

**HERBERT E. QUINTERO, Ph.D.**  
*Curriculum Vitae*

College of Food, Agricultural and Environmental Science, The Ohio State University  
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**EDUCATION**

**Ph.D.**, Fisheries & Aquaculture, Auburn University, 2007.  
**M.S.**, Biological Oceanography, University of Puerto Rico, 2003.  
**Specialist**, Business Administration, Universidad de Cartagena, 1995.  
**B.S.**, Marine Biology, Universidad Jorge Tadeo Lozano, 1991.

**AWARDS & DISTINCTIONS**

Graduate Research Fellowship, College of Agriculture, Auburn University, 2004-2007.  
Award “Jorge Tadeo Lozano”, University Jorge Tadeo Lozano, 1991.  
Scholarship “Jose Antonio Galan” – ICETEX, 1987-1988.  
Scholarship “University Jorge Tadeo Lozano”, 1986.

**PROFESSIONAL EXPERIENCE**

*Program Director for Aquaculture Extension*

The Ohio State University, Delaware, OH, USA (August 2023–present)

- Develop an extension and research program for the Ohio Aquaculture industry.
- Provide support to fish producers, research and extension faculty, staff, and students.
- Carry out farm visits to help producers solve production and hatchery related problems.
- Design and conduct a variety of experiments ranging from fish and shrimp production systems, fish broodstock maintenance, fingerling production, fish nutrition, water quality, emerging diseases, aquatic weeds, among others.
- Facilitate state level collaboration with other academic institutions and industry.
- Promote national and international collaboration to enhance the Ohio aquaculture industry.
- Offer training and extension programs for aquaculture clientele.
- Develop extension and peer-reviewed publications.
- Participate in preparation of grant proposals.
- Review manuscripts and grant proposals.

*Assistant Professor of Aquaculture*

University of the Virgin Islands, St. Croix, VI, USA (March 2021–May 2023)

- Teach aquaculture classes (Introduction to Marine and Freshwater Aquaculture, Introduction to Caribbean and Tropical Aquaculture).
- Develop proposal for a Bachelor of Science in Aquaponics.
- Develop proposal for a Certificate of Aquaculture.
- Facilitate state level collaboration with academic institutions and industry.
- Develop Extension and peer-reviewed publications.
- Prepare and submit grant proposals. Review manuscripts and grant proposals.

### *Extension Aquaculture Specialist*

UAPB Lonoke Fish Disease Diagn. Lab., Lonoke, AR, USA (March 2018–February 2021)

- Carry out farm visits to help producers solve production and hatchery related problems.
- Provide support to fish producers, research and extension faculty, staff, and students.
- Develop an extension and research program in baitfish and sportfish aquaculture.
- Provide field and laboratory support to the Lonoke Fish Health Diagnostic Laboratory.
- Facilitate international and state level collaboration with academic institutions and industry.
- Design and conduct a variety of experiments ranging from aquatic weeds, water quality, merging diseases, fish nutrition, fish reproduction and problems associated with hatchery operations.
- Offer training and extension programs for Hispanic clientele.
- Develop extension and peer-reviewed publications.
- Reviewer for manuscripts and grant proposals.
- Participate in preparation of grant proposals.

### *Aquaculture Research Station Manager*

University of Arkansas at Pine Bluff, Pine Bluff, AR, USA (August 2014–February 2018)

- The Aquaculture Research Station is located on 200 acres of land, and there are 107 earthen ponds, and 10 buildings including a hatchery unit.
- Provide support to research and extension faculty, staff and students conducting work at the Research Station.
- Supervise personnel at the Aquaculture Research Station.
- Maintain critical life support systems (ponds, flow-through tank systems, recirculating systems) for channel catfish, tilapia, carps, largemouth bass, and baitfish.
- Ensure that water supply, electrical system, equipment, vehicles, golf carts and buildings are in good working condition.
- Design and conduct fish reproduction and nutrition experiments.
- Provide tours for different groups, from elementary, middle, and high school students, college students, visiting scholars, government authorities, and the general public.
- Develop Extension and peer-reviewed publications.
- Review manuscripts and grant proposals.
- Participate in preparation of grant proposals.
- Facilitate international and state level collaboration with academic institutions.

### *Aquaculture Consultant – Independent Contractor*

US Soybean Export Council, Victoria-Burnaby, BC, Canada (August 2008–August 2014)

- Organize feeding demonstrations at commercial level in Latin America (Mexico, Ecuador, Venezuela, Colombia, Peru, and Costa Rica) using Pacific white shrimp, cobia, red snapper, paiche, tilapia and rainbow trout.
- Conduct training seminars for shrimp and tilapia farmers, and feed manufacturers.
- Facilitate technology transfer to shrimp and tilapia farmers, and feed mill producers.
- Discuss and prepare technical protocols to be followed during the feeding demonstrations.
- Prepare and present final reports from each feeding demonstration.

*Research Associate – Faculty of Land and Food Systems, Applied Biology*

University of British Columbia, West Vancouver, BC, Canada (April 2012–April 2013)  
Preparation of grants, proposals, and peer-reviewed publications.

- Participated in the design and implementation of an online aquaculture course (APBI-490).
- Supervised research projects and graduate students at the Centre for Aquaculture and Environmental Research (CAER, West Vancouver Lab).
- Conducted independent research on microalgae culture conditions (*Haematococcus pluvialis*, *Pavlova lutheri*).

*Aquaculture Fellowship*

US Soybean Export Council, Victoria, BC, Canada (January 2009–September 2011)

- Followed up feeding demonstrations at commercial level with Pacific white shrimp, rainbow trout and cobia.
- Organized twelve shrimp feeding demonstrations at commercial level in Latin America, Southeast Asia and China using Pacific white shrimp.
- Conducted over 50 training seminars for shrimp and tilapia farmers, and feed manufacturers.
- Facilitated technology transfer to shrimp and tilapia farmers, and feed mill producers.
- Prepared final reports and prepared articles for peer-reviewed journals and trade journals.

*Visiting Exchange Scholar*

Auburn University, Gulf Shores, AL, USA (August 2007–July 2008)

- Design and conduct fish nutrition experiments at Claude Peteet Mariculture Center.
- Developed peer-reviewed publications.
- Supervised research projects and personnel at the Claude Peteet Mariculture Center.
- Maintained critical life support systems (ponds, flow-through tank systems, recirculating systems) for Pacific white shrimp, white shrimp, pink shrimp, and Florida pompano at the Claude Peteet Mariculture Center.

*Graduate Research Assistant*

Auburn University, Auburn, AL, USA (September 2003–July 2007)

- Coordinated research projects and personnel in the nutrition lab including mentoring of graduate and undergraduate students.
- Maintained critical life support systems for tilapia and channel catfish at the E. W. Shell Fisheries Station in Auburn, AL, and for red snapper and Pacific white shrimp at Claude Peteet Mariculture Center, Gulf Shores, AL.
- Compiled and analyzed biological data, including channel catfish brood stock performance, shrimp production, and shrimp feed management.
- Performed biochemical analysis of catfish eggs, fish tissues and feed samples.

*Field Assistant*

Caribe Fisheries Inc., Lajas, Puerto Rico (February–May 2003)

- Operated critical life support systems for fish husbandry of ornamental fish.
- Harvested and packed tropical fish for local distribution.
- Applied induced reproduction techniques in freshwater fish.

### *Graduate Research Assistant*

Research Center for Aquaculture Development in PR (August 2000-December 2002)  
University of Puerto Rico, Mayagüez Campus, Puerto Rico

- Developed a fish husbandry unit for the red hind grouper.
- Collected biological samples and monitored water quality parameters from oyster production sites at Magueyes Island, Puerto Rico.
- Maintained critical life support systems (ponds, flow-through tank systems, and recirculating units) for tilapia and pacu.

