

# Melissa Irizarry

## Education:

<b>University of Florida</b> Doctorate of Philosophy	2016- present Plant Pathology	
<b>Iowa State University</b> Master of Science	2013-2016 Plant Pathology	GPA: 3.69
<b>Iowa State University</b> Bachelor of Science	2011-2013 Horticulture with emphasis in fruit and vegetable production Dean's Academic List	GPA: 3.18/Major: 3.85
<b>Iowa Lakes Community College</b>	2010-2011 President's Academic List	GPA: 3.35

## Employment Experience:

<b>Iowa State University Plant and Insect Diagnostic Clinic</b>	May 2013-May 2016	
<ul style="list-style-type: none"><li>• Diagnose plant diseases and recommend treatments</li><li>• Identification of plants and correspondence with clients</li><li>• Process soil samples for soybean cyst nematode testing</li><li>• Isolation of fungal pathogens using aseptic technique</li><li>• Prepare media, plate samples, and enter data</li></ul>		
<b>USDA National Laboratory for Agriculture and the Environment</b>	August 2012- May 2013	
<ul style="list-style-type: none"><li>• Student Laboratory Technician Assistant</li><li>• Summarize and present research through poster presentations</li><li>• Preparing and testing soils for international research project</li><li>• Implement experiments to determine soil salinity</li><li>• Format, collect, record, and analyze experimental data</li></ul>		
<b>E.A.R.T.H</b>	St. John, Virgin Islands	January-April 2012
<ul style="list-style-type: none"><li>• Cooperative internship with Iowa State University and Giffit Hill School</li><li>• Maintained and developed schoolyard fruit and vegetable gardens</li><li>• Installed landscaping designs</li><li>• Developed curriculum and taught classes in grades 6-9<sup>th</sup> and kindergarten-4<sup>th</sup></li><li>• Researched obstacles to plant growth in Caribbean gardens</li><li>• Developed growing guide for future interns</li></ul>		

**Courtyard Gardens** Spirit Lake, Iowa 2009-2011

- Cared for bedding, perennial, nursery, houseplants, and display plantings
- Handled customer needs and questions
- Designed and created floral arrangements
- Propagated and finished vegetables and ornamentals

**Mckeen's Pub and Grill** Spirit Lake, Iowa 2004-2012

- Bartended, served food, cooked, and catered
- Responded to guest needs promptly and efficiently
- Maintained accuracy with recipes, drinks, and cash register

**Anderson's Greenhouse** Ackley, Iowa 2002

- Cared for greenhouse plants while assisting customers
- Assisted in creating floral arrangements

#### **Additional Skills**

- Managed all aspects of restaurants, including general manager position
- Designed, created, and implemented training manuals, procedures, recipes, and plant growing guides
- Guided staff to achieve sales and labor goals
- Microsoft Excel, Word, PowerPoint, Publisher, JMP, Sigma Plot, R

#### **Research Experience:**

- Gummy stem blight of watermelon, University of Florida, Gainesville, Florida, 2016- present
- *Soybean vein necrosis virus* in Iowa: yield response, vector movements, and host range, Iowa State University, Ames, Iowa, 2013-2016
- Effects of trees on soil salinity and sodium absorption ratios, USDA, Ames, Iowa, 2012
- Challenges to growing fruits and vegetables in the Caribbean, E.A.R.T.H., USVI, 2012

#### **Teaching and Extension Experience:**

- Master gardeners plant diagnostics training, Ames, Iowa 2014 and 2015
- Tomato grafting workshop, Decorah, Iowa, 2014
- Gardening curriculum to elementary and secondary school students, Giffit Hill School, USVI, 2012
- Training employees and developing procedures while in management positions

#### **Peer-reviewed Publications:**

- Bloomingdale, C., Irizarry, M. D., Groves, R. L., Mueller, D. S., Smith, D. L., 2016. Seasonal Population Dynamics of Thrips (Thysanoptera) in Wisconsin and Iowa Soybean Fields. *J Econ. Entomol.*, tow242. doi: 10.1093/jee/tow242
- Irizarry, M.D., Groves, C.L., Elmore, M.G., Bradley, C.A., Dasgupta, R., German, T.L., Jardine, D.J., Saalau Rojas, E., Smith, D.L. and Tenuta, A.U., 2016. Re-emergence of Tobacco streak virus Infecting Soybean in the United States and Canada. *Plant Health Progress*, 17:1:92.

#### **Extension Publications:**

- Storage problems of cabbage, ISU Horticulture and Home Pest News, February 2015
- Tips for preventing pesky compost problems, ISU Horticulture and Home Pest News, July 2014
- Plant and Insect Diagnostic Clinic update, ISU Horticulture and Home Pest News, July 2014

#### **Grants and Proposals:**

- The role of thrips and host ranges in the disease cycle of soybean vein necrosis virus in Iowa. D. Mueller, S. Whitham. Submitted to Iowa Soybean Association for \$99,772 for three years (2013 – 2016).

#### **Certifications:**

Huanglongbing (citrus greening) PCR training, USDA, Beltsville, Maryland 2014

#### **Professional Presentations:**

- Plant Pathology Department Exit Seminar 2016
- Global Food Security Consortium poster presentation 2015
- Plant Pathology Department Seminar Series 2014
- Iowa State University GMAP Research Symposium 2014
  - First place STEM oral presentations
- Plant Pathology Department Brown Bag Series (ISU) 2014
- Science with Practice Research Poster Presentation 2013
- Symposium on Undergraduate Research and Creative Expression 2013
- E.A.R.T.H. Annual Board Meeting 2012
- Science with Practice Research Poster Presentation 2012

#### **Associations and Service:**

- University of Florida Plant Pathology Graduate Student Organization
  - Professional Development Committee
  - Journal Club Committee
- Iowa State University Graduate Minority Assistantship Program Peer Mentor
- Iowa State University Plant Pathology Department Awards Committee
- Iowa State University Plant Pathology Graduate Student Organization
- Iowa State University Graduate and Professional Student Senate
  - Plant pathology department senator
- Gamma Sigma Delta, agricultural honor society
- American Phytopathological Society
  - Graduate Student Committee
- International Society of Plant Pathology
- Entomological Society of America
- Alpha Zeta, agricultural honorary professional fraternity
  - Bylaws Committee
- Pi Alpha Xi, horticulture honorary fraternity
- Iowa State University Undergraduate Horticulture Club
- Iowa Lakes Community College Turfgrass and Landscape Club, secretary/treasurer

#### **Community Service:**

- Lime Creek Nature Center, Volunteer, Mason City, Iowa
- Worldly Goods, Volunteer, Ames, Iowa

**Competitive Scholarship Awards:**

- Grinter Graduate School Fellowship
- Osher Reentry Scholarship
- Minnesota Nursery and Landscape Association Scholarship
- Iowa Nursery and Landscape Association Scholarship
- Western Nursery and Landscape Association/ National Green Centre Scholarship
- National Merit Society