

Jason D. Licamele, Ph.D.

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Agriculture & Biological Systems Engineer

Keywords: biotechnology, agriculture, aquaculture, fisheries, plant production, natural products, bioenergy, bioprocessing, ecosystems, food science, greenhouse engineering, horticulture, hydroponics, fisheries, algae, environment, natural resources, water resources, bioprospecting, sustainability

- Biological systems engineer, marine biologist, ecologist, environmental scientist, and biotechnologist with commercial operations and research experience leading, designing, developing, executing, and managing projects.
- Innovative applied scientist and engineer with a multitude of skills, a patent portfolio, over 20 years of commercial experience in the aquaculture, agriculture, food, and bioenergy industries with a focus on environmental sustainability and resource management.
- Experienced entrepreneur and consultant effectively developing global relationships with business, legal, non-governmental organizations, academic, and government organizations via strong communication, interpersonal skills, leadership qualities, and dedication to mission.
- Skilled in project design, project management, experimental design, data management, and data translation with a unique ability to critically analyze and effectively communicate information to all levels of audiences.
- Professional scientist and engineer with experience in business, production, research and development, intellectual property development, technology transfer, environmental policy and regulation, managing multi-dimensional teams, and leading start-ups.
- Focused on the application of advanced technologies for addressing the production of food and pharmaceutical crops, hydroponic systems, vertical farming, controlled environments, recirculating aquaculture systems, aquaponics systems, production of plant based phytochemical products, biological remediation technologies, integrated farming technologies, biotechnology, and environmental sciences.
- Aquaculture specialist with over 20 years of experience with fish, invertebrate, and algae culture; designing, commissioning and operating extensive and intensive systems, recirculating aquaculture systems, integrated multi-trophic aquaculture, aquaponics, and integrated farming systems; experienced with water chemistry, water filtration design, bioprospecting, broodstock collection and conditioning, and feed formulations.
- Plant physiologist and agronomist with over 10 years of commercial experience with all forms of plant production in field, greenhouse, and controlled environments.
- Experienced in designing, commissioning, operating and managing hydroponics, aquaponics, aquaculture, controlled environment agriculture (CEA), vertical farming and all aspects of hydroponic plant production processes; develops fertilizer formulations, turnkey production systems, and CEA systems for the hydroponics and aquaponics industries.
- Expert in light management in controlled environments, tissue culture, cloning, nutrient fertilizer formulation, sensors and controls, automation, integrated pest management, biosecurity, soil and all forms of hydroponics, genetics and strain development, and various aspects of designing and managing commercial operations.
- Managerial experience running multimillion-dollar research and development labs, directing research and development, transferring technology, and managing commercial aquaculture and hydroponic plant production in the field, greenhouses, and in controlled environments.
- Experienced consultant in the commercial agriculture and hydroponics industry with a focus on the commercial production of medicinal plants and algae for the food, fertilizer, cosmetics, nutraceutical and pharmaceutical industries.
- Serves as a scientific and technical consultant in the fields of biotechnology, hydroponics, horticulture, greenhouse engineering, controlled environments, vertical farming, agriculture, aquaponics, aquaculture, algae, and sustainable integrated farming working with leaders in business, intellectual property development, and research contexts.
- Goal driven passionate scientist and engineer focused on developing and implementing economically and environmentally sustainable solutions for a bioeconomic world.

Education & Credentials:

Doctor of Philosophy 2009

Agriculture and Biological Systems Engineering
Minor: Soil, Water, and Environmental Science
Graduate Certificate: Water Policy and Management
University of Arizona, Tucson, AZ
Biomass Production and Nutrient Dynamics in an Aquaponics System

Master of Science 2004

Marine Biology
Florida Institute of Technology, Melbourne, FL
Linking Prey Selectivity with Feeding Functional Morphology in Marine Fish Larvae

Bachelor of Science 2000

Marine Biology and Ecology
Minor: Aquaculture
Florida Institute of Technology, Melbourne, FL

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Professional Experience:

