793.

Eleazar Hernandez and Omar Vázquez and Andre Torruco and MD Saydur Rahman. Histological evidence of lunar reproductive rhythm of Atlantic sea urchin Arbacia punctulata (Echinodermata: Arbaciidae) in the Gulf of Mexico. .: *Biological Rhythm Research*. (March) 53, : 455-467.
https://www.tandfonline.com/toc/nbrr20/53/3?nav=tocList

Krista Ruppert and Drew Davis and MD Rahman and Richard Kline. Development and assess- ment of an environmental DNA (eDNA) assay for a cryptic Siren (Amphibia: Sirenidae).: *Environmental Advances*. (January (1st Quarter/Winter))

Md Rahman and MD Rahman. Elevated seasonal temperature disrupts prooxidant-antioxidant homeostasis and promotes cellular apoptosis in the American oyster, Crassostrea virginica, in the Gulf of Mexico: A field study. . (November) 26, : 917-936.

Dong Wang and Zhen Wang and Xu Li and SEcilia Martinez and Genevieve James and MD Rahman and J. Brenna. Unusual polymethylene-interrupted Δ5 monounsaturated and omega-3 fatty acids in sea urchin (Arbacia punctulata) from the Gulf of Mexico identified by solvent mediated covalent adduct chemical ionization mass spectrometry. .: *Food Chemistry*. (September) 371, : 131131.

MD Saydur Rahman and Peter Thomas. Molecular Characterization and Expression of Cytochrome P450 Aromatase in Atlantic Croaker Brain: Regulation by Antioxidant Status and Nitric Oxide Synthase During Hypoxia Stress.: *Froentiers in Physiology*. (August) 12, : 720200.

Stephanie DuBois and Brittney Lacy and Abdullah Rahman and MD Saydur Rahman. Elevated CYP1A expression detected in pinfish collected from a coastal lagoon in the southern Texas Gulf Coast: indicative of exposure to microplastics or pollutants?.: *Environmental Science and Pollution Research*. (July (3rd Quarter/Summer)) 28, : Environmental Science and Pollution Research.

Md Rahman and MD Saydur Rahman. Effects of elevated temperature on prooxidant-antioxidant homeostasis and redox status in the American oyster: Signaling pathways of cellular apoptosis during heat stress.: *Environmental Research*. (May) 196, : 110428.

Omar Vazquez and MD Saydur Rahman. An ecotoxicological approach to microplastics on terrestrial and aquatic organisms: A systematic review in assessment, monitoring and biological impact .: *Environmental Toxicology and Pharmacology*. (February) 84, : 103615.

Eleazar Hernandez and Omar Vazquez and Andrew Torruco and MD Saydur Rahman. Reproductive cycle and gonadal development of the Atlantic sea urchin Arbacia punctulata in the Gulf of Mexico: changes in nutritive phagocytes in relation to gametogenesis.: *Marine Biology Research*. 2020, : 177-194.
https://doi.org/10.1080/17451000.2020.1731758

MD Rahman and Richard Kline and Omar Vazques and Izhar Khan and Peter Thomas. Molecular characterization and expression of arginine vasotocin V1a2 receptor in Atlantic croaker brain: potential mechanisms of its downregulation by PCB77 .: *Journal of Biochemical and Molecular Toxicology*. (March)

Jackson Johnstone and Sarah Nash and Eleazar Hernandez and MD Rahman. Effects of elevated temperature on gonadal functions, cellular apoptosis, and oxidative stress in Atlantic sea urchin, Arbacia punctulata. . Brownsville: *Marine Environmental Research* . 149, : 40-49.

MD Rahman and Peter Thomas. Molecular cloning and characterization of two ARNT (ARNT-1 and ARNT-2) genes in Atlantic croaker and their expression during co-exposure to hypoxia and PCB77 .: *Environmental Toxicology*. 34, : 160-171.

Patricia Faulkner and David Hala and MD Rahman and Lene Petersen. Short-term exposure to 12‰ brackish water has significant effects on the endocrine physiology of juvenile American alligator (Alligator mississippiensis). . Brownsville

Sarah Nash and MD Rahman. Short-term heat stress impairs testicular functions in the American oyster, Crassostrea virginica: molecular mechanisms and induction of oxidative stress and apoptosis in spermatogenic cells .: *Molecular Reproduction & Development*. (September) 86, : 1444-1445.

Sarah Nash and Jackson Johnstone and MD Rahman. Elevated temperature attenuates ovarian functions and induces apoptosis and oxidative stress in the American oyster, Crassostrea virginica: potential mechanisms and signaling pathways.: *Cell Stress and Chaperones* . (August) 24, : 957-967.
https://link.springer.com/article/10.1007%2Fs12192-019-01023-w

Krista Ruppert and Richard Kline and MD Rahman. Past, present and future perspectives of environmental DNA (eDNA) metabarcoding: a systematic review in methods, monitoring and application of global eDNA.: *Global Ecology and Conservation*. (February) 17, : 1-29.
https://doi.org/10.1016/j.gecco.2019.e00547

Kenneth Rose and Sean Creekmore and Peter Thomas and J Craig and MD Rahman and Rachael Neilan. Modeling the Population Effects of Hypoxia on Atlantic Croaker (Micropogonias undulatus) in the Northwestern Gulf of Mexico: Part 1—Model Description and Idealized Hypoxia.: *Estuaries and Coasts*.

Austin Greene and Abdullah Rahman and Richard Kline and MD Rahman. Side scan sonar: A cost-efficient alternative method for measuring seagrass cover in shallow environments.: *Estuarine, Coastal and Shelf Science*. 207, : 250--258.

Kenneth Rose and Sean Creekmore and Dubravko Justić and Peter Thomas and J Craig and Rachael Neilan and Lixia Wang and MD Rahman and David Kidwell. Modeling the Population Effects of Hypoxia on Atlantic Croaker (Micropogonias undulatus) in the Northwestern Gulf of Mexico: Part 2—Realistic Hypoxia and Eutrophication.: *Estuaries and Coasts*.

Austin Greene and Abdullah Rahman and Richard Kline and MD Rahman. Side scan sonar: a cost-efficient alternative method for measuring seagrass cover in shallow environments.: *Estuarine Coastal and Shelf Science*. (July (3rd Quarter/Summer)) 207, : 250-258.

MD Rahman and P Thomas. Interactive effects of hypoxia and PCB co-exposure on expression of CYP1A and its potential regulators in Atlantic croaker liver..: *Environmental toxicology*. (April (2nd Quarter/Spring)) 33, : 411-421.

Nazmul Islam and Vazquez Omar and MD Rahman. Detection of environmental estrogen by piezoresistive microcantilever sensor: a cutting-edge review.: *Toxicological & Environmental Chemistry Journal*. (March) 3, : 18.

MD Rahman and Peter Thomas. Molecular and biochemical responses of hypoxia exposure in Atlantic croaker collected from hypoxic regions in the northern Gulf of Mexico. Brownsville: *PLOS ONE*. 12, : e0184341.

Peter Thomas and Md Rahman and Matthew Picha and Wenxian Tan. Impaired gamete production and viability in Atlantic croaker collected throughout the 20,000km2 hypoxic region in the northern Gulf of Mexico.: *Marine Pollution Bulletin*. (December) 101, : 182-192.
http://dx.doi.org/10.1016/j.marpolbul.2015.11.001

MD Rahman and Peter Thomas. Molecular characterization and hypoxia-induced upregulation of neuronal nitric oxide synthase in Atlantic croaker: Reversal by antioxidant and estrogen treatments.: *Comparative Biochemistry and Physiology Part A: Molecular & Integrative Physiology* . 185, : 91-105.

John Mohan and MD Rahman and Peter Thomas and Ben Walter. Influence of constant and periodic experimental hypoxic stress on Atlantic croaker otolith chemistry.: *Aquatic Biology*. 20, : 1-11.

MD Rahman and Peter Thomas. Restoration of tryptophan hydroxylase functions and serotonin content in the Atlantic croaker hypothalamus by antioxidant treatment during hypoxic stress. .: *Frontiers in Neuroscience* . 8, : 1-13.

A. Berg and Charles Rice and Md. Rahman and Jing Dong and Peter Thomas. Identification and Characterization of Membrane Androgen Receptors in the ZIP9 Zinc Transporter Subfamily: I. Discovery in Female Atlantic Croaker and Evidence ZIP9 Mediates Testosterone-Induced Apoptosis of Ovarian Follicle Cells.: *Endocrinology*. (November) 155, : 4237-4249.
http://dx.doi.org/10.1210/en.2014-1198

Md. Rahman and Peter Thomas. Interactive effects of hypoxia with estradiol-17β on tryptophan hydroxylase activity and serotonin levels in the Atlantic croaker hypothalamus.: *General and Comparative Endocrinology*. (October (4th Quarter/Autumn)) 192, : 71-76.
http://dx.doi.org/10.1016/j.ygcen.2013.03.001

Keita Kodama and MD Rahman and T Horiguchi and Peter Thomas. Assessment of hypoxia-inducible factor-1α mRNA expression in mantis shrimp as a biomarker of environmental hypoxia exposure. .: *Biology Letters* . 8, : 278-281.

T Tokumoto and M Tokumoto and T Oshima and K himizuguchi and T Fukuda and E Sugita. Characterization of multiple membrane progestin receptor (mPR) subtypes from the goldfish ovary and their roles in the induction of oocyte maturation. .: *General and Comparative Endocrinology* . 177, : 168-176.

MD Rahman and Peter Thomas. Effects of hypoxia exposure on cytochrome P4501A (CYP1A) expression in Atlantic croaker: molecular mechanisms of CYP1A down-regulation..: *PLOS ONE* . 7, : e40825.
1 West University Drive

Keita Kodama and MD Rahman and T Horiguchi and Peter Thomas. Upregulation of hypoxia-inducible factor (HIF)-1α and HIF-2α mRNA levels in dragonet Callionymus valenciennei exposed to environmental hypoxia in Tokyo Bay.: *Marine Pollution Bulletin*. 64, : 1339-1347.

P. Thomas and MD Rahman. Extensive reproductive disruption, ovarian masculinization and aromatase suppression in Atlantic croaker in the northern Gulf of Mexico hypoxic zone.: *Proceedings of the Royal Society B: Biological Sciences*. (January (1st Quarter/Winter)) 279, : 28-38.
http://dx.doi.org/10.1098/rspb.2011.0529

MD Rahman and Izhar Khan and Peter Thomas. Tryptophan hydroxylase: a target for neuroendocrine disruptions. .: *Journal of Toxicology and Environmental Health B* . 14, : 473-494.

