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| **Jonas Raphael Miller**ジョナス ラファエル ミラー5 Arrow PathNatick, Massachusetts 01760U.S.A.U.S. Cell: +1 339-222-8948Japan Cell: +81 80-6170-0475LINE ID: jonasfish55Email: Jm6254@gmail.comLinkedIn: [linkedin.com/in/jonas-miller-a588867b](https://www.linkedin.com/in/jonas-miller-a588867b) |
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|  | Education: Kindai University, Uragami Experiment Station, Nachi-katsuura, Wakayama Prefecture, Japan ; MSc. Study April 2018 – April 2020 ; Aquaculture NutritionUniversity of Rhode Island, Kingston, RI, USA ; B.S. ; 2014 ; Aquaculture and Fisheries TechnologyUniversity of Rhode Island, Kingston, RI, USA ; B.A. ; 2014 ; BiologyBoston Japanese Language School September 2015 – March 2018 Experience:Masters Research StudentUragami Station, Aquaculture Research Institute, Kindai University (April 2018 – April 2020) \*Kindai University Presidential International Graduate Student Fellowship Recipient\*Kindai University Graduate School of Agriculture Alumni Friendship Award for Best Thesis Oral Defense M.S. Thesis Title: Exploration of alternative protein sources in the development of a sustainable diet for white trevally *Psuedocaranx dentex* juveniles- Trained undergraduate students in all aspects of aquaculture - Taught English to Japanese undergraduate students, professors, and to the local community of Uragami village- Feed management of red seabream for local high school students’ experiment- Maintaining flow-through sea water aquaculture system for experimental white trevally, red seabream, Japanese eel, yellowtail (Kanpachi and Buri).- Constructed a recirculating system for culturing Japanese eel broodstock and larvae incubation- Isolation of gut bacteria from juvenile white trevally for bacteriology analysis- Conducted various biochemical analyses for nutrition experiments- Hormone injection and broodstock management of Japanese eel- Daily water quality testing of local sea water in Uragami Bay and daily meteorological reporting- Conducting three experiments for graduation thesis on white trevally nutrition- Marine finfish aquaculture studies, specifically pertaining to nutrition and feeding technology- Completed industrial training with A-Marine Kindai Corporation including;a) small vessel and sea cage training with Red Sea bream, white trevally, three varieties of yellowtail, striped knife jaw, Japanese jack mackerel, green fish, puffer fish and Pacific bluefin tuna, b) marine finfish breeding center training, and Pacific bluefin tuna hatchery management c) technical aquaculture engineering training and system designd) feed management of larval, juvenile, adult and broodstock for all species listed aboveOral Presentations: - The Japan Society of Fisheries Science Nippon Suissan Gakkai Autumn 2019 Meeting, Fukui Prefectural University, Fukui, Japan (September, 2019)- United States - Japan Natural Resources Panel on Aquaculture: 47th Scientific Symposium Travel Award Recipient, Okinawa, Japan (November, 2019)- Aquaculture America 2020, Honolulu, Hawaii (February, 2020)Courses:Advanced Marine MammalogyAdvanced Science on Aquatic Products UtilizationAdvanced Fisheries DistributionSeminar in Fisheries Science I & IIAdvanced Marine AquacultureAdvanced Fresh Water Fish CultureAdvanced Seedling ProductionAdvanced Propagation and Aquaculture SystemsSeminar in Fish Reproductive PhysiologyResearch in AquacultureResearch in Fish Reproductive BiologyPublications: 1. Development of a sustainable diet for Japanese white trevally *Pseudocaranx dentex* juveniles, Bulletin of Japan Fisheries Research and Education Agency, (In preparation)
2. Optimal replacement of fish meal by soybean meal in white trevally *Pseudocaranx dentex* juveniles, (in preparation)
3. Clarification of optimal level of fish meal replacement by soybean meal and binder comparison in white trevally *Pseudocaranx dentex* juveniles, (in preparation)
4. Increased replacement of fish meal by soybean meal and krill meal replacement by poultry-byproduct meal in white trevally *Pseudocaranx dentex* juveniles, (in preparation)

Laboratory Technician Cryogenetics, Inc., Woburn, MA (August 2017 – March 2018)Cryogenetics offered services and technology for effective fish reproduction, cryopreservation of milt and storage services for zebrafish researchers and the global aquaculture industry.- Assisted in cryopreservation procedure of zebrafish and trout milt from various U.S. hatcheries and laboratories- Assisted in IVF of zebrafish- Maintained nitrogen storage dewars for major aquaculture corporations and biomedical research institutes- Maintained RAS zebrafish aquaculture engineering systems- Liquidated the entire US office/laboratory and sold all laboratory equipment prior to closing**Aquaculture Specialist** (July 2015 – March 2018)Aquatic Resources Program, Boston Children’s Hospital- Provided high quality zebrafish husbandry to facilitate all of the scientists using fish in their research at BCH - Maintained live feed cultures, egg sorting, feeding fish, daily systems maintenance, aquaculture troubleshooting- Maintained larval culture tanks and inoculating new larval zebrafish tanks for BCH