### *Production Manager of a 300-acre shrimp farm*

Aquacultivos del Caribe S. A., Pueblo Nuevo, Colombia (January 1993-December 1997)

- Reorganized personnel in key production areas, evaluated their performance, and handled other issues related to Human Resources.
- Established budget plans and status reports for production and support activities.
- Prepared maintenance programs for vehicles and equipment.
- Incorporated sanitation control procedures, shrimp health monitoring, and HACCP plans.
- Reduced the average feed conversion ratio from 1.80 in 1992 to 1.25 in 1995 and increased total production over 10% in the same period.

### *Biologist at a 300-acre shrimp farm*

Aquacultivos del Caribe S. A., Pueblo Nuevo, Colombia (February 1990-December 1992)

- Supervised technical and logistic activities, and scheduled work assignments to operative staff.
- Designed an aquaculture manual (in Spanish) for training farm personnel.
- Conducted biological monitoring (phytoplankton, zooplankton and benthos) and water quality monitoring.
- Collected, analyzed, and generated production reports, including biological and water quality monitoring, feed management, growth sampling, and fertilizing procedures.

## **TEACHING**

### **Assistant Professor**

*AGR 115 – Introduction to Marine and Freshwater Aquaculture Production (Fall 2022)*

School of Agriculture, University of the Virgin Islands, St. Croix, USVI

*AGR 110 – Introduction to Caribbean and Tropical Aquaculture (Fall 2022, Spring 2023)*

School of Agriculture, University of the Virgin Islands, St. Croix, USVI

### **Adjunct Faculty**

*Principles of Aquaculture – APBI 490 (January–April 2013)*

Collaborated with Dr. Scott McKinley and Dr. Wendy Vandersteen to design an on-line course for biology students in the Faculty of Land and Food Systems, University of British Columbia, Vancouver, British Columbia, Canada.

*Water Quality – Graduate on-line course (August–December 2012)*

Faculty of Agriculture Sciences, School of Veterinary, University of Caldas, Manizales, Colombia.

*Shrimp Aquaculture & Estuarine fish aquaculture (February–June 1999)*

Department of Aquaculture, University of Cordoba, Monteria, Colombia.

*Engineering economics* (January 1997–June 1999)

Department of Food Engineering, University of San Buenaventura, Cartagena, Colombia.

### **Undergraduate Teaching Assistant**

*Physics Laboratory Instructor* (August 1999-May 2001)

Coordinated undergraduate students in practical sessions of Physics laboratory (Fisi 3173, Fisi 3174, Fisi 3092) in the Department of Physics, University of Puerto Rico, Mayagüez Campus, PR

### **Guest Lecturer**

*Fish Production*. Department of Aquaculture & Fisheries, University of Arkansas at Pine Bluff, Pine Bluff, AR (Spring, 2015).

*Fish Nutrition*. Faculty of Agriculture Sciences, University of Caldas, Manizales, Colombia (Fall 2012).

*Fish Nutrition*. Department of Fisheries & Allied Aquacultures. Auburn University (Summer 2007, graduate course).

### **Student Mentoring & Supervision**

#### **Graduate Students**

*Auburn University*

- João Reis (Ph.D. (2021)
  - Shrimp nutrition and Feed management (2019-2021).
- Daranee Sookying (Ph.D.) (2007)
  - Animal husbandry, water quality analyses, nutrition growth trials.
- Evan Durland (M.S.) (2006-2007)
  - Fish reproduction, animal husbandry, biochemistry analyses of feeds and channel catfish eggs, feed formulation and extrusion of experimental fish diets.
- Justin Markey (M.S.) (2006)
  - Animal husbandry, water quality analysis.

*University of Arkansas at Pine Bluff*

- Annette Fields (August 2018)
  - Student exchange program – Value added products, aquaculture production systems, fish diagnostics.
- Nathan Egnaw (August 2018)
  - Student exchange program - Value added products, aquaculture production systems, fish diagnostics.

*University of British Columbia*

- Lorena Garcia (M.S.) (2012-2015).
  - Shrimp nutrition and growth trials.

*University of Caldas*

- Christine Hanh-von Hessberg (M.S.) (2012-2015)
  - Water quality and fish nutrition.

## **Undergraduate Students**

### *University of the Virgin Islands*

- Destinee Turnbull
  - Data analysis of water temperatures for Molluscan Aquaculture (Summer 2022).
  - Microalgae culture techniques (Spring 2023).

### *University of Arkansas at Pine Bluff*

- Brian Freeman Rhodes (August 2018)
  - Student exchange program – Value added products, aquaculture production systems, fish diagnostics.
- April Surratt (August 2018)
  - Student exchange program – Value added products, aquaculture production systems, fish diagnostics.
- Wilmar Buitron (September 2018)
  - Student exchange program - Fish diagnostics, water quality.
- Juan David Cerquera (September 2018)
  - Student exchange program - Fish diagnostics, water quality.
- Elizabeth Ferreira (September 2018)
  - Student exchange program - Fish diagnostics, water quality.
- Mónica Alejandra González (September 2018)
  - Student exchange program - Fish diagnostics, water quality.
- Jessica Montes (September 2018)
  - Student exchange program - Fish diagnostics, water quality.
- Mónica Irene Triana (September 2018)
  - Student exchange program - Fish diagnostics, water quality.
- Nolan Sorensen (Summer 2016)
  - Water quality, fish harvesting, fish feeding.
- Meagan Kerr (Fall 2015-Spring 2016)
  - Water quality, fish stocking, fish harvesting, fish feeding.
- Cristian David Diaz Sanchez (Spring 2016)
  - Water quality, fish stocking, fish harvesting, pond preparation, data analysis.
- Luis Jeronimo Mejia (Spring 2015)
  - Water quality, fish stocking, fish harvesting, pond preparation, data analysis.

### *Auburn University*

- Laurent Littleton (Spring 2007)
  - Biochemistry analysis of channel catfish eggs.

## **Employee Supervision**

### *University of Arkansas at Pine Bluff*

- David Bush (2015-2018)
  - Equipment maintenance, facilities maintenance, animal husbandry, fish feeding.
- David Brewer (2017-2018)
  - Equipment maintenance, facilities maintenance, animal husbandry, fish feeding.

- Paul Anderson (2014-2018)
  - Equipment and facilities maintenance, animal husbandry, fish feeding.
- Jacob Owens (2014-2015)
  - Equipment and facilities maintenance, animal husbandry, fish feeding.
- Tyler Gwin (2014-2015)
  - Equipment and facilities maintenance, animal husbandry, fish feeding.

*Auburn University*

- Melanie Rhodes (2007-2008)
  - Animal husbandry, fish, and shrimp nutrition growth trials.

**GRANTS (Total funding to date: \$403,440)**

- Romano, N., Sinha, A. M., Mane, R. A., Quintero H. E. **\$77,440**. 2021. Technical and Economic Feasibility of Black soldier fly larvae (BSFL) production under conventional and novel stacked system. University of Arkansas at Pine Bluff. Funding Agency: USDA-National Institute of Food and Agriculture (NIFA). September 1<sup>st</sup>, 2021 – August 31<sup>st</sup>, 2022.
- Quintero H (PI), Romano N, Hager J, Rodríguez A. **\$96,000**. 2020. Promoting international and local collaboration to optimize sustainable and autonomous fish and plant farming to improve food security. 1890 Center of Excellence for International Engagement and Development. Global Food and Nutritional Security Initiative. FY 2020-2022.
- Moore P, Quintero H (Co-PI). **\$25,000**. 2017. Developing the next generation of Aquaculture leaders: strengthening workforce readiness in a global economy for aquaculture students in Arkansas, USA, and Huila, Colombia. 100,000 strong in the Americas initiative innovation grants #13:2017 SENA Tech Challenge.
- Benetti, D. D., Cabarcas, A., Quintero, H. E. (Co-PI), Cortés-Maldonado R., and Alston, D. **\$200,000**. 2000. National Sea Grant College Program. 2001-2002. National Marine Aquaculture Initiative: environmental and social impact of sustainable offshore cage culture production in Puerto Rican waters.
- Quintero, H. (PI), Cortes-Maldonado, R., and Kubaryk, J. 2000. Puerto Rico Sea Grant College Program. Seed Money: Larvae rearing of the red hind grouper *Epinephelus guttatus* under hatchery conditions. **\$5,000**. Grant Number MPRD-22-42-1-00.