MD Rahman and P. Thomas. Characterization of three IGFBP mRNAs in Atlantic croaker and their regulation during hypoxic stress: potential mechanisms of their upregulation by hypoxia.: *AJP: Endocrinology and Metabolism*. (October (4th Quarter/Autumn)) 301, : E637-E648.
http://dx.doi.org/10.1152/ajpendo.00168.2011

A Takemura and MD Rahman and Y park. External and internal controls of lunar-related reproductive activities in fish. .: *Journal of Fish Biology* . 76, : 7-26.

Peter Thomas and Md. Rahman. Region-wide impairment of Atlantic croaker testicular development and sperm production in the northern Gulf of Mexico hypoxic dead zone.: *Marine Environmental Research*. (January (1st Quarter/Winter)) 69, : S59-S62.
http://dx.doi.org/10.1016/j.marenvres.2009.10.017

Peter Thomas and Md. Rahman. Biomarkers of hypoxia exposure and reproductive function in Atlantic croaker: A review with some preliminary findings from the northern Gulf of Mexico hypoxic zone.: *Journal of Experimental Marine Biology and Ecology*. (December) 381, : S38-S50.
http://dx.doi.org/10.1016/j.jembe.2009.07.008

Cheryl Murphy and Kenneth Rose and MD Rahman and Peter Thomas. TESTING AND APPLYING A FISH VITELLOGENESIS MODEL TO EVALUATE LABORATORY AND FIELD BIOMARKERS OF ENDOCRINE DISRUPTION IN ATLANTIC CROAKER (MICROPOGONIAS UNDULATUS) EXPOSED TO HYPOXIA.: *Environmental Toxicology and Chemistry*. 28, : 1288.
http://dx.doi.org/10.1897/08-304.1

Peter Thomas and Md. Rahman. Chronic Hypoxia Impairs Gamete Maturation in Atlantic Croaker Induced by Progestins through Nongenomic Mechanisms Resulting in Reduced Reproductive Success.: *Environmental Science & Technology*. (June) 43, : 4175-4180.
http://dx.doi.org/10.1021/es9000399

M.S. Rahman and P. Thomas. Molecular cloning, characterization and expression of two tryptophan hydroxylase (TPH-1 and TPH-2) genes in the hypothalamus of Atlantic croaker: Down-regulation after chronic exposure to hypoxia.: *Neuroscience*. (January (1st Quarter/Winter)) 158, : 751-765.
http://dx.doi.org/10.1016/j.neuroscience.2008.10.029

Peter Thomas and MD Rahman and Izhar Khan. Widespread endocrine disruption and reproductive impairment in an estuarine fish population exposed to seasonal hypoxia. .: *Proceedings of the Royal Society B* . 274, : 2693-2701.

Md. Rahman and Peter Thomas. Molecular cloning, characterization and expression of two hypoxia-inducible factor alpha subunits, HIF-1α and HIF-2α, in a hypoxia-tolerant marine teleost, Atlantic croaker (Micropogonias undulatus).: *Gene*. (July (3rd

Quarter/Summer)) 396, : 273-282.
http://dx.doi.org/10.1016/j.gene.2007.03.009
Y Park and J Park and SE Kim and Y Lee and MD Rahman and Akihoro Takemura. Melatonin receptor of a reef fish with lunar-related rhythmicity: cloning and daily variations. .: *Journal of Pineal Research* . 41, : 166-174.

Peter Thomas and Md. Rahman and James Kummer and Susan Lawson. Reproductive endocrine dysfunction in Atlantic croaker exposed to hypoxia.: *Marine Environmental Research*. (January (1st Quarter/Winter)) 62, : S249-S252.
http://dx.doi.org/10.1016/j.marenvres.2006.04.031

Akihiro Takemura and MD Rahman and S Nakamura and Y Park and Kazunori Takano. Lunar cycles and reproductive activity in reef fishes with particular attention to rabbitfishes.: *Fish and Fisheries* . 5, : 317-328.

Akihiro Takemura and Endang Susilo and M.D. Rahman and Masaya Morita. Perception and possible utilization of moonlight intensity for reproductive activities in a lunar-synchronized spawner, the golden rabbitfish.: *Journal of Experimental Zoology*. (October (4th Quarter/Autumn)) 301A, : 844-851.
http://dx.doi.org/10.1002/jez.a.105

Md. Rahman and Byung-Ho Kim and Akihiro Takemura and Chang-Bum Park and Young-Don Lee. Influence of light-dark and lunar cycles on the ocular melatonin rhythms in the seagrass rabbitfish, a lunar-synchronized spawner.: *Journal of Pineal Research*. (September) 37, : 122-128.
http://dx.doi.org/10.1111/j.1600-079x.2004.00147.x

Md. Rahman and Byung-Ho Kim and Akihiro Takemura and Chang-Bum Park and Young-Don Lee. Effects of Moonlight Exposure on Plasma Melatonin Rhythms in the Seagrass Rabbitfish, Siganus Canaliculatus.: *Journal of Biological Rhythms*. (August) 19, : 325-334.
http://dx.doi.org/10.1177/0748730404266712

B Kim and MD Rahman and S Kim and Y Lee and A Takemura. Alcohol treatment promotes conversion of estradiol-17β in female tilapia, Oreaochromis mossambicus. . Brownsville: *Fish Physiology and Biochemistry* . 29, : 263-268.
1 West University Drive

J Leatherland and K Ogasawara and MD Rahman and R Renaud and A Takemura and H Yamashiro. In vitro steroidogenesis of the gonads of a protogynous Pacific wrasse, Haliochoeres trimaculatus. .: *Journal of Fish Biology* . 62, : 1414-1434.

M.S. Rahman and A. Takemura and Y.J. Park and K. Takano. Lunar cycle in the reproductive activity in the forktail rabbitfish.: *Fish Physiology and Biochemistry*. 28, : 443-444.
http://dx.doi.org/10.1023/b:fish.0000030623.49948.3c

Md Saydur Rahman and Masaya Morita and Akihiro Takemura and Kazunori Takano. Hormonal changes in relation to lunar periodicity in the testis of the forktail rabbitfish, Siganus argenteus.: *General and Comparative Endocrinology*. (May) 131, : 302-309.
http://dx.doi.org/10.1016/s0016-6480(03)00025-x

MD Rahman and A. Takemura and S. Nakamura and K. Takano. Rhythmic changes in testicular activity with lunar cycle in the forktail rabbitfish.: *Journal of Fish Biology*. (February) 62, : 495-499.
http://dx.doi.org/10.1046/j.1095-8649.2003.00036.x

MD Rahman and A Takemura and K Takano. Lunar synchronization of in vitro steroidogenesis in ovaries of the golden rabbitfish, Siganus guttatus (Bloch)..: *General and Comparative Endocrinology* . 125, : 1-8.

Agustinus HARAHAP and Akihiro TAKEMURA and MD Rahman and Shigeo NAKAMURA and Kazunori TAKANO. Lunar synchronization of sperm motility in the spiny rabbitfish Siganus spinus (Linnaeus).: *Fisheries Science*. (June) 68, : 706-708.
http://dx.doi.org/10.1046/j.1444-2906.2002.00482.x

Md.Saydur Rahman and Akihiro Takemura and Kazunori Takano. Lunar Synchronization of in Vitro Steroidogenesis in Ovaries of the Golden Rabbitfish, Siganus guttatus (Bloch).: *General and Comparative Endocrinology*. (January (1st Quarter/Winter)) 125, : 1-8.
http://dx.doi.org/10.1006/gcen.2001.7708

Agustinus Harahap and Akihiro Takemura and Shigeo Nakamura and Saydur Rahman and Kazunori Takano. Histological evidence of lunar-synchronized ovarian development and spawning in the spiny rabbitfish Siganus spinus (Linnaeus) around the Ryukyus.: *Fisheries Science*. (October (4th Quarter/Autumn)) 67, : 888-893.
http://dx.doi.org/10.1046/j.1444-2906.2001.00337.x

Md.Saydur Rahman and Akihiro Takemura and Kazunori Takano. Lunar synchronization of testicular development and steroidogenesis in rabbitfish.: *Comparative Biochemistry and Physiology Part B: Biochemistry and Molecular Biology*. (June) 129, : 367-373.
http://dx.doi.org/10.1016/s1096-4959(01)00323-2

MD Rahman and A Takemura and K Takano. Annual changes in ovarian histology, plasma steroid hormones and vitellogenin in the female golden rabbitfish, Siganus guttatus (Bloch)..: *Bulletin of Marine Science* . 67, : 729-740.

MD Rahman and Akihiro Takemura and Kazunori Takano. Annual changes in testicular activity and plasma steroid hormones in the golden rabbitfish Siganus guttatus (Bloch).: *Fisheries Science*. (October (4th Quarter/Autumn)) 66, : 894-900.
http://dx.doi.org/10.1046/j.1444-2906.2000.00144.x

MD Rahman. Lunar synchronization of testicular development and plasma steroid hormone profiles in the golden rabbitfish.: *Journal of Fish Biology*. (October (4th Quarter/Autumn)) 57, : 1065-1074.
http://dx.doi.org/10.1006/jfbi.2000.1368

MD Rahman and A. Takemura and K. Takano. Lunar synchronization of testicular development and plasma steroid hormone profiles in the golden rabbitfish.: *Journal of Fish Biology*. (October (4th Quarter/Autumn)) 57, : 1065-1074.
http://dx.doi.org/10.1111/j.1095-8649.2000.tb02212.x

Md.Saydur Rahman and Akihiro Takemura and Kazunori Takano. Correlation between plasma steroid hormones and vitellogenin profiles and lunar periodicity in the female golden rabbitfish, Siganus guttatus (Bloch).: *Comparative Biochemistry and Physiology*

Part B: Biochemistry and Molecular Biology. (September) 127, : 113-122. http://dx.doi.org/10.1016/s0305-0491(00)00240-6

M Islam and MD Rahman and M Rahman and S Shokita. Status of mud crab (Scylla spp.) fishery and its culture in Bangladesh.: *Biological Magazine, Japan.* . 37, : 97-106.