- Fish Farmacy, LLC, Scottsdale, Arizona*** - Consultant **2003 – present**
- Consults domestically and internationally with private companies, government entities, and research institutions.
 - Serves as a scientific and technical consultant in the fields of agriculture, aquaculture, aquaponics, greenhouse hydroponics, controlled environments, vertical farming, environmental science, sustainability, and biotechnology.
 - Provides scientific and engineering consultation for the food, bioenergy, nutraceutical, and pharmaceutical industries.
 - Provides technical writing, donor relations, intellectual property development, and project management services.
 - www.fishfarmacy.com
- Heliae Development LLC., Gilbert, Arizona*** – Manager of Photobioreactor Development **2011 – 2014**
- Managed the research and development of photobioreactor production systems for the algae production platform, coordinated research and development with production, legal, and business departments.
 - Implemented and managed teams, budgets, timelines, project plans, research plans and experimentation, data acquisition, data analysis, and presented results to scientists, engineers, media, and corporate leaders.
 - Guided the research and product development of a biotech start-up, generated intellectual property, and successfully developed and transferred technology platforms.
- United States AID (USAID) Aquafish CRSP Program, New Caledonia*** – Technical Consultant and Liaison **2010 – 2011**
- Consulted in the design and operations of an algae and sea cucumber farm, designed water filtration systems, and assisted in commissioning of the farm. Successfully produced sea cucumbers and surpassed projected goals.
 - Provided technical advice, presented technical information, and collaborated with U.S. government officials, French Institute for Exploration of the Sea, French government officials, private businesses, and local producers of fish, shrimp, sea cucumbers, greenhouse vegetables, and agricultural products.
- United States AID (USAID) Aquafish CRSP Program, Trinidad & Tobago*** – Technical Consultant and Liaison **2010**
- Consulted in the design of aquaculture and aquaponics production systems, provided workshops and training seminars, and technical assistance on freshwater tropical aquaculture and aquaponics projects.
 - Provided technical advice, presented technical information, and collaborated with U.S. government officials, Institute of Marine Affairs, Seafood Industry Development Corporation, University of the West Indies, Trinidad government officials, private businesses and local producers of fish, greenhouse vegetables and agricultural products.
- United States AID (USAID) Aquafish CRSP Program, Guyana*** – Technical Consultant and Liaison **2009 – 2010**
- Consulted in the design of fish hatcheries, fish ponds and integrated farming systems, formulated fish feeds sourced from local commodities, and assisted in the initial stages of the development of the aquaculture industry in Guyana.
 - Provided technical advice and collaborated with U.S. government officials, Carana Corporation, World Bank, Guyana Department of Fisheries of the ministry of Agriculture, Guyanese government officials, and local producers of tilapia and agricultural products. Provided workshops for the Ministry of Agriculture.
- University of Arizona Environmental Research Lab, Arizona*** – Research Associate **2008 - 2010**
- Managed data collection, data analysis, manuscript preparation, presentations, and public speaking events regarding various research projects, including the completion of my doctoral studies.
 - Designed, constructed, and managed the aquaponics research greenhouse.
 - Provided leadership as a mentor to undergraduate and graduate students.
- University of Arizona College of Agriculture and Life Sciences, Tucson, Arizona*** – Teaching Assistant **2006 – 2008**
- Teaching assistant for the Freshwater and Marine Algae and the Aquatic Plants and the Environment courses.
 - Assisted the professor with lab experimentation, field trips, and field sampling.
 - Chaperoned field trips in Arizona and Mexico.
- Florida Institute of Technology Department of Biological Sciences, Melbourne, Florida*** **2002 – 2004**
Research Assistant and Lab Manager
- Conducted research and managed a marine ornamental lab under the Florida Sea Grant Program.
 - Designed and managed an ornamental fish research lab.
 - Collected broodstock, spawned broodstock, and cultivated marine fish larvae and live feeds.
 - Collected field samples for research and aquaculture.
 - Utilized high-speed video kinematics to analyze the prey selection of marine ornamental fish larvae throughout their life cycle.
 - Assisted with manuscript preparation, presentation of findings to peer groups, and co-authored a chapter in a book.

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University of Hawaii, Honolulu, Hawaii – Research Assistant (Contractor) **2003**

- Assisted in projects on behavioral ecology and sensory biology of stingrays.
- Collected live male and female stingrays from the field.
- Collected morphological data and metrics.
- Dissected and sampled Ampullae of Lorenzini organs and prepared blood serum samples.