**PUBLICATIONS**

***Peer Reviewed Journal Articles & Book Chapters***

**\*bold indicates undergraduate or graduate student author**

21. **Reis J.**, Quintero H., Roy L. 2022. Feeding practices for automated systems in commercial shrimp production, pp. 357-373. In: The Shrimp Book II (Edited by Victoria Alday-Sanz). 5 M Pub. 660 pp.
20. Roy L. A., Rawles S. D., Quintero H. E., Kelly A. M., Park J., Webster C. D. 2022. Weight loss, survival, and fatty acid composition in over-wintered juvenile Coppernose Bluegill (*Lepomis macrochirus purpureus*) cultured in outdoor tanks using different feeding regimens. *North American Journal of Aquaculture*, 84: 42-52. Doi: 10.1002/naaq.10213
19. Romano N., Fischer H., Rossi W., Quintero H., Limbaugh N., Sinha A. K. 2021. Effects of bioprocessed soybean meal and nucleotide supplementation on growth, physiology and histomorphology in largemouth bass, *Micropterus salmoides*, juveniles. *Journal of Comparative Biochemistry and Physiology Part A: Molecular & Integrative Physiology*, July

- 13, 2021, 111038. [doi.org/10.1016/j.cbpa.2021.111038](https://doi.org/10.1016/j.cbpa.2021.111038)
18. Quintero H., Roy L. A., Kelly A. M. 2021. Evaluation of split-pond systems for production of channel catfish fingerlings. *Journal of the Southeastern Association of Fish and Wildlife Agencies*, 8: 1-8.
  17. Romano N., Egniew N., Quintero H., Kelly A., Sinha A. K. 2020. The effects of water hardness on the growth, metabolic indicators, and stress resistance of largemouth bass *Micropterus salmoides*. *Aquaculture*, 527, 735469. <https://doi.org/10.106/j.aquaculture.2020.735469>
  16. Quintero H., Roy L., Park J., Kelly A., Heikes D. 2019. Evaluation of alternative pond production systems for raising largemouth bass, *Micropterus salmoides*. *Journal of the World Aquaculture Society*, 50(3): 622-632. DOI: 10.1111/jwas.12582
  15. Hahn-von-Hessberg C., Quintero H., Grajales A. 2016. Desarrollo e implementación de una noria modificada como propuesta sostenible de recirculación de agua para una estación piscícola (Development and implementation of a modified waterwheel as a proposal for sustainable water circulation for an aquaculture station). *Luna Azul* 42 (1): 185-199. DOI: 10.17151/luaz.2016.42.12 <https://www.redalyc.org/pdf/3217/321744162006.pdf>
  14. Quintero H., Davis D. A., Rhodes, M. 2012. Soy protein concentrate as an alternative ingredient in Florida Pompano (*Trachinotus carolinus*) diets. *Journal of Applied Aquaculture*, 24(3): 247-261.
  13. **Paz P.**, Roy L., Davis D. A., Quintero H. 2011. Survival of post-larval *Litopenaeus vannamei* following acclimation to low salinity waters at different temperatures. *Journal of World Aquaculture Society*, 42(4): 575-579.
  12. Quintero H., Durland E., Davis D. A., Dunham R. 2011. Effect of lipid supplementation on reproductive performance of channel catfish, *Ictalurus punctatus*, induced and strip-spawned for hybridization. *Aquaculture Nutrition*, 17:117-129. Doi: 10.1111/j.1365-2095.2009.00709.x
  11. Quintero H., Roy L. 2010. Practical feed management in semi-intensive systems for shrimp culture, pp. 443-453. In: *The Shrimp Book* (Edited by Victoria Alday). Nottingham University Press. 920 pp.
  10. **Durland E.**, Quintero H., Davis D. A., Dunham R. 2010. Influence of forage fish and dietary lipid supplements on egg quality and fry production in channel catfish (*Ictalurus punctatus*) x blue catfish (*Ictalurus furcatus*) hybridization. *Aquaculture nutrition*, 16(2):153-162.
  9. Quintero H., Hutson A., Chaimongkol A., Davis D. A., Abebe A., Dunham R. 2009. Effects of varying dietary protein levels and feeding frequencies on condition and reproductive performance of channel catfish to produce hybrid catfish. *Journal of the World Aquaculture Society*, 40(5): 601-615.
  8. Quintero H., Abebe A., Davis D. A. 2007. Zero inflated discrete statistical models for fecundity data analysis in channel catfish (*Ictalurus punctatus*). *Journal of World Aquaculture Society*, 38(2):175-187.
  7. Quintero H., Abebe A., Davis D. A. 2007. Logit models for evaluation of spawning channel catfish (*Ictalurus punctatus*). *Aquaculture Research*, 38:635-643.
  6. Alston D. E., Cabarcas A., Quintero H., Capella J., Cortes R. 2003. Public policies, current laws, and socioeconomic factors affecting sustainable cage culture in Puerto Rican waters. In Bridger C, Costa-Pierce BA (Eds). *Open Ocean Aquaculture IV – From Research to Commercial Reality*. World aquaculture Society, 65-72.



5. Quintero H., Ojeda E., Cabarcas A., Alston D. E., Capella J. 2003. Preliminary results of induced spawning of the red hind grouper (*Epinephelus guttatus*) in Puerto Rico, United States. In Bridger C, Costa-Pierce BA (Eds). Open Ocean Aquaculture IV – From Research to Commercial Reality. World aquaculture Society, 223-227.
4. Capella J., Alston D. E., Cabarcas A., Quintero H., Cortes R. 2003. Oceanographic considerations for offshore aquaculture on the Puerto Rico-US Virgin Islands platform. In Bridger C, Costa-Pierce BA (Eds). Open Ocean Aquaculture IV – From Research to Commercial Reality. World aquaculture Society, 247-262.
3. Quintero H., Moreno P., Vanin C. I. 1992. Reproductive cycle of the marine amphipod *Parhyale hawaiiensis* (Dana) (Gammaridea: Hyalidae). *Journal of the Marine Research Institute Punta de Betin, Santa Marta, Colombia* 21: 85-93.
2. Moreno P., Quintero H., Vanin C. I. 1990. Determination of lethal concentration (CL(I)50) of Cd+2 and DDT in *Parhyale hawaiiensis* (Dana) 1853 (Amphipoda-Talitroidea). Memories of VII National Seminar of Science and Technology of the Sea, Cali, Colombia.
1. Quintero H., Vanin C. I. 1990. Evaluation of the structure and productivity of the mangrove in the Ciénaga de Cocoliso – Great Island – Natural National Park Corales del Rosario. Memories of VII National Seminar of Science and Technology of the Sea, Cali, Colombia.

#### ***Extension type Publication - Trade Journal Articles***

16. Barrow B., Pena M., Quintero H. 2023. Is there any space for aquaculture and aquaponics in the USVI. *51<sup>st</sup> Agriculture & Food Fair of the U.S. Virgin Islands – AGRIFEST, Bulletin #35, UVI Cooperative Extension Service*, 27-32.
15. Quintero H., Bailey D., Habtes S., Angeli N. 2022. U. S. Virgin Islands (USVI): Opportunities in Aquaculture. *World Aquaculture Magazine, December*, 53(4): 46-50.
14. Quintero H. 2022. Aquaculture in the USVI: A golden opportunity to grow. *50<sup>th</sup> Agriculture & Food Fair of the U.S. Virgin Islands – AGRIFEST, Bulletin #34, UVI Cooperative Extension Service*, 25-31.
13. Rojo-Cebreros A., Quintero H., Romano N., Heikes D., Sánchez-Ramírez A. 2022. Challenges in largemouth bass (*Micropterus salmoides*) juvenile production. *World Aquaculture Magazine, March*, 53 (1): 34-39.
12. Quintero H., Bush D., Brewer D., Kelly A. 2019. Evaluation of channel catfish (*Ictalurus punctatus*) fry production in indoor hatchery systems. *Arkansas Aquafarming, June*, 36 (1): 2-3.
11. Arana, E., Chappell, J., Amezcuita, J., Pedroza, L., Quintero H. 2019. In-pond raceway culture of red tilapia. *Global Aquaculture Advocate, February 18, 2019*. (<https://www.aquaculturealliance.org/advocate/in-pond-raceway-culture-red-tilapia/>)
10. Arana, E., Chappell, J., Hanson, T., Amezcuita, J., Romellon, F., Quiñones, A., Lopez, G., Quintero H. 2018. Commercial demonstration of in-pond raceway – Results of tilapia production show major potential of technology. *Global Aquaculture Advocate, May 21, 2018*. (<https://www.aquaculturealliance.org/advocate/commercial-demonstration-of-in-pond-raceways/>)
9. Quintero H., Roy L., Kelly A., Park J., Heikes D. 2017. Comparison of different pond production systems for raising Largemouth bass. *Arkansas Aquafarming, April*, 34 (1): 1-2.
8. Quintero H. 2016. Channel Catfish – An overview of nutritional requirements. *International Aquafeed, January/February*: 42-44.