Media Contributions

Internet

University of Texas at Austin, College of Natural Sciences, (May 26, 2011)

Magazine

National Geographic (March 31, 2011)

Contracts, Grants and Sponsored Research

Abdullah Faizur Rahman and Richard J Kline and MD SAYDUR Rahman. Grant Remote Sensing-Based Mapping, Suitability Modeling, and Carbon Sequestration Analysis of Potential Oyster Mariculture Sites Along the Texas Coast Texas Sea Grant State , 394003$ (January 2024 - December 2025)

Richard J Kline and MD SAYDUR Rahman. Contract Development and Application of an eDNA assay for Southern Flounder (Paralichthys lethostigma) USFWS / TPWD State Wildlife Grant Federal , 99999$ (June 2022 - December 2025)

MD SAYDUR Rahman and Jayson Parsons. Grant Combined effects of elevated temperature and pesticide exposure on molecular, biochemical, and epigenetic signals in the American oyster. UTRGV The University of Texas Rio Grande Valley , 8800$ (February 2022 - April 2023)

Richard J Kline and MD SAYDUR Rahman. Grant Movements, Behavior, and Reproductive Condition of Two Snook Species in South Texas US Fish and Wildlife Service via Texas Parks and Wildlife Department (TPWD SWG) Federal , 100000$ (August 2018 - August 2021)

Abdullah F Rahman and Richard J Kline and MD SAYDUR Rahman. Contract Endangered Species Research Projects on Survey Methods for the Rio Grande Cooter Texas Comptroller of Public Accounts State , 248478.37$ (September 2018 - December 2019)

Abdullah F Rahman and Richard Kline and MD S Rahman. Contract Development and Application of a Novel Suite of Field Survey Methods to Inform Conservation of the Rio Grande cooter Pseudemys gorzugi Texas Comptroller of Public Accounts State , 248478.37$ (August 2018 - December 2019)

Nazmul Islam and MD Rahman. Grant Detection of Environmental Estrogen in Microfluidic Biochips to Improve Sensitivity UTRGV Research The University of Texas Rio Grande Valley , 18900$ (December 2016 - December 2018)

Richard J Kline and MD SAYDUR Rahman. Grant Defining the range of the South Texas Siren, development and validation of an eDNA assay for use with this species US Fish and Wildlife Service via Texas Parks and Wildlife Department (TPWD-SWG) Federal , 99983$ (June 2016 - August 2018)

MD S Rahman. Grant Evaluation of molecular and epigenetic indicators of hypoxia exposure in brown shrimp UTRGV COS SEED Grant The University of Texas Rio Grande Valley , 10380$ (May 2016 - November 2017)

Awards and Honors

Scholarship/Research

Travel Award. UTRGV (March 2022)

Faculty Grant Award Incentive. University of Texas Rio Grande Valley (November 2019)

Japan Rotary Scholarship in Marine and Environmental Sciences. Rotary Club Japan (1999)

Japan Hayanakajima Scholarship in Marine Science. Hayanakajima Foundation, Japan (1998)

Japan Monbusho Scholarship in Marine Science. Ministry of Education, Japan (1996)

Service, Professional

Student Belonging Achievement Award . University of Texas Rio Grande Valley (November 2019)

Japan Society for the Promotion of Science . Japan Society for the Promotion of Science Foundation (October 2001)

Service, University

Student Accessibility Service. University of Texas Rio Grande Valley (2018)

Student Accessibility Service . The University of Texas Rio Grande Valley (October 2016)

Teaching

Outstanding Teaching to Pre-medical Students. UTRGV Office of Health Professions Careers (April 2021)

Outstanding Teaching to Pre-medical Students. Office of Health Professions Careers, UTRGV (2018)

Presentations

Esmirna Cantu and MD SAYDUR Rahman."Pesticides induce Oxidative/Nitrative stress, Disrupt Renal System and Impair Swimming Behavior in Goldfish. ".UTRGV College of Science Annual Research Conference , UTRGV, Brownsville. (April2023)

Sakib T Rishan and Richard J Kline and MD SAYDUR Rahman."Applications of environmental DNA (eDNA) to detect subterranean and aquatic invasive species: Prospects and challenges of eDNA metabarcoding.".UTRGV College of Science Annual Research Conference , UTRGV, Brownsville. (April 28, 2023)

Asif Ahmed and MD SAYDUR Rahman."Effects of short-term exposure to pesticides mixture on tissue architecture and body fluid conditions of American oyster. ".UTRGV College of Science Annual Research Conference , UTRGV, Brownsville. (April 28, 2023)

Esmirna Cantu and MD SAYDUR Rahman."Pesticides Disrupt the Renal System Due to Oxidative and Nitrative Stress in Goldfish. ".Biomedical Research Awareness Day (BRAD) Annual Research Conference , UTRGV, Brtownsville. (April 19, 2023)

Esmirna Cantu and MD SAYDUR Rahman.". Pesticides Disrupt the Renal System Due to Oxidative and Nitrative Stress in Goldfish".School of Interdisciplinary Programs and Community Engagement (SIPCE) Annual Research Conference , UTRGV, Edinburg. (March 31, 2023)

MD SAYDUR Rahman."Molecular, cellular, and epigenetics responses to global warming, hypoxia, and environnemental chemicals in fish and shellfish. ".Invited Speaker, Khulna University, Bangladesh. (February 13, 2023)

MD SAYDUR Rahman."Hypoxia Exposure Triggers Cellular Apoptosis, DNA breaks, and Epigenetic Signals in Red Snapper. ".Society of Comparative and Integrated Biology (SICB) Annual Research Conference , SICB, (January2023)

MD SAYDUR Rahman."Physiological, Molecular & Biochemical Responses in Atlantic Croaker Exposed to Environmental Stress".Society of Comparative and Integrated Biology (SICB) Annual Research Conference, SICB, Austin. (January2023)

Md Imran Noor and MD SAYDUR Rahman."Exposure to Roundup of Oxidative Stress Biomarkers, Na+/K+ -ATPase Expression, and Cellular Apoptosis in goldfish. ".the Society of Comparative and Integrated Biology (SICB) Annual Research Conference , SICB, Austin. (January2023)

Exmirna Cantyu and MD SAYDUR Rahman."Pesticide Cocktail Affects Free-swimming Behavior in Relation to Distance and Movement in Goldfish.".Presented in the Society of Comparative and Integrated Biology (SICB) Annual Research Conference, SICB, Austin. (January 6, 2023)

Esmirna Casntu and MD SAYDUR Rahman."Pesticide Mixtures Influences the Physiology and Induces Oxidative/Nitrative Stress in Goldfish.".Society of Comparative and Integrated Biology (SICB) Annual Research Conference , SIOCB, Austin. (January 5, 2023)

MD SAYDUR Rahman."Presented at the Department of Biology".Invited Speaker, UTRGV Department of Biology, Edinburg. (November 3, 2022)

Wendy Martinez and Mohammad Maruf Billah and MD SAYDUR Rahman."Detection of bacterial pathogen in the American Oyster, Crassostrea virginica in South Texas Waters.".South-Central SETAC Regional Chapter Annual Meeting , South-Central SETAC , Texas A&M University-Corpus Christi. (April2022)

Afsana Chowdhury and MD SAYDUR Rahman."Effects of High temperature and RoundUp exposure on antioxidant expression in the American Oyster: Mechanisms and modulation of oxidative/nitrative stress.".South-Central SETAC Regional Chapter Annual Meeting , South-Central SETAC , Texas A&M University-Corpus Christi. (April2022)

MD SAYDUR Rahman and Peter Thomas."Effects of PCB/Aroclor and hypoxia exposure on CYP1A expression in Atlantic croaker liver: Molecular and cellular mechanisms of CYP1A regulation".South-Central SETAC Regional Chapter Annual Meeting , South-Central SETAC , Texas A&M University-Corpus Christi. (April2022)

Mohan Dash and MD SAYDUR Rahman."Effects of tributyltin (TBT) in the American oyster at environmentally relevant concentrations: DNA lessons and oxidative stress biomarkers. ".South-Central SETAC Regional Chapter Annual Meeting , South-Central SETAC , Texas A&M University-Corpus Christi. (April2022)

Md Imran Noor and MD SAYDUR Rahman."Exposure to Roundup on oxidative/nitrative stress, Na+/K+-ATPase, and antioxidant enzymes expression in the gills of goldfish. ".South-Central SETAC Regional Chapter Annual Meeting , South-Central SETAC , Texas A&M University-Corpus Christi. (April2022)

Md Imran Noor and MD SAYDUR Rahman."Oxidative/nitrative stress biomarker in goldfish organ induced by sub-chronic Roundup exposure. ".UTRGV Engaged Scholar Symposium , UTRGV Engaged Scholar , Brownsville. (April2022)

Valeria Ruiz and Cassidy Richard and MD SAYDUR Rahman."Enumeration and detection of bacterial pathogen, Escherichia coli, in the American oyster. ".UTRGV Engaged Scholar Symposium (ES2) , UTRGV Engaged Scholar Office, Brownsville. (April2022)

MD SAYDUR Rahman and Esmirna Cantu."Elevated temperature triggers nitrative stress, cellular apoptosis, and DNA methylation in gonads of Atlantic sea urchin".Society of Comparative and Integrated Biology , Society of Comparative and Integrated Biology , Arizona (Virtually). (March2022)

Esmirna Cantu and Michelle Rivera and MD SAYDUR Rahman."Pesticide concoctions influence free-swimming behavior in relation to distance and movement in goldfish, Carassius auratus".Society of Comparative and Integrated Biology, Society of Comparative and Integrated Biology, Arizona (Virtually). (March2022)

Mohan Dash and MD SAYDUR Rahman."Effects of tributyltin on oxidative-nitrative stress, 8-OHdG and dsDNA expressions in the American oyster.".Academy of Science 2022 Annual Conference , Academy of Science , University of Houston in Clear Lake . (February2022)

Md Imran Noor and MD SAYDUR Rahman."Expression of Oxidative/Nitrative Stress Biomarker and Renin Enzyme During RoundUp Exposure in Goldfish".Texas Academy of Science 2022 Annual Conference, Texas Academy of Science , University of Houston in Clear Lake . (February2022)

MD SAYDUR Rahman."Hypoxia-induced cellular apoptosis, ssDNA/dsDNA breaks and DNA methylation in red snapper".Texas Academy of Science 2022 Annual Conference , Texas Academy of Science , University of Houston in Clear Lake . (February2022)

Esmirna Cantu and Michelle Rivera and MD SAYDUR Rahman."Pesticide cocktail affects free-swimming behavior and induces oxidative and nitrative stress in goldfish, (Carassius auratus). ".Texas Academy of Science 2022 Annual Conference , Texas Academy of Science , University of Houston in Clear Lake . (February2022)

Afsana Chowdhury and MD SAYDUR Rahman."Effect of elevated temperature and glyphosate exposure on oxidative stress and antioxidant status in the American oyster".Society of Comparative and Integrated Biology , Society of Comparative and Integrated Biology , Arizona (online). (January2022)

Md Imran Noor and MD SAYDUR Rahman."Effects of Roundup on Nitrative Stress and Renin Expression in Kidney of Goldfish. ".Society of Comparative and Integrated Biology , Society of Comparative and Integrated Biology , Arizona. (January2022)