researchers- Set up and breaking down paired crosses of different genetic strains of zebrafish- Prepared shipments of live eggs and fish to be sent to laboratories in the US and internationally- Assisted in a feeding trial comparing fecundity vs. feed ration and photographing eggs- Assisted in IVF procedure for Zon Lab researchers- Set up a rotifer system for use of an experimental synthetic rotifer enrichment diet- Installed a QR code system for digital organization of fish database- Earned a Certificate of Completion from UAB and Gadsen State Community College in Biomedical Aquaculture Zebrafish Online Husbandry Education Course **Zebrafish Service Technician (Contractor)** (September 2016 – March 2018)Daniolab, Boston, MA  - Traveled domestically in the United States to different zebrafish and aquatics facilities for service calls- Troubleshooted aquaculture engineering issue in zebrafish recirculating aquaculture systems (RAS)- Installed pumps, filters, and replacement electrical components- Calibrated probes for water quality- Provided a high level of customer service**Zebrafish Technician** (April 2016 – September 2016)Harvard University, Cambridge, MA  - Temporary contractual position in the zebrafish laboratory of Dr. Alex Schier - Genotyping (fin clipping/ PCR) for post-doctoral researchers using fish for embryogenesis research- Maintained live feed cultures, egg sorting, feeding fish, daily systems maintenance, aquaculture troubleshooting- Maintaining larval culture tanks and inoculating new larval zebrafish tanks for Schier lab and Engert lab researchers- Maintained various genetic lines of fish (ie. Crossing fish and screening fish)- Assisted in a feeding trial using three different commercially available zebrafish diets**Quality Assurance Laboratory Technician** (February 2016 – May 2016) Legal Sea Foods, LLC., Boston, MA- Microbiological testing of shellfish and finfish species for a seafood production and processing facility- Daily coliform and vibrio testing in Mercenaria spp., Crassostria spp., Ostrea spp., and other cultured bivalves- Testing scombroid species of fish (Thunnus thynnus) for scombrotoxin (histamine)- Mercury testing in swordfish (Xiphias gladius).- Assisted in development and implementation of new lab standard operating procedures and HACCP plans for BRC dcertification for production of value-added seafood products- Assisted in the renovation plans of the lobster holding facility in the LSF Quality Control Center**Research Assistant** (September 2013 – February 2015) Food Science Nutrition Research Center and Blount Aquaculture Lab, University of Rhode Island Sea Grant Project: Conducted proximate analysis (Kjeldahl protein and lipid analyses) of summer flounder diets and muscle tissue. Performed nitrogen and phosphorus analytical water quality tests.Saltonstall-Kennedy Grant Project: Supervised on the development of a new class soy protein-based aquaculture feed ingredient by impregnation with squid and scallop byproduct hydrolysate using barramundi and yellowtail as a model for bioconversion. Prepared and formulated diets for barramundi, California yellowtail, Atlantic salmon, black seabass and shrimp for Auburn University and the University of Maine. Performed routine animal husbandry and tank system maintenance on barramundi and yellowtail throughout two 8-week feeding trials. Research Assistant (June 2014 – September 2014)Food Science Nutrition Research Center, University of Rhode Island- Biochemical quality and safety analysis of time/temperature storage conditions of bluefish tissue by testing scombrotoxin (histamine) levels for a 4-week trial**Volunteer**  (May 2012 – September 2013)US Fish and Wildlife Service, North Attleboro National Fish Hatchery, North Attleboro, MA- Assisted in everyday fish culture operations for the Atlantic salmon and American shad restoration projects.- Weighed, sorted, graded and fed Atlantic salmon fry and parr.- Developed of an innovative captive spawning method for American shad broodstock and egg collection system.- Treated, counted and incubated American Shad eggs and larvae.- Maintained live brine shrimp cultures.- Assisted the implementation of new aquaculture engineering systems for shad larvae and hauling fish. |
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| **Education Details (University of Rhode Island)**University of Rhode Island Concentration Courses:Aquaculture Systems and Design (Graduate Course) Aquaculture Health ManagementAquaculture and the Environment (Graduate Course) Marine Environmental PhysiologyFinfish Aquaculture Pathobiology (Graduate Course)Fish Nutrition (Graduate Course) Applied Calculus I and IIMarine Finfish Aquaculture (Graduate Course) GIS and Remote Sensing (Arc Map Software)Shellfish Aquaculture (Concentration on Bivalve Molluscs) Independent Biological Research (Allometry of Sharks) Crustacean Aquaculture Independent Aquaculture Research on Migratory FishSalmonid Aquaculture Aquaculture in the Philippines (Graduate Study Abroad Course in January 2015)**Languages:**English (Native Fluency)Japanese (Professional Working Proficiency)Spanish (Limited Working Proficiency) |

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