7. Quintero H., Cremer, M. C., Amezquita, J., De la Torre, F., Henostroza, L. 2015. Soy-based feeds evaluated for production of fast-growing Amazonian Paiche. *Global Aquaculture Advocate*, November/December: 45-47.
6. Quintero H., Cremer, M. C., Amezquita, J., De la Torre, F., Soligo, T. 2015. Soy protein concentrate replaces fishmeal in spotted rose snapper diets. *Global Aquaculture Advocate*, September/October: 42-43.
5. Quintero H., Cremer, M. C., Amezquita, J., De la Torre, F., Thiriez, G. 2012. Soy products replace fishmeal in offshore cobia feed study. *Global Aquaculture Advocate*, September/October: 106-107.
4. Alceste C., Quintero H. 2010. Sustitución de harina de pescado por harina de soya en alimentos para tilapia (Fishmeal replacement in tilapia feeds using soybean meal). *Panorama Acuicola Magazine*, September/October: 50-54.
3. Quintero H., Cremer, M. C., Manomaitis, L., Davis, D. A. 2010. Using feed with reduced levels of fish meal for commercial production of the Pacific white shrimp in Asia. *Aqua Culture Asia Pacific Magazine*, March/April: 18-20.
2. Quintero H., Davis D. A. 2008. Commercial experiences on production of Pacific white shrimp using feed with reduced levels of fish meal. *Global Aquaculture Advocate*, November/December: 62-65.
1. Durland E., Quintero H., Davis D. A. 2007. Use of lipid supplemented diets to enhance catfish brood stock performance. *International Aquafeed*, 10(4):34-36.

***In preparation*** (partial list)

- Straus DL, Abernathy JW, Kelly AM, Quintero HE, Freeze TM, Williams RS. Initial investigations into the production of triploid sunshine bass using temperature shock. Submitted to *North American Journal of Aquaculture*.
- Roy LA, Kelly AM, Hanson TR, Dorman L, Recsetar MA, Quintero HE. Research verification is effective as a tool for extension programs in aquaculture. Submitted to *Journal of Extension*.
- Quintero H, Roy LA, Pena ML. Engaging aquaculture farmers in participatory research. Submitted to *Journal of the National Association County Agricultural Agents*.
- Quintero H, Williams R, Pena ML. Carbon dioxide monitoring in aquaculture well water: A participatory research case study. Submitted to *Journal of the National Association County Agricultural Agents*.

***Thesis & Dissertation***

- Quintero F, HE. 2007. Brood stock nutrition: enhancement of egg quality for the production of hybrid catfish. Doctor of Philosophy dissertation in Fisheries and Allied Aquacultures. Auburn University Press. 126 pp.
- Quintero F, HE. 2002. Induced reproduction and evaluation of the effect of water hardness on embryonic development of *Colossoma macropomum* Cuvier, 1818 (Pisces Characidae). Master of Science thesis in Marine Sciences. University of Puerto Rico, Press. 100 pp.

**CONFERENCE PAPERS (Published Abstracts)**

**Bold indicates undergraduate or graduate student author.**

96. **Pena-Morales M. L., García-Ramírez I. T., Quintero-Fonseca H. E.** 2023. Understanding context of our environment through descriptive statistics [“Entendiendo contextos de nuestro

- entorno a través de la Estadística Descriptiva”]. XVI Inter American Conference on Mathematics Education. Lima, Perú, July 30 - August 4. (Poster).
95. Pena-Morales M. L., García-Ramírez I. T., Quintero-Fonseca H. E. 2023. Preliminary analysis of enrollment and semester cancellation in the Faculty of Education during the period 2015-1 to 2022-1 - [“Análisis preliminar de matrículas y cancelación de semestre en la Facultad de Educación durante el periodo 2015-1 al 2022-1]. XVI Inter American Conference on Mathematics Education. Lima, Perú, July 30 - August 4. (Poster).
  94. Turnbull D., Quintero H. E. 2023. Data analysis of water temperatures for Molluscan Aquaculture. Aquaculture 2023. New Orleans, LA. February 23 – 26. (Poster).
  93. Turnbull D., Quintero H. E. 2022. Data analysis of water temperatures for Molluscan Aquaculture. Annual Biomedical Research Conference for Minoritized Scientists (ABRCMS), Anaheim, CA, November 9-12.
  92. Turnbull D., Quintero H. E. 2022. Water Quality Data Analysis for Molluscan Aquaculture. 23<sup>rd</sup> Annual Fall Student Research Symposium. St. Thomas, USVI, August 28.
  91. Quintero H. E. 2022. Requisitos básicos de acuicultura como sistema de producción de alimentos (Basic requirements for Aquaculture as a food production system). Virtual presentation. Corporación Universitaria del Huila -CorHuila, Extension Service. Neiva, Colombia, March 24.
  90. Pena M., M. L., Quintero H. E. 2022. Developing mathematical and statistical thinking in the context of aquaculture. Aquaculture 2022. San Diego, CA. February 28 – March 4.
  89. Quintero H. E., Bailey D., Morton D., Adamu U. 2022. University of the Virgin Islands (UVI) Historical perspective and opportunities in aquaponics and aquaculture. Aquaculture 2022. San Diego, CA. February 28 – March 4.
  88. Pena M., M. L., Quintero H. E. 2022. Desarrollo del pensamiento matemático y estadístico en el contexto de acuicultura (Developing mathematical and statistical thinking in the context of aquaculture). XII Symposium of Mathematics and Mathematical Education, XI International Congress of Computer-Assisted Mathematics, and II Symposium of Mathematical Competitions. Universidad Antonio Nariño. Bogotá, Colombia. Feb. 17-19.
  87. Roy L. A., Rawles S. D., Quintero H. E., Kelly A. M., Park J., Webster C. D. 2021. Weight loss, survival, and fatty acid composition in over-wintered juvenile Coppernose Bluegill (*Lepomis macrochirus purpureus*) cultured in outdoor tanks using different feeding regimens. American Fisheries Society - Alabama Chapter Meeting. Ramer, AL September 23-24.
  86. Roy L. A., Kelly A. M., James J., Quintero H. E., Smith M. A. 2021. Intensive pond-based production systems: are they a good fit for sportfish and bait species? American Fisheries Society - Alabama Chapter Meeting. Ramer, AL September 23-24.
  85. Quintero H. E. 2021. Experiencias de Investigación y Extensión en Acuicultura en Arkansas (Aquaculture Research and Extension Experiences in Arkansas). LV National Congress of Biological Sciences and VII International Congress of Biological Sciences, La Guajira Chapter. Riohacha, La Guajira (Colombia), September 16.
  84. Cuellar M., Pastrana L., Pena M., Quintero H. E. 2021. Diseño y aplicación virtual del manual “Medidas de tendencia central en acuicultura” en el grado noveno (Design and implementation of the manual “Measures of central tendency in aquaculture” in ninth grade). III Coloquio de la Licenciatura en Matemáticas 20 años, Universidad Surcolombiana, Neiva, Huila. August 17-19.