Mohan Dash and MD SAYDUR Rahman."Effects of tributyltin exposure of 8-OHdG and dsDNA expressions and oxidative/nitrative stress in the American oyster. ".Society of Comparative and Integrated Biology , Society of Comparative and Integrated Biology , Arizona. (January2022)

MD SAYDUR Rahman."Environmental Hypoxia on Physiological, Molecular and Epigenomic Responses in Atlantic Croaker".Society of Comparative and Integrated Biology , Society of Comparative and Integrated Biology , (January2022)

Michelle Rivera and Esmirna Cantu and Alexa Campus and Britteny Lacy and MD Saydur Rahman."Effects of pesticides on cellular apoptosis, DNA damage, and Global DNA methylation in goldfish (Carassius auratus). ".10th Young Environmental Scientist Meeting, Society of Environmental Toxicology and Chemistry , Virtual.2021)

Brittney Lacy and Md Sadequr Rahman and MD Saydur Rahman."Environmentally relevant pesticide cocktail and heat stress co-exposure affect osmoregulation and antioxidant system of goldfish gill and kidney. ".Annual Research Conference Society of Comparative and Integrated Biology , SICB, Virtual.2021)

Brittney Lacy and Md Sadequr Rahman and MD Saydur Rahman."Interactive Effects of Heat and Common-Use Pesticides on Oxidative Stress, Antioxidant Expression, and Osmoregulation in Common Goldfish. ".Europe 10th Young Environmental Scientists Meeting , SETAC, Virtual.2021)

Brittney Lacy and Michelle Rivera and Leinady Estrada and MD Saydur Rahman."The ramifications of prolonged co-exposure to heat and pesticide conglomerate in swimming behavior of common goldfish (Carassius auratus). ".in Society of Comparative and Integrated Biology (SICB) Annual Research Conference , SICB, Virtual.2021)

Michelle Rivera and Brittney Lacy and Leinady Estrada and MD Saydur Rahman."Cocktail and Heat Stress Co-Exposure Alter Free-Swimming Behavior and Increase Action-Less Time Over Long-Term Exposure in Goldfish. ".Society of Environmental Toxicology and Chemistry , SETAC, Virtual.2021)

Afsana Chowdhury and MD SAYDUR Rahman."Interactive Effects of Temperature and RoundUp Exposure on Oxidative/Nitrative Stress and Antioxidant Status in the Eastern Oyster. ".UTRGV College of Science Annual Research Conference , UTRGV,2021)

Esmirna Cantu and Michelle Rivera and MD SAYDUR Rahman."Pesticide mixtures affect free-swimming behavior in relation to distance and movement in goldfish, Carassius auratus. ".UTRGV College of Science Annual Research Conference , UTRGV,2021)

Md Imran Noor and MD SAYDUR Rahman."Roundup Exposure Induces Oxidative/Nitrative Stress and Renin Expression in Kidney of Goldfish. ".UTRGV College of Science Annual Research Conference , UTRGV,2021)

Mohan Dash and MD SAYDUR Rahman."Tributyltin Exposure Induces dsDNA breakage and 8-OHdG Expression in the American Oyster. ".UTRGV College of Science Annual Research Conference , UTRGV, Edinburg-Brownsville.2021)

Valeria Ruiz and Cassidy Richard and MD SAYDUR Rahman."Detection and Enumeration of Bacterial Pathogen, Escherichia coli in the American Oyster Collected from Natural Habitats. ".Engaged Scholar Showcase in the University of Texas Rio Grande Valley , UTRGV, Brownsville. (November2021)

Alexa Jade Alaniz and Amin Ibrahim and Esmirna Cantu and MD Saydur Rahman."Effects of Heat Stress on Ovarian Functions, Heat Shock Protein Expression, Cellular Apoptosis and DNA Methylation in Atlantic Sea. ".UTRGV High Scholar Summer Research Program , UTRGV, Virtual. (August2021)

Michelle Rivera and Esmirna Cantu and Alexa Campos and Brittney Lacy and MD Saydur Rahman."Pesticides affect Free Swimming Behavior, DNA damage, and Oxidative stress in goldfish. ".National Conferences on Undergraduate Research (NCUR). , NCUR, Virtual. (April2021)

Michelle Rivera and Esmirna Cantu and Alexa Campus and Britteny Lacy and MD Saydur Rahman."The repercussions of pesticides in goldfish free swimming behavior, DNA damage, and oxidative stress. ".UTRGV Engaged Scholarship Symposium, ES Program, UTRGV, Virtual . (April2021)

Michelle Rivera and Brittney Lacy and Leinady Estrada and MD Saydur Rahman."Ramifications of Prolonged co-exposure to heat and pesticide conglomerate in swimming behaviors of common goldfish (Carassius Auratus).".Society for Integrative & Comparative Biology Annual Meeting, SICB, Washington, D.C. (January2021)

Md Faizur Rahman and MD Saydur Rahman."Effects of elevated temperature on 8-hydroxy-2- deoxyguanosine expression and DNA damage in the eastern oyster (Crassostrea virginica). ".Society of Integrated and Comparative Biology (SICB) Annual meeting, SICB, Washington, D.C.. (January2021)

Md Sadequr Rahman and MD Saydur Rahman."Elevated Seasonal Temperature Disrupts ProoxidantAntioxidant Homeostasis and Promotes Cellular Apoptosis in the American Oyster, Crassostrea virginica: A Field. ".Society of Integrated and Comparative Biology (SICB) Annual meeting, SICB, Washington, D.C.. (January2021)

Omar Vazquez and MD Saydur Rahman."Effects of heat stress on cellular stress response in the common goldfish, Carassius auratus. ".Society of Integrated and Comparative Biology (SICB) Annual meeting,, SICB, Washington, D.C.. (January2021)

Brittney Lacy and Md Sadequr Rahman and MD Saydur Rahman."Effects of environmentally relevant pesticides and heat stress co-exposure on osmoregulation and antioxidant system in gill and kidney of goldfish.".North America 41st Annual Meeting, Society of Environmental Toxicology and Chemistry , Virtual Meeting.2020)

Brittney Lacy and Michelle Rivera and Leinady Estrada and MD Saydur Rahman."Commonly used pesticide cocktail and heat stress co-exposure alter free swimming behavior, and increase actionless time over long-term exposure in common goldfish. ".North America 41st Annual Meeting/ SciCon2 Virtual Meeting, Society of Environmental Toxicology and Chemistry , Virtual Meeting.2020)

Michelle Rivera and Alexa Campos and Esmirna Cantu and Brittney Lacy and MD Saydur Rahman."Pesticides affect apoptosis, DNA damage, and global DNA methylation in aquatic organisms.".UTRGV College of Science Annual Research Conference , UTRGV, Virtual.2020)

Michelle Rivera and Alexa Campus and Esmirna Cantu and Brittney Lacy and MD Saydur Rahman."Pesticides affect apoptosis, DNA damage, and global DNA methylation in aquatic organisms. ".UTRGV Engaged Scholar Virtual Showcase Event , UTRGV Virtual Showcase Event Online..2020)

Jackson Johnston and MD Saydur Rahman."Impacts of rising temperatures on gonadal functions, heat shock protein expression, cellular apoptosis and body fluid conditions in Atlantic sea urchin. ".Society for Integrative and Comparative Biology, SICB, Austin, Texas. (January2020)

and Stephanie Dubois and Abdullah Faizur Rahman and MD Saydur Rahman."Investigation environmental contamination in the Lower Laguna Madre through CYP1A expression in pinfish liver. ".Society for Integrative and Comparative Biology, Society for Integrative and Comparative Biology, Asutin, Texas. (January2020)

Mohammad Maruf Billah and MD Saydur Rahman.". Detection and enumeration of bacterial pathogens in the American oyster, Crassostrea virginica.".Society for Integrative and Comparative Biology , Society for Integrative and Comparative Biology , Austin, TX. (January 6, 2020)

MD Sadequr Rahman and MD Saydur Rahman."Effects of heat exposure on antioxidant expression and redox status in the American oyster: a laboratory study. ".Society for Integrative and Comparative Biology, University of Texas Rio Grande, Austin, Texas. (January 6, 2020)

Brittney Lacy and MD Saydur Rahman."Interactive effects of heat stress and pesticides co-exposure on osmoregulation and antioxidant system in gill and kidney of goldfish. ".Society for Integrative and Comparative Biology , Society for Integrative and Comparative Biology , Austin, Texas. (January 6, 2020)

Eleazar Harnandez and Omar Vazquez and Andre Torucco and MD Saydur Rahman."Histological evidence of annual and lunar reproductive rhythms of Atlantic sea urchin, Arbacia punctulate in the southern Gulf of Mexico: changes in nutritive phagocytes in relation to gametogenesis. ".Society for Integrative and Comparative Biology , SICB, Austin, Texas. (January 4, 2020)

Sarah Nash and MD Saydur Rahman."Short-term heat stress attenustes gonadal functions and induces apoptosis and oxidative stress in the American oyster, Crassostrea virginica: molecular mechanisms and signaling pathway. ".Society for Integrative and Comparative Biology , SICB, Austin, Texas. (January 3, 2020)

MD Sadequr Rahman and MD S Rahman."Impacts of global warming on antioxidant status and redox signaling in gills and digestive glands of American oyster. ".UTRGV Graduate Student Research Showcase, University of Texas Rio Grande, Edinburg, Texas. (November 7, 2019)

Brittney Lacy and MD Sadequr Rahman and MD Saydur Rahman."Environmental relevant pesticides attenuate renin and antioxidant expressions in goldfish. ".Society of Environmental Toxicology and Chemistry (SETAC) North Amer, Society of Environmental Toxicology and Chemistry , Toronto, Canada. (November 4, 2019)

Rim Touhami and Ahmed Touhami and MD S Rahman."AFM analysis of cytochrome P450 1A snook liver and kidney tissue. ".UTRGV REU Program, UTRGV, Brownsville, Texas. (August 16, 2019)

Sara Ortiz and Steven Belancourt and Eleazar Hernandez and MD S Rahman."Bacterial Pathogen Vibrio cholerae in the American oyster in South Texas Waters".High Scholar Program College of Science, UTRGV, Edinburg, TX. (August 02, 2019)

Krista M. Ruppert and Drew R. Davis and Richard J. Kline and MD Saydur Rahman."Development, Application, and Assessment of an Environmental DNA Assay for Detection of the Rio Grande Siren".Joint Meeting of Ichthyologists and Herpetologists, American Society of Ichthyologists and Herpetologists, Snowbird, Utah. (July 25, 2019)

