

Braulio Andres Macias-Rodriguez
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EDUCATION

Masters of Science in Food Science and Human Nutrition **May 2013**

University of Florida, Gainesville, FL

Concentration: Food Safety, Engineering and Processing

GPA: 3.60/4.00

Thesis: "Pulsed Light as a Risk Mitigation Tool for Disinfecting Hard-Cooked Eggs and Conveyor Surface"

Bachelor of Science in Food Processing Engineering **Feb 2010**

Superior Polytechnic School of Litoral, Guayaquil, Ecuador

GPA: 3.26/4.00

RESEARCH EXPERIENCE

Graduate Research/Teaching Assistant **August 2011 to Present**

University of Florida, Food Engineering and Processing Laboratory, Gainesville, FL

- Investigated the use of novel technologies such as pulsed light in food processing/engineering applications
- Prepared manuscripts for publication in peer-reviewed scientific journals
- Supervised 14 graduate students during Advanced Food Chemistry laboratory exercises
- Prepared chemicals for laboratory exercises and set up lab equipment

INDUSTRY EXPERIENCE

Research and Development Intern **May to August 2013**

Florida Food Products Inc., Eustis, Florida, United States

- Designed, planned and executed experiments pertaining stability and sensory analysis on hydrocolloids.
- Ensured quality of hydrocolloids (e.g., strength, viscosity) according to final product specification
- Researched on methods to improve functionality of hydrocolloids
- Performed testing required for scale-up operations
- Compiled, summarized, interpreted and reported data obtained from bench testing

Quality Assurance Supervisor **February to July 2011**

Topsy Ice-cream processing company, Guayaquil, Ecuador

- Audited daily inspection checklists
- Ensured quality and safety of raw materials, product in process and finished product according specifications
- Performed quality-control checks on daily production
- Supervised and standardized sanitation procedures of processing lines, product storage tanks and tanker trucks
- Collaborated with production and research and development teams regarding the implementation of Good Manufacturing Practices (GMPs)
- Collaborated with the project engineering team in the implementation of temperature controls to increase yield and minimize waste of chocolate coatings in covered ice-cream popsicles.
- Trained plant personnel about in-line quality tests, sanitation procedures and GMPs

LEADERSHIP

Graduate Student Representative

August 2012 to August 2013

University of Florida, Food Science and Human Nutrition Department, Gainesville, FL

- Represented and served as a liaison between 100 graduate students, Graduate Student Council and departmental administration in the Food Science Department
- Presented the grievances and needs of the graduate students to the Graduate Student Council
- Attended monthly Graduate Student Council meetings to elicit and convey information pertaining to scholarships, travel grants and other issues of relevance

HONORS AND AWARDS

- Travel grant of \$250 to support funding to attend the Institute of Food Technologist (IFT) Annual Scientific Meeting and Food Expo, Las Vegas, NV, **June 2012**
- Outstanding International Student Academic award, University of Florida, College of Agriculture and Life Sciences, **January 2012**

PROFESSIONAL ORGANIZATION AND SERVICE

Professional Membership

- Toastmasters International, University of Florida, **November 2012 to Present**
- Food Science and Human Nutrition Club, **January 2012 to Present**
- Graduate Student Association (GSA), **August 2011 to Present**
- Florida Institute of Food Technologists Student Association, **October 2011 to Present**
- Institute of Food Technologist Student Association (IFTSA) college bowl team, **October 2011 to Present**
- Institute of Food Technologists (IFT), **December 2011 to Present**
- Institute of Food Technologist Student Association, **December 2011 to Present**

Volunteering

- Cooked meals, served dinner and interacted with residents at the American Cancer Society Winn-Dixie Lodge, Gainesville, FL, **January 2013**
- Cooked meals, served dinner and interacted with residents at the American Cancer Society Winn-Dixie Lodge, Gainesville, FL, **October 2011**
- Judged science projects (physics) and posters of Grades 6 to 8 students for Alachua County public schools, Gainesville, FL, **December 2011 and 2012**
- Participated in the Foreign Language Conversational Partner Program at the University of Florida to facilitate international students in enhancing their English speaking skills, Gainesville, FL, **February 2012 to Present**

CONFERENCE PRESENTATIONS AND PUBLISHED ABSTRACTS OF RESEARCH

- Improvement of Microbial Safety of Hard-cooked Eggs by Pulsed Light. Invited to present at the International Association for Food Protection Annual Meeting. Charlotte, NC, July 2013.
- Improvement of Microbial Safety of Hard-cooked Eggs by Pulsed Light Illumination. Invited to present at The Institute of Food Technologists and Food Expo Annual Meeting. Chicago, IL, July 2013.
- Improving the Microbial Safety of Hard-cooked Eggs by Pulsed Light. Presented at the Emory University STEM Research and Career Symposium. Atlanta, GA, April 2013.

SKILLS

Languages

- Fluent in Spanish

Computer

- Operating Systems: Microsoft and Apple Macintosh
- Statistical Analytical Software (SAS), Color Machine Vision Systems (CMVS)
- Microsoft Office Word, PowerPoint, Excel, Visio and Adobe Acrobat Reader

Technical

- Laboratory equipment: Pulsed Light System, Ultraviolet (UV) Spectrometer, Texture Analyzer, Color Machine Vision System