83. Roy LA, Kelly AM, Hanson TR, Dorman L, Recsetar MA, Quintero HE. 2021. Research verification is effective as a tool for extension programs in aquaculture. Aquaculture America. San Antonio, TX. August 11-14.
82. Pena M., Cuellar M., Pastrana L., Quintero H. E. 2021. Implementing didactic materials for teaching measures of central tendency in the context of aquaculture. Aquaculture America. San Antonio, TX. August 11-14.
81. Rojo-Cebreros A., Quintero H. E., Heikes D., Pyco, J. D., Sanchez J. 2021. Preliminary results from a largemouth bass *Micropterus salmoides* juvenile production. Aquaculture America. San Antonio, TX. August 11-14.
80. Quintero H. E., Rojo A., Heikes D., Romano N., Egnaw N., Thompson M. 2021. Preliminary results from a largemouth bass *Micropterus salmoides* broodstock nutrition trial. Aquaculture America. San Antonio, TX. August 11-14.
79. Quintero H. 2021. Carbon dioxide in groundwater: developing a warning system for aquaculture producers – Experience during a pandemic. National Aquaculture virtual Extension Conference. June 8-9.
78. Quintero H, Kelly AM, Roy LA. 2020. Demonstration of split-pond production systems for production of channel catfish *Ictalurus punctatus* fingerlings. 74<sup>th</sup> Annual Southeastern Association of Fish & Wildlife Agencies Conference, 2020. Virtual meeting. October 26-28.
77. Kelly, A.M., H. Quintero, L.A. Roy, J. Park, and D. Heikes. 2020. The potential of alternative production systems for raising largemouth bass *Micropterus salmoides*. American Fisheries Society - Alabama Chapter Meeting 2020, Rogersville, AR, March 3-4.
76. Caicedo Prada A, Pena-Morales M, Quintero H. 2020. Diseño de material didáctico para la enseñanza de las medidas de tendencia central en el contexto de la Acuicultura (Designing didactic materials for teaching measures of central tendency in the context of Aquaculture). X Simposio de Matemáticas y Educación Matemática, IX Congreso Internacional de Matemática asistida por computador. Universidad Antonio Nariño. Bogotá, Colombia. Feb. 21-22.
75. Quintero H, McCoy K. 2020. Monitoring blue green algae and evaluation of different management strategies employed by a commercial baitfish farm to control *Microcystis*. 64<sup>th</sup> Annual Rural Life Conference. Pine Bluff Convention Center, Pine Bluff, Arkansas. February 21. (Poster).
74. Quintero H, McCoy K. 2020. On-farm evaluation and monitoring of different management strategies employed by a commercial baitfish farm to control *Microcystis*. Aquaculture America 2020. Hawaii Convention Center, Honolulu, Hawaii. February 9-12.
73. Pena-Morales M, Caicedo Prada A, Quintero H. 2020. Designing didactic materials for teaching measures of central tendency in the context of Aquaculture. Aquaculture America 2020. Hawaii Convention Center, Honolulu, Hawaii. February 9-12. (Poster).
72. Straus D, Kelly A, Quintero H, Abernathy J. 2020. Investigations in producing sterile sunshine bass. Aquaculture America 2020. Hawaii Convention Center, Honolulu, Hawaii. February 9-12.
71. Quintero H. 2020. On-farm evaluation and monitoring of different management strategies employed by a commercial baitfish farm to control *Microcystis*. Baitfish producers meeting. Lonoke Community Center, Lonoke, Arkansas, Feb. 6.
70. Kelly, A.M., H. Quintero, L.A. Roy, J. Park, D. Heikes, and M. Smith. 2020. Comparison of pond production systems and overwinter feeding strategies for largemouth bass. 2020 North Central Aquaculture Conference. Columbus, Ohio, Jan 31-Feb 2. Invited Presentation.

69. Quintero H, Roy L. 2019. Sistemas intensivos de producción en estanque ¿Funcionan para la camaricultura? Ecuadorian shrimp producers - Training program. Alabama Fish Farming Center, Greensboro, AL, August 25-26.
68. Quintero H, Kelly A. 2019. Experiences of an exchange program in Aquaculture. Aquaculture America 2019. New Orleans Marriot, New Orleans, Louisiana. March 7-11.
67. Quintero H, Kelly A. 2019. Effect of retention time in water quality parameters of the split pond system in channel catfish production. Aquaculture America 2019. New Orleans Marriot, New Orleans, Louisiana. March 7-11. (Poster).
66. Quintero H, Roy L, Kelly A. 2019. Evaluation of production systems for raising channel catfish fingerlings. Aquaculture America 2019. New Orleans Marriot, New Orleans, Louisiana. March 7-11. (Poster).
65. Quintero H, Kelly A. 2019. Effect of retention time in water quality parameters of the split pond system in channel catfish production. 2019 Catfish Farmers of America – Annual Convention. Embassy Suites, Hot Springs, Arkansas. February 21-23. (Poster).
64. Quintero H, Roy L, Kelly A. 2019. Evaluation of production systems for raising channel catfish fingerlings. 2019 Catfish Farmers of America – Annual Convention. Embassy Suites, Hot Springs, Arkansas. February 21-23. (Poster).
63. Quintero H, Kelly A, Roy L. 2019. Evaluation of three production systems for raising ... LMB... no wait... channel catfish fingerlings. Baitfish producers meeting. Lonoke Community Center, Lonoke, Arkansas. Feb. 7.
62. Quintero H, Kelly A. 2019. Effect of retention time in water quality parameters of the split pond system in channel catfish production. Rural Life Conference 2019. Pine Bluff, Arkansas. February 1. (Poster).
61. Arana E, Chappell J, Hanson T, Amezcuita J, Romellon F, Quiñonez A, Lopez G, Quintero H. 2018. Tilapia Farming: Use of in-pond raceways system (IPRS) in Mexico. Latin American & Caribbean Aquaculture 2018. Ágora Bogotá Centro de Convenciones, Bogotá, Colombia. Oct. 23-26.
60. Quintero H, Roy L, Kelly A. 2018. Evaluation of production systems for raising channel catfish fingerlings. Aquaculture America 2018. Paris Hotel and Convention Center, Las Vegas, Nevada. Feb. 19-23.
59. Smith M, Roy L, Kelly A, Thompson M, Quintero H, Lochmann R, Park J. 2018. Feeding regimes for largemouth bass at low winter temperatures. Aquaculture America 2018. Paris Hotel and Convention Center, Las Vegas, Nevada. Feb. 19-23.
58. Quintero H, Park J, Roy L, Kelly A, Heikes D. 2018. Evaluation of three different pond production systems for raising largemouth bass. Baitfish Producers Meeting 2018 – Lonoke, AR.
57. Quintero H, Kelly A, Roy L. 2018. Comparison of different pond production systems for raising Channel Catfish fingerlings. Rural Life Conference. Pine Bluff. March 9. (poster).
56. Quintero H, Bush D, Brewer D, Kelly, A. 2018. Growth evaluation of channel catfish fry in indoor systems. Rural Life Conference. Pine Bluff. March 9. (poster).
55. Quintero H, Kelly A, Roy L. 2018. Evaluation of production systems for raising channel catfish fingerlings. Catfish farmers of Arkansas Annual Meeting. Hot Springs. Jan. 12. (Poster).
54. Quintero H, Bush D, Brewer D, Kelly, A. 2018. Growth evaluation of channel catfish fry in indoor systems. Catfish farmers of Arkansas Annual Meeting. Hot Springs. Jan. 12. (Poster).
53. Roy L, Kelly A, Stone N, Engle C, Park J, Smith M, Quintero H. 2017. Using an extension approach to address an emerging industry concern: a case study of winter fish losses in