Aloha Pet & Bird Hospital – Veterinary Technician **2002 – 2004**

- Interacted with clients and provided basic examinations.
- Assisted veterinarians with exams, surgery, day-to-day maintenance, and clients.
- Conducted hematological lab work.

Harbor Branch Oceanographic Institute, Oceans, Reefs and Aquariums – Production & Shipping Manager **2000 – 2002**

- Produced marine ornamental fish, seahorses, shrimp, seaweeds, and corals in recirculating aquaculture systems.
- Responsible for designing and managing aquaculture systems, shipping orders to meet deadlines, fish collection and conditioning, live feed production, marine fish cultivation, maintaining filtration systems, and designing aquariums.

Florida Medical Entomology Lab, University of Florida, Vero Beach, Florida – Research Technician **1999 – 2000**

- Assisted entomological researchers regarding the biological and ecological interactions between different mosquito species.
- Collected mosquitoes from field locations in teams and individually.
- Maintained a mosquito cultivation research lab.
- Organized data and file databases.

Seacamp Association Inc., Big Pine Key, Florida – Science Teacher and Camp Counselor **1998 – 1999**

- Assisted in teaching SCUBA diving, marine science, marine ecology, sailing, and other various water activities.
- Responsible for assisting in site maintenance, maintaining SCUBA equipment, and captaining boats for teaching marine science in the field.
- Received lifeguard, SCUBA Rescue Diver certification, CPR/PR certification, Lifeguard certification, and participated in a Captain's course certification program.
- Assisted shark researchers in collecting specimens, tagging, handling, filming and collecting data both in the lab and in the field.
- Mentored and chaperoned campers.

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Patents & Publications:

Licamele, Jason. 2017. An Integrated Multi-Trophic Farming Process. WO2016172702 A1, filed April 25, 2014 and issued on October 27, 2017.

Licamele, Jason. 2017. An Integrated Multi-Trophic Farming Process. US20150305313 A1, filed April 24, 2014 and issued on October 29, 2017.

Licamele, Jason. Turnkey Aquaponics Garden. U.S. Patent 62001184, filed on April 24, 2014 (Patent Pending).

Eneko Ganuza Taberna, **Jason D Licamele**, Anna Lee Tonkovich, Michael V Bellefeuille, Cameron Wyatt. 2017. Method of culturing microorganisms using phototrophic and mixotrophic culture conditions. 2017. US 9758756 B2, filed on April 29, 2015 and issued on September 12, 2017.

Eneko GANUZA, **Jason David LICAMELE**, Anna Lee Tonkovich. 2017. Methods of culturing microorganisms in non-axenic mixotrophic conditions. 2017. US20170145378 A1, filed February 2, 2017 and issued on May 25, 2017.

Thomas John KULAGA, Cameron Miles WYATT, Richard MAZUR, James Riley, **Jason LICAMELE**, Alexander SITEK, Timothy Sullivan, James Esler. 2016. Modular tubular bioreactor. EP2961824 A1 / PCT/US2014/016490, filed on February 14, 2014 and issued on January 6, 2016.

Sandip Shinde, Aniket Kale, Tom KULAGA, **Jason D. Licamele**, Anna Lee Tonkovich. 2015. Omega 7 rich compositions and methods of isolating omega 7 fatty acids. US9200236 B2, filed on November 19, 2012 and issued on December 1, 2015.

Thomas John KULAGA, Cameron Miles WYATT, Richard MAZUR, James Riley, **Jason LICAMELE**, Alexander SITEK, Timothy Sullivan, James Esler. 2016. Modular tubular bioreactor. US20150329810 A1, filed on July 29, 2015 and issued on November 19, 2015.

Eneko GANUZA, **Jason David LICAMELE**, Anna Lee Tonkovich. 2015. Methods of culturing microorganisms in non-axenic mixotrophic conditions and controlling bacterial contamination in the cultures using acetate and/or oxidizing agents. WO2014074769 A8, filed November 8, 2013 and issued on October 1, 2015.

Eneko GANUZA, **Jason David LICAMELE**, Anna Lee Tonkovich. 2015. Methods of culturing microorganisms in non-axenic mixotrophic conditions and controlling bacterial contamination in the cultures using acetate and/or oxidizing agents. 2015. EP2917333 A2 / PCT/US2013/069046, filed November 8, 2013 and issued on September 16, 2015.

