

# ALTON F. BURNS, PH.D.

Humble, TX 77346 | (713)-614-9390 | Alton.F.Burns@gmail.com

---

## EDUCATION

**PH.D., TEXAS A&M UNIVERSITY** – May 2019

MAJOR: WILDLIFE & FISHERIES

FOCUS: FISH NUTRITION & PHYSIOLOGY

**MASTERS OF SCIENCE, TEXAS A&M UNIVERSITY** - May 2015

MAJOR: WILDLIFE & FISHERIES

FOCUS: FISH NUTRITION & PHYSIOLOGY

**BACHELOR OF SCIENCE, TEXAS SOUTHERN UNIVERSITY** – August 2009

MAJOR: BIOLOGY

MINOR: CHEMISTRY

## SKILLS

- Analytical Chemistry (7 years)
- Aquatic Animal Husbandry (7 years)
- Fish Nutrition / Disease / Physiology
- Presenting / Public Speaking
- Project Management
- Microbiology
- Proficient in JMP (statistical software)
- Data Base Management
- Recirculating Aquaculture Systems
- Curriculum Design
- Online Instruction Experience
- Pond Management

## EXPERIENCE

### Adjunct Professor, Houston Community College

2021-Present

- Instruct Anatomy and Physiology I and II courses.
- Utilize diverse instructional methodologies, techniques, and methods for optimal online learning.
- Plan, develop, and utilize a variety of teaching methods and materials to assist students in meeting course objectives with consideration of students' different backgrounds and learning styles.
- Regular review and evaluation of student progress toward achievement of course objectives.
- Provide access to students through office hours, electronic communication, and other methods for support, advisement, supplemental instruction, and discussion regarding their progress in the course.

### Adjunct Professor, San Jacinto Community College

2020-2021

- Instruct Biology II courses including lectures and lab.
- Utilize various methodologies, techniques, and delivery methods.
- Plan, develop, and utilize a variety of diverse teaching methods and materials.
- Evaluate students to measure their progress toward achievement of stated course objectives and advised them of their progress.
- Provide support and access to students through office hours, electronic communication, and other methods for supplemental instruction and advisement as needed or requested.

### Assistant Manager, Primo Broodstock, Brookshire TX

2019-2020

- Managed farm operations in support of the senior manager.
- Advised personnel as to maintain daily processes and maintenance.
- Oversaw the spawning of white shrimp and raised larval shrimp (N-1 to PL-6).
- Improved culture system design by applying good aquaculture practices (GAQPs) for white shrimp.
- Employed sterile techniques to grow a mono-strain of algae feed for larval shrimp.
- Maintained water quality parameters and biosecurity to assure quality production of brood stock, and superior survival of larvae (Dissolved Oxygen, Ammonia, Salinity, Hardness, Alkalinity, Calcium, Magnesium, and Microorganisms).

**Graduate Teaching Assistant, College Station, Texas A&M University**

2015-2017

- Conducted laboratory experiments and lectures for junior, senior, and graduate-level courses (Aquaculture, Fish Nutrition, Fish disease)
- Assisted faculty with classroom instructions, preparation and proctoring examinations, and record keeping.
- Developed laboratory standard operating protocols and lesson plans for junior, senior, and graduate-level courses.
- Conducted laboratory experiments and lectures for junior, senior, and graduate-level courses.

**Research Scientist, College Station, Texas A&M University**

2012-2019

- Managed guided and independent research projects and reported calculated statistical analysis on collected data to discern statistical differences.
- Manager assistant of an aquaculture research facility which maintained 4 student workers, 6 graduate students, up to 10 research projects, and 100,000 fish comprised of red drum, southern flounder, tilapia, black bass, hybrid striped bass, and channel catfish.
- Developed a revenue stream of approximately 20,000\$ a year.
- Spawned southern flounder, channel catfish, and tilapia.
- Transported red drum, channel catfish, and southern flounder.
- Formulated and prepared practical and refined diets.
- Engineered innovative designs to conduct independent research experiments.
- Composed animal use protocols, and research papers for submittal to periodicals for publication and ran experiments in compliance with IACUC use approvals.
- Produced microorganisms (zooplankton) as live feed for larval rearing of southern flounder.
- Designed and maintained recirculating aquaculture systems (RAS).
- Maintained water quality parameters for various fish species (Dissolved Oxygen, Ammonia, Salinity, Hardness, Alkalinity, Calcium, Magnesium, Microorganisms, and Total suspended solids (TSS))
- Supervised undergraduate student research.
- Calibrated and repaired mechanical and analytical equipment.
- Presented at 4 national conferences.
- Developed chemical procedures and standard operating protocols.
- Organized dissection, collection, and analysis of various fish species.
- Assisted with stocking of channel catfish with Texas Parks and Wildlife.

**Technician, Intertek, Houston TX**

2010-2011

- Assumed project ownership and conducted standard chemical methodologies.
- Independently conducted evaluations to industry standards on and off-site to determine compliance with applicable standards.
- Performed testing of products in accordance with standards with the highest level of accuracy.
- Calibrated and/or identified damaged equipment.
- Communicated project status and results to client, sales, and management.

**PUBLICATIONS / RESEARCH**

- Sustained swimming effects on tilapia, red drum and hybrid striped bass (**Published**)
- Relative use of dietary carbohydrates, non-essential amino acids, and lipids for energy by hybrid striped bass (**Published**)
- Effects of dietary creatine on Juvenile Red Drum Raised in various salinities (**Published**)
- Effects of dietary creatine on Juvenile Hybrid Striped Bass Raised in various salinities (**Published**)
- Effects of dietary creatine on Channel Catfish Fry raised in various salinities
- Evaluation of Nutrient Digestibility from Seafood by-product blends with Red Drum (*Sciaenops ocellatus*) and Hybrid striped Bass (*Morone saxatilis*)

**HONORS / AWARDS**

- Texas A&M Diversity Fellowship Award: August 2015
- Louis Stokes Alliance for Minority Participation Fellowship Award: 08/2011
- Excellence Fellowship: August 2011
- Completion of Bishop State Chemistry Program (Honor Certificate)
- Guest speaker for the Iraq Veterans March to New Orleans