Amy P. Bogolin and Abdullah Faizur Rahman and Richard J. Kline and MD Saydur Rahman and Drew R. Davis."Comaring Novel and Traditional Sampling Methodologies to Assess the Population Status of the Rio Grande Cooter, Pseudemys gorzugi".Joint Meeting of Ichthyologists and Herpetologists, American Society of Ichthyologists and Herpetologists, Snowbird, Utah. (July 24, 2019)

Amy Bogolin and Abdullah Rahman and Richard Kline and Carl Franklin and MD S Rahman and Drew Davis."Comparing Novel and Traditional Sampling Methodologies to Assess the Population Status of the Rio Grande Cooter, Pseudemys gorzugi.".Joint Meeting of Ichthyologists and Herpetologists Conferences, ASIH, SSAR, HL, AES, Snowbird, Utah. (July 24, 2019)

Krista Ruppert and Drew David and Richard Kline and MD S Rahman."Development, Application, and Assessment of an Environmental DNA Assay for Detection of the Rio Grande Siren. ".Joint Meeting of Ichthyologists and Herpetologists Conferences, ASIH, SSAR, HL, AES, Snowbird, Utah. . (July 24, 2019)

Sarah Nash and MD S Rahman."Impacts of elevated temperatures on gonadal functions, cellular apoptosis and oxidative stress in the American oyster. ".20th International Symposium on Pollutant Responses in Marine Organisms (PRIMO20), PRIMO20, Clemson University, Charleston, South Carolina . (May 20, 2019)

MD S Rahman and Peter Thomas."Effects of hypoxia and PCB co-exposure on CYP1A expression and its potential regulators in Atlantic croaker liver. ".20th International Symposium on Pollutant Responses in Marine Organisms (PRIMO20), PRIMO20, Clemson University, Charleston, South Carolina . (May 19, 2019)

Jackson Johnstone and MD S Rahman."Impacts of global warming on gonadal functions in Atlantic sea urchin.".20th International Symposium on Pollutant Responses in Marine Organisms (PRIMO20), PRIMO20, Clemson University, Charleston, South Carolina . (May 19, 2019)

Alehi Silguero and Mohammad Maruf Billah and MD S Rahman."Pathogenic Bacteria: Detection of Salmonella in American Oyster. ".4th Annual Engaged Scholar Symposium, UTRGV, Brownsville, Texas. (April 16, 2019)

Alehli Silguero and Obdulia Robles and Breada Pena and MD S Rahman."Bacterial pathogen, Vibrio cholerae in the American oyster from South Texas Water. ".College of Sciences Annual Conference UTRGV, UTRGV, Edinburg, TX. (March 29, 2019)

Sarah nash and MD S Rahman."How will global warming affect the future of American oysters? ".College of Sciences Annual Conference UTRGV, UTRGV, Edinburg, TX. (March 29, 2019)

Eleazar Hernandez and Omar Vázquez and MD S Rahman."Influence of environmental phenomena in the reproductive cycle of Atlantic sea urchin in the southern Gulf of Mexico. ".College of Sciences Annual Conference UTRGV, UTRGV, Edinburg, TX. (March 29, 2019)

Jackson Johnston and MD S Rahman."Impacts of global warming on gonadal functions, heat shock protein expression, and cellular apoptosis in Atlantic sea urchin. ".122nd annual meeting of Texas Academy of Science, Howard Payne University, Brownwood, Texas. (March 01, 2019)

Eleazar Hernandez and Omar Vázquez and Andre Torucco and MD S Rahman."Lunar reproductive rhythms of the Atlantic sea urchin in the Southern Gulf of Mexico".122nd annual meeting of Texas Academy of Science, Howard Payne University, Brownwood, Texas . (March 1, 2019)

Mohammad Maruf Billah and Wendy Martinez Guerra and Alehli Silguero and MD S Rahman."Microbial contaminants in Atlantic oyster in South Texas waters. ".122nd annual meeting of Texas Academy of Science, Howard Payne University, Brownwood, Texas . (March 01, 2019)

Krista M. Ruppert and Drew R. Davis and Richard J. Kline and MD Saydur Rahman."Development and Application of an Environmental DNA Assay for Detection of the Rio Grande Siren".55th Annual Meeting of the Texas Chapter of the Wildlife Society , Texas Chapter of the Wildlife Society, Montgomery, Texas. (February 22, 2019)

Krista Ruppert and Drew Davis and Richard Kline and MD S Rahman."Development and Application of an Environmental DNA Assay for Detection of the Rio Grande Siren. ".55th Annual Meeting of Texas Chapter of Wildlife Society, Howard Payne University, Browns wood, Texas. (February 21, 2019)

Victor Rangel and Eleazar Harnendaz and Omar Vázquez and MD S Rahman."The Effects of Global Warming on the Reproductive Systems of Atlantic Sea Urchins".Annual Regional Science and Engineering Fair, Brownsville. (February 02, 2019)

Jackson Joshnstone and MD S Rahman."Gonadal functions and cellular apoptosis in Atlantic sea urchin. ".Winter Seminar series in UTRGV , UTRGV Coastal Studies Lab, South Padre Island, Brownsville. (January 19, 2019)

Eleazar Hernandez and Omar Vázquez and Andre Torucco and MD S Rahman."Annual and lunar reproductive rhythms of the Atlantic sea urchin in the Southern Gulf of Mexico. ".Society for Integrative & Comparative Biology, SICB, Florida. (January 03, 2019)

Sarah Nash and MD S Rahman."Consequences of high temperatures on gonadal functions, cellular apoptosis and oxidative stress in the American oyster. ".Society for Integrative & Comparative Biology, SICB, Florida. (January 03, 2019)

Krista Ruppert and K.M. Bare and Richard Kline and MD S Rahman."Development of a new environmental DNA assay for detection of the Rio Grande siren in highly turbid water".Society for Integrative & Comparative Biology, SICB, Florida. (January 03, 2019)

Jackson Johnstone and MD S Rahman."Impacts of rising temperatures on gonadal functions, heat shock protein expression, and cellular apoptosis in Atlantic sea urchin. ".Society for Integrative & Comparative Biology, SICB, Florida. (January 03, 2019)

Krista M. Ruppert and Evan A. Bare and Richard J. Kline and MD Saydur Rahman."Development of a New Environmental DNA Assay for Detection of the Rio Grande Siren".Society for Integrative and Comparative Biology, Society for Integrative and Comparative Biology, Tampa, Florida. (January 3, 2019)

MD S Rahman and Peter Thomas."Effects of environmental hypoxia on reproductive endocrine functions, molecular and epigenetic signals in Atlantic croaker. ".Society for Integrative and Comparative Biology , SICB, Florida. (January 03, 2019)

MD S Rahman."Interactions between environmental chemicals and stressors: molecular, biochemical and epigenetic signals in marine fishes. ".Invited speaker at the University of North Carolina , University of North Carolina at Greensboro, North Carolina. (October 17, 2018)

Eleazar Hernandez and Omar Vázquez and Ivonne Cano and Alehli Silguero and ."Presence of pathogenic bacteria (Salmonella and E. coli) in American oyster in south Texas waters. ".UTRGV School of Medicine Research Symposium , University of Texas Rio Grande, McAllen. (September 15, 2018)

Wendy Martinez and Mohammad Maruf Billah and Alehli Silguero."Investigating bacterial pathogens in American oyster in south Texas waters. ".High Scholar Program College of Science, University of Texas Rio Grande, Edinburg, TX. (August 03, 2018)

Victor Rangel and Eleazar Hernandez and MD S Rahman."Warmer temperature attenuates testicular functions in Atlantic sea urchin. ".High Scholar Program College of Science, University of Texas Rio Grande, Edinburg, TX. (August 03, 2018)

Sarah Nash and MD S Rahman."Effects of global warming on reproductive functions, heat stress expression and cellular apoptosis of eastern oyster gonad.".International Conference on Environmental Science and Technology, American Academy of Sciences, Houston, TX. (June 25, 2018)

MD S Rahman."Global impact of climate change, hypoxia and environmental chemicals: molecular, cellular and epigenetic signals in marine fishes. ".USDA Hispanic Serving Institute Program , Department of Biology, UTRGV, Edinburg, TX. (May 01, 2018)

Sarh Nash and MD S Rahman."Effects of global warming on reproductive functions, heat shock protein expression and cellular apoptosis of eastern oyster gonad. ".College of Sciences Annual Conference UTRGV, University of Texas Rio Grande, Edinburg, TX. (April 13, 2018)

Jackson Jo and MD S Rahman."Influence in response to elevated temperature on gonadal functions in purple sea urchin. ".College of Sciences Annual Conference UTRGV, University of Texas Rio Grande, Edinburg, TX. (April 13, 2018)

Omar Vazquez and Eleazar Hernandez and Andre Torruco and MD S Rahman."Lunar reproductive cycle of Atlantic sea urchin in south Texas waters. ".College of Sciences Annual Conference UTRGV, University of Texas Rio Grande, Edinburg, TX. (April 13, 2018)

Eleazar Hernandez and Omar Vazquez and Ivonne Cano and MD S Rahman."Microbial contaminants in Atlantic oyster in Brownsville waters. ".College of Sciences Annual Conference UTRGV, University of Texas Rio Grande, Edinburg, TX. (April 13, 2018)

Eleazar Hernandez and Omar Vazquez and Ivonne Cano and MD S Rahman."Detecting bacterial pathogens in the American oyster of south Texas waters. ".UTRGV Engaged Scholarship Symposium, UTRGV, University of Texas Rio Grande, Brownsville. (April 10, 2018)

Sarah Nash and MD S Rahman."Effects of heat stress on gonadal functions, heat shock protein expression and cellular apoptosis of American oyster.".9th NOAA Biennial Education and Science Forum , NOAA, Washington, DC. (March 18, 2018)

Jackson Johnstone and MD S Rahman."Impacts of global climate change on ovarian and testicular development in Atlantic sea urchin.".9th NOAA Biennial Education and Science Forum , NOAA, Washington, DC. (March 18, 2018)

Eleazar Hernandez and Omar Vazquez and Andrew Torruco and MD S Rahman."Annual reproductive cycle of Atlantic sea urchin in the southern Gulf of Mexico".Annual meeting in Texas Academy of Science, Texas Academy of Science, Midland, Texas . (March 2, 2018)

Jackson Johnstone and Sarah Nash and Mario Monila and MD S Rahman."Effects of high temperature on ovarian functions and heat shock protein expression in Atlantic sea urchin. ".Annual meeting in Texas Academy of SciencM, Texas Academy of Science, Midland, Texas . (March 2, 2018)

MD S Rahman."Impact of global climate change, hypoxia and environmental chemicals: molecular, biochemical and epigenetic signals in marine fishes. ".Sungkyunkwan University, South Korea, Sungkyunkwan University, Suwon, South Korea . (February 20, 2018)