Eneko Ganuza, **Jason D Licamele**, Anna Lee Tonkovich, Michael V Bellefeuille, Cameron Wyatt, Thomas J Kulaga, Adriano Galvez II. 2015. Balanced Mixotrophy Methods. US20150240199 A1, filed April 29, 2015 and issued on August 27, 2015.

Jason David LICAMELE, Eneko GANUZA, Anna Lee Tonkovich, Cameron Miles WYATT, Michael Vincent BELLEFEUILLE, Adriano Galvez, Thomas John KULAGA. 2015. Mixotrophic, phototrophic, and heterotrophic combination methods and systems. US20150232802 A1, filed on April 29, 2015 and issued on August 20, 2015.

Eneko GANUZA, **Jason David LICAMELE**, Anna Lee Tonkovich. Methods of culturing microorganisms in non-axenic mixotrophic conditions. 2015. US20150118735 A1, filed December 30, 2014 and issued on April 30, 2015.

Eneko Ganuza, **Jason D Licamele**, Anna Lee Tonkovich, Michael V Bellefeuille, Cameron Wyatt, Thomas J Kulaga, Adriano Galvez II. 2014. Balanced Mixotrophy Methods. WO2014074770A3 / PCT/US2013/069047, filed November 8, 2013 and issued on December 18, 2014.

Thomas John KULAGA, Cameron Miles WYATT, Richard MAZUR, James Riley, **Jason LICAMELE**, Alexander SITEK, Timothy Sullivan, James Esler. 2014. Modular tubular bioreactor. WO2014133793 A1 / PCT/US2014/016490, filed on February 14, 2014 and issued on September 4, 2014.

Thomas John KULAGA, Cameron Miles WYATT, Richard MAZUR, James Riley, **Jason LICAMELE**, Alexander SITEK, Timothy Sullivan, James Esler. 2014. Modular tubular bioreactor. CA2902100 A1 / PCT/US2014/016490, filed on February 14, 2014 and issued on September 4, 2014.

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Jason David LICAMELE, Eneko GANUZA, Anna Lee Tonkovich, Cameron Miles WYATT, Michael Vincent BELLEFEUILLE, Adriano Galvez, Thomas John KULAGA. 2014. Mixotrophic, phototrophic, and heterotrophic combination methods and systems. WO2014074772 A1 / PCT/US2013/069049, filed on November 8, 2013 and issued on May 15, 2014.

Eneko GANUZA, **Jason David LICAMELE**, Anna Lee Tonkovich. 2014. Methods of culturing microorganisms in non-axenic mixotrophic conditions. 2014. CA2888493 A1 / CA 2888493, filed November 8, 2013 and issued on May 15, 2014.

Jason D. Licamele, Carl L. White, Frank E. Mars, Thomas J. Kulaga. 2014. V-trough photobioreactor system and method of use. 2014. CN103547667 A / PCT/US2012/040157, filed on May 31, 2012 and issues on January 29, 2014.

Jason Licamele, Anna Lee Y. Tonkovich, Alexander Sitek, Scott Kuhlman. 2013. Systems and methods for contaminant removal from a microalgae culture. US8617891 B2, filed on October 5, 2012 and issued on December 31, 2013.

Jason D. Licamele, Carl L. White, Frank E. Mars, Thomas J. Kulaga. 2013. V-trough photobioreactor system and method of use. 2013. EP2675886 A1 / PCT/US2012/040157, filed on May 31, 2012 and issues on December 25, 2013.

Sandip Shinde, Aniket Kale, Tom KULAGA, **Jason D. Licamele**, Anna Lee Tonkovich. 2013. Omega 7 rich compositions and methods of isolating omega 7 fatty acids. WO2013075116 A3, filed on November 19, 2012 and issued on November 7, 2013.

Jason Licamele, Anna Lee Y. Tonkovich, Aniket KALE, Alexander Sitek, Scott Kuhlman. 2013. Systems and methods for contaminant removal from a microalgae culture US8546133 B2, filed on June 27, 2012 and issued on October 1, 2013.

Licamele, Jason and Carl L. White. 2013. V-trough photobioreactor system and method of use. 2013. US20130232866 A1, filed on January 29, 2013 and issues on September, 12, 2013.