- Arkansas. National Aquaculture Extension Conference. Boise, Idaho. June 5-9.
52. Smith MA, Roy LA, Kelly AM, Lochmann R, Quintero H, Park J. 2017. Temperature and feeding regime effects the growth and fatty acid composition of largemouth bass. Aquaculture America 2017. San Antonio, Texas. Feb. 19-22.
  51. Pena M, Quintero H, Ashby S, Kelly AM. 2017. Aquaculture data may be used by teachers as a tool for teaching a specific mathematics topic. Aquaculture America 2017. San Antonio, Texas. Feb. 19-22.
  50. Quintero H, Selden G, Kelly AM, Roy L. 2017. UAPB – Aquaculture experimental research station: Extension and Outreach activities. Aquaculture America 2017. San Antonio, Texas. Feb. 19-22.
  49. Quintero H. 2017. Developing a framework for the Extension program. Aquaculture 101 session. Aquaculture America 2017. San Antonio, Texas. Feb. 19-22.
  48. Roy LA, Rawles SD, Kelly AM, Park J, Quintero HE, Webster CD. 2017. Growth, survival, and fatty acid composition of coppernose bluegill (*Lepomis macrochirus* subspecies) offered different winter-feeding regimes. Aquaculture America 2017. San Antonio, Texas. Feb. 19-22.
  47. Smith MA, Roy LA, Kelly AM, Quintero HE, Park J. 2016. Feeding regimes for largemouth bass at high summer temperatures. Aquaculture America 2016. Paris Hotel and Convention Center, Las Vegas, Nevada. Feb. 22-26.
  46. Quintero HE, Davis A. 2016. Broodstock nutrition: enhancement of egg quality in channel catfish for hybrid catfish production. Aquaculture America 2016. Paris Hotel and Convention Center, Las Vegas, Nevada. Feb. 22-26.
  45. Quintero H, Park J, Roy L, Kelly A, Heikes D. 2016. Comparison of different pond production systems for raising largemouth bass. Aquaculture America 2016. Paris Hotel and Convention Center, Las Vegas, Nevada. Feb. 22-26.
  44. Quintero H, Park J, Roy L, Kelly A, Heikes D. 2016. Comparison of different pond production systems for raising largemouth bass. Poster. Baitfish meeting. Lonoke, Feb. 11.
  43. Quintero HE, Davis, DA. 2015. Broodstock nutrition: enhancement of egg quality in channel catfish. XIII International Symposium on Aquaculture Nutrition. Hermosillo, Mexico. November 11-13.
  42. Cota, SV., Lopez, LM., Galaviz, MA., Quintero HE. 2015. Dieta practica para *Totoaba macdonaldi* elaborada con productos a base de soya (Practical diet for *Totoaba macdonaldi* based on soy products). XIII International Symposium on Aquaculture nutrition. Hermosillo, Mexico. November 11-13.
  41. Soligo T, Quintero HE, Illarramendi M, Newman M, Lara C, Cremer, M. 2015. Evaluation of Soy protein concentrate as a partial replacement for fishmeal in diets for spotted rose snapper *Lutjanus guttatus*. World Aquaculture 2015. Annual Meeting of the World Aquaculture Society. Jeju, Korea. May 26-30.
  40. Roy LA, Park J, Kelly AM, Webster C, Quintero HE, Haukenes A, Stone N, Recsetar M. 2015. The effect of different winter-feeding regimes on survival, growth, and lipid composition of centrarchids and baitfish in Arkansas. World Aquaculture 2015. Annual Meeting of the World Aquaculture Society. Jeju, Korea. May 26-30
  39. Roy LA, Dorman L, Quintero HE, Kelly A, Stone N. 2015. Current biosecurity practices to prevent the spread of “hot” *Aeromonas* on catfish farms. Arkansas Aquaculture 2015. Annual Meeting of the Catfish Farmers of Arkansas. Embassy Suites Hotel, Hot Springs, Arkansas. Jan. 15-16.

38. Quintero HE. 2012. Alternative ingredients in shrimp feed manufacturing. XIV Ecuadorian Aquaculture Conference & Aquaexpo 2012, Guayaquil, Ecuador, October 22-25.
37. Quintero HE. 2010. Aquaculture utilization: Fellowship marine shrimp. 2010 Stakeholders Meeting ASA – USB –USSEC, Campbell River, BC, August 31-September 3.
36. Quintero HE. 2009. Shrimp farm in Latin America and the Soy-in Aquaculture shrimp technology program. 2009 Aquatic Animal Nutrition, Production, and Feed processing Conference. Economical Aquatic Animal Research Institute. School of Life Sciences. Sun Yat-Sen University (Guangzhou Zhong Shan University), Guangzhou, Guandong Province, China, September 7.
35. Quintero HE. 2009. Technical development and production of marine species: ASA – IM experiences. Regional Animal Production Course (RAPCO) Aquaculture Fish Course – American Soybean Association – International Marketing, United Soybean Board. Ahualulco del Mercado, Jalisco, Mexico. April 26-May 1.
34. Quintero HE. 2009. Feed management in different production systems. Regional Animal Production Course (RAPCO) Aquaculture Fish Course – American Soybean Association – International Marketing, United Soybean Board. Ahualulco del Mercado, Jalisco, Mexico. April 26-May 1.
33. Quintero HE. 2009. Nutritional aspects and its influence in fish health. Regional Animal Production Course (RAPCO) Aquaculture Fish Course – American Soybean Association – International Marketing, United Soybean Board. Ahualulco del Mercado, Jalisco, Mexico. April 26-May 1.
32. Quintero HE. 2009. Ingredients for aquaculture feeds. Regional Animal Production Course (RAPCO) Aquaculture Fish Course-American Soybean Association–International Marketing, United Soybean Board. Ahualulco del Mercado, Jalisco, Mexico. April 26-May 1.
31. Roy LA, Davis DA, Quintero HE, **Jacquay J, Paz P, Sookying D**. 2009. The effect of temperature and low salinity on growth and survival of post-larval and juvenile *L. vannamei* and *F. duorarum*. Annual Meeting of Aquaculture America. Book of Abstracts pp. 4. Seattle, Washington. Feb. 15-19.
30. Quintero HE. 2008. Challenges for aquaculture nutrition: sustainability and profitability – shrimp culture case. II Seminar on Nutrition and Animal Health – SINAS. Manizales, Caldas. Oct. 29-30.
29. Quintero HE. 2008. Perspectives for Tilapia production: nutrition and feed management. II Seminar on Nutrition and Animal Health – SINAS. Manizales, Caldas. Oct. 29-30.
28. Roy LA, Davis DA, Quintero HE, **Jacquay J, Paz P, Sookying D**. 2008. Effect of temperature and low salinity on growth and survival of post-larval and juvenile native and non-native shrimp in Alabama. Bays & Bayous Symposium. Biloxi, Mississippi, Oct. 28-29. (Poster).
27. Quintero H, Sookying D, Rodriguez D, Davis DA. 2008. Pond production of live bait shrimp, *Penaeus setiferus* and *Farfantepenaeus duorarum* in Alabama. 24<sup>th</sup> Annual meeting of the Alabama Fisheries Association. Orange Beach, Alabama. Feb. 18-20.
26. Quintero H, Davis DA. 2008. Commercial experiences on production of Pacific White Shrimp (*Litopenaeus vannamei*) using feed with low fish meal inclusion. 24<sup>th</sup> Annual meeting of the Alabama Fisheries Association. Orange Beach, Alabama. Feb. 18-20.
25. Quintero H, Davis DA. 2008. Commercial experiences on production of Pacific White Shrimp (*Litopenaeus vannamei*) using feed with low fish meal inclusion. Annual meeting of Aquaculture America. Lake Buena Vista, Florida. Feb. 9-12.