Krista Ruppert and Evan Bare and Richard J Kline and MD SAYDUR Rahman."Sifting Through the Soup: Developing an Environmental DNA Assay for Threatened Amphibians".54th Annual Meeting of the Texas Chapter of the Wildlife Society, Texas Chapter of the

Wildlife Society, Dallas, TX. (February 10, 2018)

Krista Ruppert and Ethan Bare and Richard Kline and MD S Rahman."Sifting through the soup: developing an environmental DNA assay for threatened amphibians. ".Annual meeting of the Texas Chapter of The Wildlife Society , Dallas, TX. (February 9, 2018)

MD S Rahman and Eleazar Hernandez and Victor Rangel and Omar Vazquez and Esmirna Kantu."Impacts on global warming on gonadal functions in Atlantic sea urchin. ".Society for Integrative & Comparative Biology, SICB, California. (January 03, 2018)

MD S Rahman."Effects of global climate change, hypoxia and environmental chemical on marine fishes: molecular and epigenetics signals. ".Invited Seminar, Texas A&M University at Galveston, Galveston, TX. (October 26, 2017)

MD S Rahman."Evaluating molecular and epigenetic signals in brown shrimp exposure to environmental hypoxia. ".College of Sciences ASEED Grant Presentation, University of Texas Rio Grande, Brownsville. (October 17, 2017)

Victor Rangel and Esmirna Cantu and MD S Rahman."Effects of high temperature on ovarian functions in Atlantic sea urchin. ".High Scholar Program College of Science, College of Sciences UTRGV, Edinburg, TX. (August 04, 2017)

Andre Torruco."Correlation between environmental temperature and gonadal development of sea urchin in the Gulf of Mexico. ".Texas Bays and Estuaries Meeting , University of Texas at Austin, Marine Science Institute, Port Aransas, TX. (April 12, 2017)

Stephanie DuBois."Determination environmental contamination in the Lower Laguna Madre through CYP1A expression in pinfish liver and microplastics content. ".Texas Bays and Estuaries Meeting , University of Texas at Austin, Marine Science Institute, Port Aransas, TX. (April 12, 2017)

MD S Rahman."Molecular, cellular, and epigenetics responses to environmental hypoxia and chemical stress in marine fishes.".Invited Lecture, Indiana University -Purdue University at Fort Wayne, Fort Wayne, Indiana. (April 07, 2017)

Stephanie DuBois and Abdullah F Rahman and MD S Rahman."Investigating environmental contamination in the Lower Laguna Madre through CYP1A expression in Pinfish liver. ".Annual Conference College of Science UTRGV, College of Sciences UTRGV, Edinburg, TX. (March 31, 2017)

MD S Rahman."Molecular and epigenetic indicators of hypoxia exposure in brown shrimp. ".College of Sciences Annual Conference UTRGV, College of Sciences UTRGV, Edinburg, TX. (March 31, 2017)

Andre Torruco and Eleazar Hernandez and Jocelyn Martinez and Md S Rahman."Reproductive cycle of Atlantic sea urchin, Arbacia punctulata in Texas waters.".College of Sciences Annual Conference UTRGV, College of Sciences UTRGV, Edinburg, TX. (March 31, 2017)

Md S Rahman and Peter Thomas."Effects of Environmental Hypoxia on Physiological, Molecular and Epigenomic Responses in a Marine Fish, Atlantic Croaker.".Texas Chapter of the American Fisheries Society, TPWD, Corpus Christi, TX. (January 19, 2017)

Md S Rahman and Peter Thomas."Interactive effects of hypoxia: PCB mixture on hepatic CYP1A expression in Atlantic croaker: mechanisms of CYP1A regulation. ".Invited Presentation, Aquatic Animal Models of Human Disease Conference in the University of Alabama at Birmingham, University of Alabama, Birmingham, Alabama. (January 7, 2017)

Md S Rahman."Hypoxia and environmental chemicals in marine ecosystems: coupled dynamics and effects on marine organisms".Environmental Studies Symposium , UTRGV, Brownsville. (November 29, 2016)

Md S Rahman."Adverse impacts of global warming, hypoxia and environmental chemical: molecular and epigenomic signals in marine organisms. ".Invited Lecture, University of Texas Austin, Marine Science Institute, Port Aransas, TX. (August2016)

Md S Rahman and Peter Thomas."Interaction between hypoxia and PCB on hepatic expression in Atlantic croaker: potential mechanisms of CYP1A regulation".International Congress on the Biology of Fish , Texas State University, San Marcos, TX. (June2016)

Md S Rahman and Peter Thomas."Adverse impacts of environmental hypoxia: physiological, molecular and epigenomic responses in marine fishes".International Congress on the Biology of Fish , Texas State University, San Marcos, TX. (June 12, 2016)

Md S Rahman."Impacts of environmental hypoxia on global DNA methylation in red snapper. ".Texas Bays and Estuaries Meeting , University of Texas at Austin, Marine Science Institute, Port Aransas, TX. (April 13, 2016)

Md S Rahman."Impacts of global climate change, hypoxia and chemical stress: physiological, molecular and epigenomic responses in marine fishes. ".Invited Lecture-Mendel Society Seminar, Texas A&M University-Commerce, Commerce, Texas. (March2016)

Kenny Rose and S Creekmore and P Thomas and K Craig and R Neilan and MD S Rahman."Modeling the population-level effects of hypoxia on a coastal fish: implication of a spatially-explicit individual-based model. ".Ocean Sciences Meeting, Association for the Sciences of Limnology and Oceanography (ASLO), New Orleans, Louisiana. (February 21, 2016)

Peter Thomas and MD S Rahman."Shared physiological and molecular responses in marine fish and invertebrates to environmental hypoxia: potential biomarkers of adverse impacts on marine communities.".Ocean Sciences Meeting , Association for the Sciences of Limnology and Oceanography (ASLO), New Orleans, Louisiana. (February 21, 2016)

Peter Thomas and MD S Rahman."Physiological and epigenetic impacts of hypoxia on Atlantic croaker in the northern Gulf of Mexico. ".Coastal & Estuarine Research Federation meeting, Coastal & Estuarine Research Federation , Portland, Oregon. (November 8, 2015)

Kenny Rose and S Creekmore and P Thomas and K Craig and R Neilan and MD S Rahman."Modeling the population-level effects of hypoxia on a coastal fish: implications of a spatially-explicit individual-based model.".ICES Annual Science Conference, Carlsberg Foundation, Denmark, Copenhagen, Denmark. (September 21, 2015)

Teaching

Teaching Experience

BIOL 1406, Gen Bio I, 15 Course(s)

BIOL 1406, General Biology I, 3 Course(s)

BIOL 4316, Environmental Toxicology, 3 Course(s)

BIOL 4399, Independent Research, 2 Course(s)

BIOL 4399, Research Problems in Biology, 6 Course(s)

BIOL 4404, Ichthyology, 2 Course(s)

BIOL 5316, Adv Environmental Toxicology, 3 Course(s)

BIOL 5404, Advanced Ichthyology, 2 Course(s)

BIOL 6185, Graduate Research, 4 Course(s)

BIOL 6285, Graduate Research, 3 Course(s)

BIOL 6365, Biological Research Problems, 1 Course(s)

BIOL 6385, Graduate Research, 3 Course(s)

BIOL 6685, Graduate Research, 1 Course(s)

BIOL 7100, Thesis Proposal, 6 Course(s)

BIOL 7300, Thesis I, 3 Course(s)

BIOL 7301, Thesis II, 3 Course(s)

BMED 3224, Independent Research IV, 1 Course(s)

EEMS 6285, Graduate Research, 5 Course(s)

EEMS 6340, Adaptations to Aquatic Environ, 5 Course(s)

EEMS 6385, Graduate Research, 10 Course(s)

EEMS 6390, Graduate Internship, 3 Course(s)

EEMS 6391, Supervised Teaching, 4 Course(s)

EEMS 6585, Graduate Research, 2 Course(s)

EEMS 6685, Graduate Research, 4 Course(s)

EEMS 7100, Continuing Thesis, 14 Course(s)

EEMS 7300, Thesis I, 7 Course(s)

EEMS 7301, Thesis II, 8 Course(s)

MARS 3430, Marine Biology Field Methods, 4 Course(s)

MARS 4301, Marine Science Communication, 4 Course(s)

MARS 4399, Research Problems, 5 Course(s)

MARS 5370, SpTp: Advanced Aquaculture, 1 Course(s)

UNIV 4000, Directed Research, 3 Course(s)

UNIV 6100, Comp Exam Ext, 1 Course(s)

Non-Credit Instruction

- Workshop, UTRGV Office of Health Professions Careers, 25. (April 2, 2021 - April 10, 2021)
- Workshop, UTRGV Office of Heal Professions Careers, 20. (November 6, 2020 - November 7, 2020)
- Workshop, UTRGV Office of Heal Professions Careers, 70. (June 12, 2020 - June 14, 2020)
- Workshop, Office of Heal Professions Careers, UTRGV, 13. (June 06, 2019 - June 06, 2019)
- Guest Lecture, 8. (September 10, 2018 - September 10, 2018)
- Workshop, Office of Heal Professions Careers, UTRGV, 13. (June 12, 2018 - June 12, 2018)
- Workshop, Office of Heal Professions Careers, UTRGV, 25. (June 5, 2018 - June 5, 2018)
- Workshop, Office of Heal Professions Careers, UTRGV, 25. (June 13, 2017 - June 13, 2017)
- Workshop, Office of Heal Professions Careers, UTRGV, 40. (June 06, 2017 - June 06, 2017)
- Guest Lecture, School of Earth, Environmental and Marine Sciences, UTRGV, 15. (November 21, 2016 - November 21, 2016)
- Workshop, Office of Heal Professions Careers, UTRGV, 24. (October 29, 2016 - November 5, 2016)
- Workshop, Office of Health Professions Careers, UTRGV, 25. (August 22, 2016 - August 26, 2016)
- Workshop, Office of the Health professional Careers UTRGV , 40. (June 21, 2016 - June 21, 2016)
- Workshop, Office of Heal Professions Careers, UTRGV, 35. (June 8, 2016 - June 8, 2016)
- Workshop, Office of Heal Professions Careers, UTRGV, 30. (May 16, 2016 - May 19, 2016)
- Guest Lecture, Department of Biology, UTRGV, 24. (February 15, 2016 - February 15, 2016)
- Guest Lecture, School of Multidisciplinary Sciences, UTRGV, 13. (October 26, 2015 - October 26, 2015)

Directed Student Learning

Undergraduate Supervised Research,Alexa Campos. Effects of Environmental Pesticides on Cellular Apoptosis, DNA Damage, and Global DNA Methylation in Aquatic Organism , Department of Biology. (September 2020)