Jason Licamele, Anna Lee Y. Tonkovich, Alexander Sitek, Scott Kuhlman. 2013. Systems and methods for contaminant removal from a microalgae culture. US8501475 B2, filed on June 27, 2012 and issued on August 6, 2013.

Licamele, Jason and Thomas J. Kulaga. 2013. Systems and methods for growing photosynthetic organisms. 2013. WO2013063075 A3 / PCT/US2012/061636, filed on October 24, 2012 and issued on July 11, 2013.

Jason Licamele, Anna Lee Y. Tonkovich, Alexander Sitek, Scott Kuhlman. 2013. Systems and methods for contaminant removal from a microalgae culture. US8501475 B2, filed on June 27, 2012 and issued on August 6, 2013.

Licamele, Jason. 2013. Systems and methods for contaminant removal from a microalgae culture. US20130164834 A1, filed on June 27, 2012 and issued on June 27, 2013.

Jason Licamele, Anna Lee Y. Tonkovich, Alexander Sitek, Scott Kuhlman. 2013. Systems and methods for contaminant removal from a microalgae culture. US20130164835 A1, filed on June 27, 2012 and issued June 27, 2013

Jason Licamele, Anna Lee Y. Tonkovich, Alexander Sitek, Scott Kuhlman. 2013. Systems and methods for contaminant removal from a microalgae culture. US20130164836 A1, filed on June 27, 2012 and issued on June 27, 2013.

Jason Licamele, Anna Lee Y. Tonkovich, Alexander Sitek, Scott Kuhlman. 2013. Systems and methods for contaminant removal from a microalgae culture. US20130164796 A1, filed on June 27, 2012 and issued June 27, 2013.

Jason LICAMELE, Anna Lee Y. Tonkovich, Alexander SITEK, Aniket Kale, Scott KUHLMAN. 2013. Systems and methods for contaminant removal from a microalgae culture. WO2013096682 A1, filed on December 20, 2012 and issued on June 27, 2013.

Jason LICAMELE, Anna Lee Y. Tonkovich, Alexander SITEK, Aniket Kale, Scott KUHLMAN. 2013. Systems and methods for contaminant removal from a microalgae culture. CA2860238 A1, filed on December 20, 2012 and issued on June 27, 2013.

Sandip Shinde, Aniket Kale, Tom KULAGA, **Jason D. Licamele**, Anna Lee Tonkovich. 2013. Omega 7 rich compositions and methods of isolating omega 7 fatty acids. US20130129775 A1, filed on November 19, 2012 and issued on May 23, 2013.

Sandip Shinde, Aniket Kale, Tom KULAGA, **Jason D. Licamele**, Anna Lee Tonkovich. 2013. Omega 7 rich compositions and methods of isolating omega 7 fatty acids. WO2013075116, filed on November 19, and issued on May 23, 2013.

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Licamele, Jason and Thomas J. Kulaga. 2013. Systems and methods for growing photosynthetic organisms. 2013. WO2013063075 A2/ PCT/US2012/061636, filed on October 24, 2012 and issued on May 2, 2013.

Licamele, Jason. 2013. Aquaculture vessel. USD682637 S1, filed on June 10, 2011 and issued on May 21, 2013.

Licamele, Jason and Thomas J. Kulaga. 2013. Systems and methods for growing photosynthetic organisms. 2013. US20130102076 A1, filed on October 24, 2012 and issued on April 25, 2013.

Licamele, Jason. 2013. Aquaculture vessel. CA143601 S, filed on December 9, 2011 and issued on April 12, 2013.

Licamele, Jason. 2013. Aquaculture vessel. CA143600 S, filed on December 9, 2011 and issued on April 12, 2013.

Licamele, Jason. 2013. Aquaculture vessel. USD679965, filed on March 14, 2012 and issued on April 16, 2013.

Licamele, Jason and Carl L. White. 2013. V-trough photobioreactor system. 2013. US8365462 B2, filed on May 31, 2011 and issued on February 5, 2013.

Licamele, Jason and Carl L. White. 2013. Operation and control of V-Trough photobioreactor systems. US8341877 B, filed on September 30, 2011 and issued on January 1, 2013.