24. **Sookying D**, Markey J, Quintero H, Rodriguez D, Davis DA, Samocha T, Browdy C. 2008. Pond production of live bait shrimp, *Penaeus setiferus* and *Farfantepenaeus duorarum* in Alabama. Annual meeting of Aquaculture America. Lake Buena Vista, Florida. Feb. 9-12.
23. Quintero H, Abebe A, Davis DA. 2007. Statistical models for fecundity data analysis in channel catfish broodstock *Ictalurus punctatus*. Caribbean & Latin American Aquaculture. 1 San Juan, Puerto Rico. Nov 6-9.
22. Davis DA, Quintero H, Samocha T, Browdy C. 2007. Development and application of low fish meal diets for the production of marine shrimp (*Litopenaeus vannamei*). Feed and production management in Aquaculture. ASA-IM Regional Seminar. Maracaibo, Venezuela. Aug 22-23.
21. Quintero H, Davis DA, Dunham R, Abebe A. 2007. Biochemical analysis on egg quality from induced channel catfish females. 31<sup>st</sup> Fish Feed and Nutrition Workshop. Auburn, Alabama. May 16-18.
20. Quintero H, Abebe A, Davis DA. 2007. Statistical tools to analyze spawning data. 31<sup>st</sup> Fish Feed and Nutrition Workshop. Auburn, Alabama. May 16-18.
19. Quintero H, Davis DA, Dunham R, Abebe A. 2007. Biochemical analysis on egg quality from induced channel catfish females. Annual meeting of Aquaculture America. Book of Abstracts, pp. 745. San Antonio, Texas. Feb. 26
18. Quintero H, Abebe A, Davis DA. 2007. Application of zero inflated discrete statistical models for fecundity data analysis in channel catfish brood stock (*Ictalurus punctatus*). Annual meeting of Aquaculture America. Book of Abstracts, pp. 746. San Antonio, Texas. Feb. 26 – Mar. 2.
17. **Durland E**, Davis DA, Dunham R, Quintero H. 2007. Egg quality and fry production in channel catfish hybrids (channel ♀ x blue ♂) as influenced by forage fish and lipid supplements. Annual meeting of Aquaculture America. Book of Abstracts, pp. 267. San Antonio, Texas. Feb. 26 – Mar. 2.
16. Davis DA, Amaya E, Quintero H, Markey J, Rouse D. 2007. Case study: feed management and improvement of shrimp production in semi-intensive pond production of *Litopenaeus vannamei*. Annual meeting of Aquaculture America. Book of Abstracts, pp. 26. San Antonio, Texas. Feb. 26 – Mar. 2.
15. Davis DA, Rouse D, Amaya E, Zelaya O, Venero J, Quintero H. 2007. Historical review of feeding protocols for the Pacific white shrimp *Litopenaeus vannamei* at Claude Petet Mariculture Center, Gulf Shores, Alabama. Annual meeting of the World Aquaculture Society. Florence, Italy. May 9-13.
14. Quintero H, Davis DA, Dunham R, Phelps R, Abebe A, Hutson A. 2006. Evaluation of fatty acids sources on egg quality and fecundity from induced channel catfish females. Annual meeting of Aquaculture America. Book of Abstracts, pp. 239. Las Vegas, Nevada. Feb. 13-16.
13. Quintero H, Abebe A, Davis DA. 2006. Logistic regression model – A case study in evaluation of spawning channel catfish females (*Ictalurus punctatus*). Annual meeting of Aquaculture America. Book of Abstracts, pp. 240. Las Vegas, Nevada. Feb. 13-16.
12. Davis DA, Rouse D, Zelaya O, Venero J, Quintero H. 2005. Historical review of feeding protocols for the Pacific white shrimp *Litopenaeus vannamei* at Claude Petet Mariculture Center, Gulf Shores, Alabama. The 1<sup>st</sup> Korean-US seminar and workshop on the sustainable marine shrimp culture. Challenges and Opportunities for the future of marine shrimp



- farming. West Sea Fisheries Research Institute. National Fisheries Research & Development Institute. Publication PD-2005-AQ-016. Incheon, Korea. Aug. 8-12.
11. Quintero H, Davis DA, Dunham R, Phelps R, Abebe A. 2005. Evaluation of feeding regime and protein content on egg quality and fecundity from induced channel catfish females. Annual meeting of Aquaculture America. Book of Abstracts, pp. 346. New Orleans, Louisiana. Jan. 17-20.
  10. Ballenger J, Hutson A, Beam D, Umali G, Kristanto A, Trask M, Templeton M, Davis DA, Quintero H, Wang F, Dunham R. 2005. Effect of genetics on channel-blue hybrid catfish embryo production. Annual meeting of Aquaculture America. Book of Abstracts, pp. 22. New Orleans, Louisiana. Jan. 17-20.
  9. Rodriguez-Guerrero D, Rhodes M, Quintero H, Phelps R. 2005. Culture of Protozoans and Dinoflagellates as possible first foods for red snapper (*Lutjanus campechanus*) larvae. Annual meeting of Aquaculture America. Book of Abstracts, pp. 378. New Orleans, Louisiana. Jan. 17-20.
  8. Rodriguez-Guerrero D, Quintero H, Phelps R. 2004. Culture of Protozoans and Dinoflagellates as possible first foods for red snapper (*Lutjanus campechanus*) larvae. 21<sup>st</sup> Annual meeting of the Alabama Fisheries Association (AFA). Gulf Shores, Alabama. Feb. 16-18.
  7. Garcia-Vazquez, S, Alston, D, Cabarcas, A, Quintero H, Ojeda E, McLean E, 2002. Relation of size and gonadal development to predict fish size during sex change of *Epinephelus guttatus* (red hind). NSF-EPSCOR, Hyatt Cerromar, Dorado, PR (Mero Cabrilla).
  6. Garcia-Vazquez, S, Alston, D, Cabarcas, A, Quintero H, Ojeda E, McLean E, 2002. Relación de tamaño y desarrollo gonadal de *Epinephelus guttatus* (mero cabrilla) para predecir el peso y la longitud del pez durante el cambio de sexo. American Chemical Society Jr. Technical meeting, 22nd Puerto Rico Interdisciplinary Scientific Meeting. University of Puerto Rico, Arecibo Campus. March 16.
  5. Quintero H, Cabarcas A, Kubaryk J, Cortes R, Alston D. 2001. Preliminary larval rearing of the red hind grouper *Epinephelus guttatus* under hatchery conditions. V Sigma Xi Student poster day. University of Puerto Rico. Mayagüez, Puerto Rico. Apr. 27. (Poster).
  4. Quintero H, Ojeda E, Cabarcas A, Alston D, Capella J. 2001. Potential species for offshore culture: larval rearing of the red hind grouper *Epinephelus guttatus* under hatchery conditions. Open Ocean Aquaculture IV. St. Andrews, New Brunswick, Canada. June 17-21. (Poster).
  3. Capella J, Alston D, Cabarcas A, Quintero H, Cortes R. 2001. Oceanographic and meteorological considerations for open ocean aquaculture in the Puerto Rico-USVI platform. Open Ocean Aquaculture IV. St. Andrews, New Brunswick, Canada. June 17-21.
  2. Alston D, Cortes R, Cabarcas A, Quintero H, Capella J. 2001. Administrative and public policies for sustainable offshore cage culture in Puerto Rican waters. Open Ocean Aquaculture IV. St. Andrews, New Brunswick, Canada. June 17-21.
  1. Quintero H, Cortes R. 2000. Assessment of the artisan culture of the tarpon fish culture (*Megalops atlanticus*; Pisces; Megalopidae) in the Ciénaga de la Virgen (Cartagena de Indias, Colombia). 35<sup>th</sup> ACS Junior Technical Meeting, 20<sup>th</sup> Puerto Rico Interdisciplinary Scientific Meeting (PRISM). Rio Piedras, Puerto Rico. March 11.