Undergraduate Supervised Research,Esmirna Cantu. Effects of Environmental Pesticides on Cellular Apoptosis, DNA Damage, and Global DNA Methylation in Aquatic Organism , Department of Biology. (September 2020)

Undergraduate Supervised Research,Michelle Rivera. Effects of Environmental Pesticides on Cellular Apoptosis, DNA Damage, and Global DNA Methylation in Aquatic Organism , Department of Biology. (September 2020)

Dissertation Committee Chair,Afsana Chowdhury. Effect of chronic pesticide exposure on Oxidative stress and cellular apoptosis in American on American Oyster, Crassostrea virginica., School of Earth, Environmental, and Marine Sciences. (August 2020)

Master's Thesis Committee Member,Alexandra Olevera. School of Earth, Environmental, and Marine Sciences. (August 2020)

Master's Thesis Committee Member,Padraic Robinson. School of Earth, Environmental, and Marine Sciences. (September 2019)

Master's Thesis Committee Chair,Omar Vázquez. Effects of Heat Stress on Transcription Factors, Oxidative Stress and Cellular Apoptosis in the Common Goldfish, Carassius auratus , (August 2019)

Master's Thesis Committee Chair,Brittney Lacy. Interactive Effects of Heat Stress and Pesticides Co-exposure on Swimming Behavior, Osmoregulation, Antioxidant Expression, and Redox Status in Common Goldfish , School of Earth, Environmental, and Marine Sciences. (January 2019)

Master's Thesis Committee Chair,Md Faizur Rahman. Effects of Elevated Temperature on 8-Hydroxy-2'-Deoxyguanosine Expression, DNA Damage and Oxidative Stress in the American Oyster (Crassostrea virginica). , School of Earth, Environmental, and Marine Sciences. (August 27, 2018)

Master's Thesis Committee Member,German Torres Perez. School of Earth, Environmental, and Marine Sciences. (August 2018)

Master's Thesis Committee Member,Conner Gallagher. School of Earth, Environmental, and Marine Sciences. (2018)

Master's Thesis Committee Member,Johana Castro. Department of Biology. (September 2017)

Master's Thesis Committee Member,Johana Castro. (July 2023)

Master's Thesis Committee Chair,Afsana Chowdhury. (May 2023)

Master's Thesis Committee Member,Marybeth Weihbrecht. (May 2023)

Master's Thesis Committee Member,Md Salahuddin Majumder. (May 2023)

Undergraduate Supervised Research,Jasminnn Del Rio. School of Earth, Environmental, and Marine Sciences. (May 2023)

Master's Thesis Committee Chair,Md Imran Noor. (December 2022)

Undergraduate Supervised Research,Bryan Gonzalez. (December 2022)

Undergraduate Supervised Research,Valeria Ruiz and Cassidy Richard. School of Earth, Environmental, and Marine Sciences. (September 2021 - May 2022)

Master's Thesis Committee Member,Jonathan Cowfield and Irving Hurtado and Sean Collins and Victoria Salinas. School of Earth, Environmental, and Marine Sciences. (2021)

Supervised High School Students,Alexa Alaniz and Amin Ibrahim. Effects of Heat Stress on Ovarian Functions, Heat Shock Protein Expression, Cellular Apoptosis and DNA Methylation in Atlantic Sea., (June 2021 - August 2021)

Undergraduate Directed Individual/Independent Study,Cassidy Richard. Detection of Bacterial Pathogen in Oyster, School of Earth, Environmental, and Marine Sciences. (June 2021 - August 2021)

Undergraduate Directed Individual/Independent Study,Valeria Ruiz. Bacterial Pathogen in Oysters, Department of Biology. (June 2021 - August 2021)

Master's Thesis Committee Chair,Mohan Dash. Effects of Tributyltin Exposure on 8-OHdG and dsDNA Expressions, Oxidative and Nitrative Stress in the American oyster, Crassostrea virginica, School of Earth, Environmental, and Marine Sciences. (May 2021)

Master's Thesis Committee Member,Padraic Robinson. STATUS, DISTRIBUTION, AND CONSERVATION OF THE BLACK-SPOTTED NEWT (NOTOPHTHALMUS MERIDIONALIS) IN SOUTH TEXAS, (May 2021)

Undergraduate Supervised Research,Michelle Rivera and Alexa Campos and Esmirna Cantu. The repercussions of pesticides in goldfish free swimming behavior, DNA damage, and oxidative stress. , Department of Biology. (September 1, 2020 - May 2021)

Master's Thesis Committee Chair,Brittney Lacy. INTERACTIVE EFFECTS OF HEAT STRESS AND PESTICIDES CO-EXPOSURE ON SWIMMING BEHAVIOR, OXIDATIVE STRESS, ANTIOXIDANT EXPRESSION, AND REDOX STATUS IN COMMON GOLDFISH (CARASSIUS AURATUS) , School of Earth, Environmental, and Marine Sciences. (August 2018 - December 2020)

Master's Thesis Committee Chair,Md Faizur Rahman. EFFECTS OF ELEVATED TEMPERATURE ON 8-HYDROXY-2'-DEOXYGUANOSINE EXPRESSION, DNA DAMAGE AND CELLULAR APOPTOSIS IN THE AMERICAN OYSTER (CRASSOSTREA VIRGINICA), School of Earth, Environmental, and Marine Sciences. (2018 - December 2020)

Master's Thesis Committee Member,Krista Ruppert. School of Earth, Environmental, and Marine Sciences. (August 2020)

Master's Thesis Committee Chair,Md Sadequr Rahman. Effects of Seasonal Variations and Heat Exposure on Antioxidant Expression and Redox Status in the American Oyster, Crassostrea virginica: Field and Laboratory Studies, School of Earth, Environmental, and Marine Sciences. (August 27, 2018 - August 2020)

Supervised High School Student research,Ana Snelson. Effects of Elevated Temperature on DNA Methylation in Atlantic Sea Urchin Gonadal Functions, (June 3, 2020 - August 4, 2020)

Supervised High School Students,Monica Cantu. Effects of Elevated Temperature on DNA Methylation in Atlantic Sea Urchin GonadalFunctions, (June 3, 2020 - August 4, 2020)

Master's Thesis Committee Member,Amy Bogolin. Comparing novel and traditional sampling methodologies to analyze the population status of the Rio Grande Cooter (Pseudemys gorzugi), School of Earth, Environmental, and Marine Sciences. (May 2020)

Master's Thesis Committee Chair,Mohammad Maruf Billah. Detection and Enumeration of Key Bacterial Pathogens in American Oysters: A Laboratory and Field Study, School of Earth, Environmental, and Marine Sciences. (January 2018 - May 2020)

Master's Thesis Committee Chair,Eleazar Hernandez . Annual and Lunar Reproductive Cycles of the Atlantic Sea Urchin in South Texas Waters, School of Earth, Environmental, and Marine Sciences. (August 27, 2018 - December 2019)

Master's Thesis Committee Chair,Jackson Joshston. Effects of high temperature on gonadal functions and cellular apoptosis in Atlantic Sea urchin, School of Earth, Environmental, and Marine Sciences. (August 2017 - May 2019)

Master's Thesis Committee Chair,Sarah Nash. Effects of Global Warming on Reproductive Functions, Heat Shock Protein Expression and Cellular Apoptosis of American Oyster in Gonad, School of Earth, Environmental, and Marine Sciences. (August 2017 - May 2019)

Undergraduate Supervised Research,Alehli Silguero and Breada Pena and Obdulia Robles. Detection of Tetrodotoxin Produced by Pathogenic Bacteria in American Oyster, Department of Biomedical Sciences. (August 2018 - December 2018)

Undergraduate Supervised Research,Ivonne Cano. Reproductive cycle of American Oyster in Texas waters, School of Earth, Environmental, and Marine Sciences. (July 2017 - December 2018)

Supervised High School Student research,Victor Rangel. Warmer temperature attenuates testicular functions in Atlantic sea urchin, (June 3, 2018 - August 4, 2018)

Supervised High School Student research,Wendy Martinez. Investigating bacterial pathogens in American oyster in south Texas waters. , (June 03, 2017 - August 04, 2018)

Undergraduate Supervised Research,Omar Vazquez . Effects of Environmental Stress on Marine Invertebrates (Brown Shrimp, Sea Urchin and Oyster, Other (within UTRGV). (August 28, 2017 - June 2018)

Undergraduate Supervised Research,Christopher Posada. Effects of Environmental Stress on Marine Invertebrate, Sea Urchin , Department of Biology. (August 28, 2017 - December 2017)

Undergraduate Supervised Research,Oriana Chavez. Effects of Environmental Stress on Marine Invertebrate, Sea Urchin, Department of Biology. (August 28, 2017 - December 2017)

Undergraduate Supervised Research,Eleazar Hernandez . Effects of Heat Stress on Marine Invertebrate, Brown Shrimp, Department of Biology. (May 2017 - December 2017)

Master's Thesis Committee Member,Ethan Getz. Comparing energetics of natural and artificial reefs using acoustic telemetry, School of Earth, Environmental, and Marine Sciences. (May 2015 - December 2017)

Supervised High School Student,Esmirna Cantu. Effects of high temperature on ovarian functions in Atlantic sea urchin, Other (outside UTRGV). (May 2017 - August 4, 2017)

Supervised High School Student research,Victor Rangel. Effects of high temperature on ovarian functions in Atlantic sea urchin, Other (outside UTRGV). (May 2017 - August 4, 2017)

Undergraduate Supervised Research,Andre Torruco. Annual reproductive cycle of sea urchin in Texas waters, School of Earth, Environmental, and Marine Sciences. (July 2016 - June 2017)

Master's Thesis Committee Member,Austin Greene. Department of Biology. (May 2017)

Master's Thesis Committee Member,Stephanie DuBois. Increasing marine debris awareness through public education and analyzing fish for microplastic and pollutant contamination, Department of Biology. (May 2017)

Undergraduate Supervised Research,Erick Vazquez. Research title “Reproductive cycle of squid Lolliguncula brevis, Department of Biology. (August 2016 - December 2016)

Undergraduate Supervised Research,Jocelyn Martinez. Localization and expression of arginine vasotocin V1A2 receptor in ovary of a sex changing fish, grouper., Department of Biology. (August 2016 - December 2016)

Undergraduate Supervised Research,Andre Torruco. Ovarian development and annual reproductive cycle of sea urchin in Texas waters, School of Earth, Environmental, and Marine Sciences. (July 2016 - December 2016)

Undergraduate Supervised Research,Maria Sosa. Localization and expression of NADPH oxidase enzyme in the ovary and kidney tissues of Atlantic croaker, Department of Biology. (July 2016 - December 2016)