Jason D. Licamele, Carl L. White, Frank E. Mars, Thomas J. Kulaga. 2012. V-trough photobioreactor system and method of use. 2012. WO 2012166883 A1, filed on May 31, 2012 and issued on December 6, 2012.

Jason D. Licamele, Carl L. White, Frank E. Mars, Thomas J. Kulaga. 2012. V-trough photobioreactor system and method of use. 2012. CA2829806 A1 / PCT/US2012/040157, filed on May 31, 2012 and issued on December 6, 2012.

James BURKHEAD, Thomas E. Brokaw, *Jason D. LICAMELE*, Aniket KALE, Geoffrey Margolis, Donald K. JURGENSEN, Shan Qin. 2012. Methods and systems for controlled illumination. 2012. US20120077253 A1, filed on July 29, 2011 and issued on March 29, 2012.

Licamele, Jason. 2012. Aquaculture vessel. USD661164S1, filed on June 10, 2011 and issued on June 5, 2012.

Licamele, Jason and Carl L. White. 2012. Operation and control of V-trough photobioreactor systems. US20120064508 A1, filed on September 30, 2011 and issued on March 15, 2012.

James Burkhead, Scott Kulhlman, Thomas Edmund Brokaw, Michael Manasco, *Jason D. Licamele*, Aniket Kale, Stephen Ventre, Geoffrey Margolis, Donald K. Jurgensen, Todd Decker, Shan QIN. 2012. Methods and systems for controlled illumination. 2012. WO2012016208 A1, filed on July 29, 2011 and issued on February 2, 2012.

Licamele, Jason and Carl L. White. 2013. V-trough photobioreactor system and method of use. 2011. US20110258920 A1, filed on May 31, 2011 and issued on October 27, 2011.

Jason Licamele. 2011. USAID Trip Report: Farmer to Famer: New Caledonia. <http://www.aquaculturewithoutfrontiers.org>

Jason Licamele. 2010. USAID Farmer to Famer Trip Report: <http://www.aquaculturewithoutfrontiers.org>

Jason Licamele. 2009. USAID Trip Report: Guyana Farmer to Farmer Program. <http://www.aquaculturewithoutfrontiers.org>

Kevin Fitzsimmons and Jason Licamele. 2009. "Aquaculture in Guyana" *The Global Aquaculture Advocate*. St. Louis, Missouri. September/October 2009, pp. 83-84.

Jason Licamele et al. 2009. "Biomass production and nutrient dynamics in an aquaponics system" University of Arizona, Department of Agriculture and Biosystems Engineering. December 2009, pp. 1-172.

Ralph G. Turingan, Jessica L. Beck, Justin M. Krebs, and Jason D. Licamele. 2005. "Development of feeding mechanisms in marine fish larvae and the swimming behavior of zooplankton prey: implications for rearing marine fishes". In C.S Lee, P.J. O'Bryen, and N.M. Marcus (Eds.), *Culture of Copepods* (Ch. 10) pp. 119-132. Ames, Iowa: Blackwell Publishing Professional.

Jason Licamele. 2004. Linking Prey Selectivity with Feeding Functional Morphology In Marine Fish Larvae. M.S. Thesis Florida Institute of Technology. Melbourne, Florida.

Jason D. Licamele, Ph.D.

Presentations & Public Speaking:

Jason Licamele. Introduction to Aquaponics - Efficient, Sustainable and Local. College of Agriculture and Life Sciences Cooperative Extension University of Arizona. USDA National Institute of Food and Agriculture. November 2016.

Jason Licamele. System Design: Recirculating Aquaculture and Greenhouse Systems. University of Arizona Greenhouse & Crop Production Short Course. April 2012.

Kevin Fitzsimmons and **Jason Licamele.** “Aquaponics I: Overview of Aquaponics, Water Chemistry, Nitrogen Cycle, Tilapia and other fish in the system”. University of Arizona Greenhouse & Crop Production Short Course. April 2011.

Kevin Fitzsimmons and **Jason Licamele.** “Aquaponics II: Fish Feed as Nutrient Sources, Organic Micronutrients, System Design, Suppliers and Vendors for equipment”. University of Arizona Greenhouse & Crop Production Short Course. April 2011.

Jason Licamele. “Sustainable Integrated Farming”. University of the West Indies & Trinidad & Tobago Aquaculture Association. 2010.