## **EXTENSION & OUTREACH ACTIVITIES**

*Aquaculture/Fisheries Center, University of Arkansas at Pine Bluff (March 2018 - February 2021)*

- Primary Extension programs include carbon dioxide monitoring program, field evaluation program, algae monitoring program, and alternative species.
- From April 2018 to June 2020 a total of **309 farm visits** were logged.
- Assist in improving reproductive performance of largemouth bass.
- Assist Arkansas Cooperative Extension System County agents with recommendations on water quality and the management of recreational fishing ponds.
- Assist in providing disease and parasite diagnostic (100-130 cases per year) and water quality (70-130 cases per year) services to the commercial aquaculture industry in central Arkansas at the UAPB Lonoke Fish Disease Diagnostic Laboratory.
- Investigate the causes of fish mortality at farms and hatcheries.
- Assist fish farmers, recreational pond owners, and Extension agents in aquatic weed identification, treatment, and management.
- Provide technical support to farmers utilizing innovative culture techniques such as split pond production systems, intensive aeration systems, or in-pond raceway systems.
- Provide technical support to farmers raising fathead minnows, golden shiners, goldfish, koi, largemouth bass, grass carp, coppernose bluegill, native bluegill, redear sunfish, hybrid bluegill, crappie, hybrid crappie, hybrid striped bass, catfish, and crawfish.
- Assist Arkansas landowners in the management of recreational fishing ponds.
- Outreach demonstrations
  - Aquatic Science Day (2015- 2020, every other year).
  - Aquaculture Field Day (2014- 2020, every other year).

## **PROFESSIONAL INTERNATIONAL SERVICE**

*Visiting Scientist, Servicio Nacional de Aprendizaje SENA, Colombia, La Angostura (Huila, Colombia) – Coordinated experiential and cross-cultural learning experiences for undergraduate students and faculty from University of Arkansas at Pine Bluff (July 16 – August 1, 2018), and for Colombian students in Pine Bluff, AR (September 22- October 7, 2018).*

*Aquaculture Fellowship, Organized feeding demonstrations at commercial level in Latin America (Mexico, Ecuador, Venezuela, Colombia, Peru, and Costa Rica), China and Southeast Asia (Philippines, Thailand) using Pacific white shrimp, cobia, red snapper, paiche, tilapia and rainbow trout. Carried out over 80 training seminars for shrimp and tilapia farmers, and feed manufacturers.*

## **CONTINUING EDUCATION**

- 2019 Two on-line courses in Pedagogy (Use of Information and Communication Technology in Education; Technological training in Blackboard 9.1 Virtual Learning Environments; Colombian National Service-Learning Institute), Lonoke, AR.
- 2016 Global G.A.P. Risk Assessment on Social Practice (GRASP) v.1.3. Training (Quality Certification Services)
- 2012 The Experimental Fish (Canadian Aquaculture Institute at UPEI)

- 2010 Three on-line courses in Pedagogy (Quantitative and qualitative evaluation; Induction to pedagogical processes; Apprehension of technological processes; Colombian National Service-Learning Institute), Victoria, BC.
- 2005 Hazard Analysis and Critical Control Points (HACCP), Auburn, AL
- 2000 Sanitation Control Procedures (SCP) for processing fish and fishery products, San Juan, PR
- 1996 Hazard Analysis and Critical Control Points (HACCP), Cartagena, Colombia
- 1995 Diagnostic and Management of Healthy Shrimp Farms, Cartagena, Colombia
- 1994 Microbiology of Penaeid Shrimp Ponds in Colombia, Cartagena, Colombia

### **NATIONAL TECHNICAL COMMITTEE SERVICE**

- USDA Southern Regional Aquaculture Center – *University of the Virgin Islands (UVI) – Research Committee (2022 – 2023)*
- USDA Southern Regional Aquaculture Center *Publications, Videos, and Computer Software Project Technical Committee (2019 – 2021)*
- USDA Southern Regional Aquaculture Center – *University of Arkansas at Pine Bluff (UAPB) Technical Committee (2019 – 2021)*
- NAEC National Aquaculture Extension Conference *Planning Committee (2019 – 2021)*

### **PROFESSIONAL SERVICE**

- Peer Review (Journals): *Journal of the World Aquaculture Society; Revista Veterinaria y Zootecnia (Journal of Veterinary Medicine & Zootechnics)*
- Reviewer for proposals submitted to the *National Marine Fisheries Service (NMFS) - Saltonstall-Kennedy Competitive Research Program*
- Vice President, Auburn University Chapter of the American Fisheries Society, 2006-2007.
- Faculty Liaison, Annual meeting of Aquaculture America, Las Vegas, Nevada 2006.
- Student representative to the Graduate Student Council, University of Puerto Rico, Mayagüez Campus, 2000-2001.

### **UNIVERSITY COMMITTEE SERVICE**

#### University of the Virgin Islands

##### University-wide committees

- English Proficiency Exam Committee, Sept. 2021- May 2023.
- Academic Standards Committee, Nov. 2021- May 2023.

##### School of Agriculture

- Curriculum Committee
- Student Recruitment
- Scholarship and Awards
- Facilities Committee
- Benevolence Committee

##### Local Community

- UVI Aquaculture Scientist representative for the St. Croix Fisheries Advisory Committee, Sept. 2022- up to date.

University of Arkansas at Pine Bluff

School of Agriculture, Fisheries and Human Sciences (SAFSH)

- Member, Working group on Global Higher Education

Department of Aquaculture & Fisheries

- Chair for the Five-year Strategic plan for the Aquaculture/Fisheries Center of Excellence-Infrastructure Committee (2017 – 2018)
- OINC committee (2014-2020)
- Safety committee (2014-2020)

Hiring Committees

- Member, Assistant Dean for Extension and Outreach (2020)
- Member, Extension Aquaculture Specialist, Fish Disease Diagnostic Lab (2019)
- Member, Lonoke Laboratory Director. UAPB Lonoke Fish Disease Diagnostic Laboratory (2018-2019)
- Member, Extension Aquaculture Specialist – Baitfish and sportfish Aquaculture (206-2017)
- Chair, Station Manager Position (2018-2020)
- Member Assistant/Associate Professor Aquaculture (2017)
- Chair, Research technician position (2016-2017)
- Chair, Equipment technician position (2015-2017)
- Member, Administrative Specialist II (2015)

**AFFILIATIONS**

World Aquaculture Society

U.S. Aquaculture Society

Latin American Aquaculture Society

National Aquaculture Association

American Fisheries Association

**SPECIAL SKILLS AND CERTIFICATIONS**

**Laboratory Techniques**

Biochemical and water quality analysis, Fatty Acids Analysis using Gas Chromatograph Shimadzu GC-17A, Phytoplankton and Zooplankton culturing, maintenance, and enumeration

**Certifications & Courses**

***Faculty Development***

- Creative Problem Solving for the Workplace Training (CPS Training), UVI Creativity Lab, Oct. 2022
- Course Design and Development Blackboard, 20 CEU, Sep. 2022
- The Emerging Caribbean Scientist (ECS) Program, VI-ISERP Faculty Mentor Workshop, May 2022
- Working with Fish in Research Settings – Lab Animal Research, CITI - UVI- April 2022
- Working with the IACUC – Basic Course, CITI- UVI - April 2022

- Social & Behavioral Research – Basic Course, CITI - UVI - April 2022
- Teaching Online (16 CEU), UVI, January 2022

### ***Aquaculture Professional Development***

- Diagnosis and Control of Common Diseases in Tropical Fish of Commercial Interest, Red CYTED LARVA Plus, ESPOL, Guayaquil, Ecuador, June 2022
- Arkansas Certified Non-Commercial Pesticide Applicator (2015-2020) - Demonstration & Research Category
- Heart saver – First Aid CPR AED, American Heart Association, Pine Bluff, AR February 2015.
- Basic course in Sanitation Control Procedures (SCP) for processing fish and fisheries products, Seafood HACCP, Alliance, San Juan, PR November 2000.
- Hazardous Analysis and Critical Control Points (HACCP), ANDI-PROEXPORT-SENA-ACUANAL, Cartagena, Colombia August 1996.
- Boating skills and seamanship course, U.S. Coast Guard Auxiliary, La Parguera, PR November 2000.
- Diagnostic and Management of Healthy Shrimp Farms, CENIACUA, Cartagena, Colombia, October 1995.
- Microbiology of Penaeid Shrimp Ponds in Colombia, ACUANAL, Cartagena, Colombia, February 1994.

### **LANGUAGES**

English  
Spanish