Undergraduate Supervised Research,Alexa Perez. Localization of arginine vasotocin V1A2 receptor in testis of a sex changing fish, grouper., Department of Chemistry. (June 2016 - December 2016)

Undergraduate Supervised Research,Eleazar Hernandez . 5-methyltransferase and NADPH oxidase enzyme expression in hepatopancreas of brown shrimp, Department of Biology. (2016 - December 2016)

Master's Thesis Committee Member,Kathryn Ondricek. Other (outside UTRGV). (December 2015)

Undergraduate Supervised Research,Meagan Aguirre. Site of insulin-like growth factor action to induce oocyte maturation in Zebrafish, Other (outside UTRGV). (October 2015 - December 2015)

Service

Department Service

Committee Member, AD HOC admissions and Grad Research Assistantship award committee in Biochemistry and Molecular Biology Program (August 2019)

Committee Member, Interdisciplinary Biochemistry and Molecular Biology (BMB) Master’s Program Graduate Faculty (August 2019)

Committee Member, Biochemistry and Molecular Biology Graduate Admission Committee (2019)

Committee Member, OCES (Ocean, Coastal and Earth Sciences) Graduate Admission Committee (November 2016)

Committee Member, Library Liaison (September 2016)

Committee Chair, Scholarship Committee (January 2016)

Committee Member, Faculty Search Committee for Astro-Biochemistry (2021 - May 2022)

Committee Member, Faculty Search Committee for Oceanic or Ocean-Coastal Modeling Position (2021 - May 2022)

Committee Member, Faculty Search Committee (January 2018 - May 2018)

Committee Member, Agriculture, Environmental, and Sustainability Sciences (AESS) Graduate Admission Committee (December 2016 - 2017)

Committee Member, Faculty Search Committee for Marine Science (September 2016 - May 2017)

Committee Member, Faculty Search Committee (2016 - 2016)

Committee Member, Lab Coordination Committee (2016 - 2016)

College Service

Committee Member, COS Grade Appeal Committee (July 2019 - July 2019)

Committee Member, Biochemistry and Molecular Biology Undergraduate and Graduate Program (November 2016 - 2018)

Committee Member, Food Chemistry Faculty position, College of Science (January 2018 - April 2018)

Committee Member, Food Microbiology Faculty position, College of Science (January 2018 - April 2018)

Committee Member, Food Technology Faculty position, College of Science (January 2018 - April 2018)

University Service

Committee Member, IACUC (January 1, 2022 - December 31, 2023)

Committee Member, UTRGV Institutional Review Board (September 01, 2016 - August 30, 2017)

Development Activities Attended

• Workshop, "Information Resources Acceptable Use", UTRGV Online (July 2022)

• Workshop, "TX-Ramp", UTGV Online (July 2022)

• Workshop, "Engaging students in challenging times: Family, culture, and education – all matters", Center of Teaching Excellent (February 2022)

• Workshop, "Rocking the Syllabus: Innovative Ways to Make Your Syllabus Student-Centered and Engaging", Center of Teaching Excellent (December 6, 2021)

• Workshop, "COLTT – Blackboard advanced (grade center)", Center for Online Learning and Teaching Technology at the University of Texas Rio Grande (May 18, 2020)

• Workshop, "Exploring student participation through questions", Center for Teaching Excellence, University of Texas Rio Grande (March 24, 2020)

• Workshop, "Increasing student engagement through technology", Center for Teaching Excellence at the UTRGV (March 19, 2020)

• Workshop, "COLTT – Blackboard basic", Center for Online Learning and Teaching Technology at the UTRGV (March 18, 2020)

• Workshop, "Increasing student engagement & achievement with reflective writing", Center for Teaching Excellence at the UTRGV (March 6, 2020)

• Workshop, "Teaching Strategies: Flipping the classroom away from the instructional and implementing dynamic and interactive lectures", University of Texas Rio Grande (March 5, 2020)

• Workshop, "Improving Peer Observation of Teaching through Formative Feedback from Students", Center for Teaching Excellence at the UTRGV Brownsville campus (July 2, 2019 - July 2, 2019)

• Workshop, "Using PAUSES to Create Dynamic Lectures", Center for Teaching Excellence at the UTRGV Brownsville campus (June 25, 2019 - June 25, 2019)

• Workshop, "Using Transparent Design to Improve Teaching and Student Learning", Center for Teaching Excellence at the UTRGV Brownsville campus (June 25, 2019 - June 25, 2019)

• Workshop, "Creating Learned-Centered Syllabus and First Day Engaging Activities", Center for Teaching Excellence at the UTRGV Brownsville campus (June 20, 2019 - June 20, 2019)

• Workshop, "Flipping the Initial and Final Minutes of Class", Center for Teaching Excellence at the UTRGV Brownsville campus (June 20, 2019 - June 20, 2019)

• Workshop, "Creating Syllabus", Center for Teaching Excellence at the UTRGV Brownsville campus (December 13, 2018 - December 13, 2018)

• Workshop, "Animal Care Occupational Health and Safety", UTRGV Department of Environmental Health, Safety and Rick Management (March 29, 2017 - March 29, 2017)

• Workshop, "Using Technology to Extend Teaching Beyond the Classroom", Center for Teaching Excellence & the Center for Online Learning and Teaching Technology at the UTRGV Brownville campus (November 16, 2016 - November 16, 2016)

• Workshop, "Study Abroad: Faculty Development Series", Center for Teaching Excellence at the UTRGV Brownsville campus (November 14, 2016 - November 14, 2016)

• Workshop, "Professional development workshop for teaching “How to Evaluate Course Outcomes” ", Center for Teaching Excellence at the UTRGV (November 11, 2016 - November 11, 2016)

• Workshop, "Engage session Evaluation on “Service Learning” in the Center for Teaching Excellence at the UTRGV", Center for Teaching Excellence at the UTRGV (November 8, 2016 - November 8, 2016)

Professional Service

Reviewer, Grant Proposal, New York Sea Grant. New York, New York (June 2023)

Grant Proposal Reviewer, External, Royal Society of Aparangi, New Zealand. (June 2023)

Editor, Associate Editor, Frontiers in Marine Sciences. (January 2023)

Editor, Associate Editor, Frontiers in Physiology. (January 2023)

Reviewer, Journal Article, Zoological Research. (2021)

Reviewer, Journal Article, Environmental Pollution. (2020)

Reviewer, Journal Article, Fish and Shellfish. (2020)

Reviewer, Journal Article, Journal of Marine Science Engineering. (2020)

Reviewer, Journal Article, Scientific Reports. (2020)

Reviewer, Journal Article, Sensors. (2020)

Reviewer, Journal Article, Chemical Research Toxicology. (2019)

Reviewer, Journal Article, Chemosphere. (2019)

Reviewer, Journal Article, Comparative Biochemistry and Physiology. (2019)

Reviewer, Journal Article, International Journal of Nutrition. (2019)

Reviewer, Journal Article, Journal of Sports and Exercise Medicine. (2019)

Reviewer, Journal Article, Journal of the Marine Biological Association of the United Kingdom. (2019)

Reviewer, Journal Article, Proceedings of the Royal Society Biological Sciences. (2019)

Reviewer, Journal Article, Acta Ichthyologica et Piscatoria. (2018)

Reviewer, Journal Article, Agri Gene. (2018)

Reviewer, Journal Article, BMC Pulmonary Medicine. (2018)

Reviewer, Journal Article, Ecotoxicology and Environmental Safety. (2018)

Reviewer, Journal Article, Evidence-Based Complementary and Alternative Medicine . (2018)

Reviewer, Journal Article, Gene. (2018)

Reviewer, Journal Article, Journal of Experimental Marine Biology and Ecology. (2018)

Reviewer, Journal Article, Marine Environmental Research. (2018)

Editorial Review Board Member, International Journal Physiology . New Delhi, (September 2017)

Reviewer, Journal Article, BMC Genomics. (2017)

Reviewer, Journal Article, Ecotoxicology. (2017)

Member, Society of Integrative and Comparative Biology. McLean , Virginia (2017)

Reviewer, Journal Article, Drug and Chemical Toxicology. (2016)

Member, Texas Chapter of the American Fisheries Society. Corpus Christi, TEXAS (2016)

Other, University of Texas Marine Science Institute. Port Aransas, TX (September 2015)

Member, American Physiological Society. Bethesda, Maryland (2015)

Reviewer, Journal Article, Aquatic Toxicology. California (2015)

Reviewer, Journal Article, General and Comparative Endocrinology. (2015)

Professional Memberships

Society of Integrative and Comparative Biology, (SICB) (September 02, 2017)

International Physiology Journal, (IPJ) (2017)

Texas Chapter of the American Fisheries Society, (TCAFS) (December 2016)

American Physiological Society, (APS) (January 2015)

World Aquaculture Society, (WAS) (2006 - 2008)

Japanese Society of Fisheries Science, (JSFS) (1997 - 2003)

Public Service

Judge, Scientific Judge, 60th Annual Regional Science and Engineering Fair. Brownsville, TX (February 15, 2020 - February 15, 2020)

Judge, Scientific Judge, 61th Annual Regional Science Bowl in UTRGV. Edinburg, TX (February 16, 2019 - February 16, 2019)

Judge, Scientific Judge, 59th Annual Regional Science and Engineering Fair. Brownsville, TX (February 2, 2019 - February 2, 2019)

Judge, Scientific Judge, UTRGV Regional Science and Engineering Fair. Brownsville, TX (February 3, 2018 - February 3, 2018)

Judge, Scientific Judge, UTRGV Regional Science and Engineering Fair. Edinburg, TX (February 11, 2017 - February 11, 2017)

Judge, Scientific Judge, UTRGV Regional Science Bowl. Edinburg, TX (February 4, 2017 - February 4, 2017)

Judge, Scientific Judge in Stllman Middle School. Brownsville, TX (January 28, 2017 - January 28, 2017)

Judge, Scientific Judge, Besterio ISD Middle School. Brownsville, TEXAS (December 3, 2016 - December 3, 2016)

Judge, Scientific Judge, Texas Science and Engineering Fair. San Antonio, TX (April 2, 2016 - April 2, 2016)

Judge, Scientific Judge, Weslaco ISD. Weslaco, TEXAS (March 5, 2016 - March 5, 2016)

Judge, Scientific Judge, Regional Science and Engineering Fair. Brownsville, TX (February 2016 - February 2016)

Judge, Scientific Judge, Regional Science Bowl. Edinburg, TX (February 2016 - February 2016)

Judge, Scientific Judge, Weslaco ISD. Weslaco, TEXAS (January 16, 2016 - January 16, 2016)