Jason Licamele. Inside Tucson Business. 2009. http://m.insidetucsonbusiness.com/news/the_next_generation/pulling-fresh-fish-out-of-the-sonoran-desert/article_e307aedf-37ed-5771-8ce3-7131312c6123.html?mode=jqm

Kevin Fitzsimmons and **Jason Licamele.** University of Arizona Promotional Video. 2009. <http://www.fishfarmacy.com/projects/aquaponics-greenhouse.php>

Jason Licamele. “Aquaponics and farm integration”. Advisory Board of the National Aquaculture Association of Guyana. 2009.

Jason Licamele. “Whetting your appetite for sustainable food production”. Flandrau Science Center Science Café. 2009. <http://www.viddler.com/v/969be676>

Jason Licamele, G. Giacomelli, K. Fitzsimmons, C. Kubota, J. Cuello, and M. Jensen. Nitrogen Dynamics and Biomass Production of an Aquaponics System in a Controlled Environment. In: Proceedings of the International Society of Horticulture Science. Tucson, Arizona. 2008.

Jason Licamele (session organizer and chair). “Aquaponics overview, aspects and future” In: Proceedings of the World Aquaculture Society America Orlando, Florida. 2008.

Jason Licamele, Kevin Fitzsimmons, and Gene Giacomelli. Nitrogen Dynamics and Biomass Production of an Aquaponics System. In: Proceedings of the World Aquaculture Society America Orlando, Florida. 2008.

Jason Licamele, K. Fitzsimmons, and G. Giacomelli. Nitrogen Dynamics and Biomass Production of an Aquaponics System in a Controlled Environment. In: Proceedings of the World Aquaculture Society. San Antonio, Texas.

Jason Licamele. Linking Prey Selectivity with Feeding Functional Morphology. In: Proceedings of the Journal of World Aquaculture. Honolulu, Hawaii. 2004.

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Technical Proficiencies:

MS Office including advanced mastery of Excel and Power Point, MS Project, Adobe Photoshop, Adobe Acrobat, Mendeley, Endnote, Elsevier BioSource and other peer reviewed research databases, Campbell Scientific Software, Berkley Madonna, MATLAB, JMP, modelling software, GraphPad Prism, SPSS, Katsuri Feed Formulation, Red Lake Imaging software. Experienced with a variety of research analytical tools and techniques for analyzing water, biomass, and microbes.

Awards & Honors:

United States Presidential Volunteer Service Award (Gold Level) 2010
Graduate Certificate in Water Policy, University of Arizona, 2009
Graduate Certificate in Aquaculture, University of Arizona, 2009
PHI ETA SIGMA National Honor Society Award, 2008
George E.P. Smith Agriculture Irrigation Engineering Scholarship, 2007, 2008
University of the Virgin Islands Aquaponics Short Course Certificate of Completion, 2007
Certificate of Appreciation, NASA SPACEHAB STS-107 STARS Mission 2003
United States Junior Olympic Soccer Team (Bronze Medal), 1992

Professional Memberships:

World Aquaculture Society
Aquaculture Engineering Society
International Society of Horticulture Science
American Society for Agriculture and Biosystems Engineers
American Tilapia Association
American Fisheries Society
American Elasmobranch Society
NAUI - Advanced Diver / Rescue Diver
Red Cross CPR/PR

Selected Volunteerism and Selected Community Activities:

International Algae Competition, Richmond, Virginia	2011
Served as a judge for the International Algae Competition	
Greenhouse Crop Production and Engineering Design Short Course, Tucson, Arizona	2009
University of Arizona, Controlled Environment Agriculture Center	
International Society for Horticulture Science International Workshop, Tucson, Arizona	2009
University of Arizona, Controlled Environment Agriculture Center	
Alumni Industrial Advisory Council University of Arizona, Tucson, Arizona	2006 – 2008
Graduate Student Liaison	
Nike Rush Soccer Club, Tucson, Arizona Tucson	2007 – 2008
Assistant Soccer Coach and Trainer	
SpaceHab STS-107 STARS Mission NASA, Cape Canaveral, Florida	2003
Mission Assistant	
Make a Wish Foundation, Fairfield, Connecticut	1992 - 1994