

Ketsira Pierre

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EDUCATION

August 2020 -
present

University of Florida – Gainesville, FL
Masters Plant Pathology
Advisors: Dr. Shouan Zhang, Dr. Jeff Jones

August 2019

University of Central Florida – Orlando, FL
Bachelor of Science, Environmental Studies - Honors
Minor, Health Sciences
Thesis: Effects of Zinc Nanoparticles on Tomato Plants

EXPERIENCE

05/2017, 05/2018

Global Brigades Bridager

Division of Medical Brigades, University of Central Florida – Nicaragua

- Provided care for over 800 patients in three days in 2017 and over 1,000 patients in 2018
- Set up medical clinics containing vaccinations, diagnosticians, optometry, gynecology, and pharmacy in underserved rural communities in Mina de la India and Samulali Nicaragua
- Partnered with doctors to treat patients and give the basic hygiene necessities
- Took patients vital signs and conducted patient assessments for diagnosticians
- Collected and organized all patient assessments, diagnoses, and medication into programs that will cut down time

03/2018-07/2019

Lead Garden Assistant

Wellness and Health Promotional Services

University of Central Florida – Orlando, FL

Supervisor: Jonathan Carr

- Responsible for growing plants and maintaining 17 hydroponic towers and 2 gardens throughout UCF
- Partnered with Knights Pantry to offer healthy, fresh and organic crops from our gardens and towers to students at no charge
- Partnership with Lucky's market for food recovery and redistribution to UCF students and faculty after sorting – recover about 200 pounds of food a week
- Work with the Creative School for Children to educate the children on plants, their importance and how to grow and care for them
- Lead volunteer shift of UCF students in education and maintenance of gardens
- Lead garden workshops educating students about our objectives and hydroponic towers and their benefits.
- Run events using plants and knowledge for students during finals and cooking demos
- Research aid: collected lettuce sample from hydroponics and tested pH
- Trained in mule, gator, and trailer

INTERNSHIP/ RESEARCH EXPERIENCE

- 01/2019-05/2019 Capstone Research
 University of Central Florida Housekeeping & Recycling Services
 IDS 4893 Capstone Experience in Environmental Studies
 University of Central Florida – Orlando, FL
 Coordinator: Richard Plate, Ph.D & Keith Krueger
- Worked with the Housekeeping & Recycling Services department to assess recycling diversion rate at UCF in hopes of making the campus more sustainable
 - Worked in teams to sort through waste bins (recycling and landfill)
 - Completed Citi Training for Human Subjects and Behavioral Research
 - Used GIS to update map of bin locations
- 08/2018-Present Independent Undergraduate Research
 University of Central Florida Materials Innovation for Sustainable Agriculture
 Nanoscience Technology Center & Department of Chemistry
 University of Central Florida – Orlando, FL
 Committee Chair: Swadeshmukul Santra, Ph.D
 Committee Member: Maria Campos
- Responsible for growing and maintaining tomato plants used for testing Nano-zinc particles
 - Created experimental for testing the effects of Nano-zinc on tomato plants
 - Observed and recorded differences in plant yield, size, roots and shoots, plant area
 - Used Atomic Absorption Spectroscopy to characterize metals in plant soil
 - Performed lab experiments and soil digestion
 - EHS certified in Laboratory and Biological Safety
- 05/2018 Research Leader
 Global Brigades Women’s Health Research in Nicaragua
 University of Central Florida Global Medical Brigades
 Medical Brigade – Samulali, Nicaragua
 Coordinator: Olivia Randall-Kosich
- Project to assess and provide sanitary products to girls and women in Samulali
 - As part of a team, created a questionnaire for patients visiting gynecology station during a three-day medical clinic
 - Asked patients if they wanted to participant in a survey to better understand how they were handling their menstruation
 - Collected over 100 surveys
 - Raised over \$600 to provide sanitary care products to girls and women in Samulali

PUBLICATION

Pierre, Ketsira, "The Effects of Zinc Nanofertilizers on Tomato Plants" (2019). Honors Undergraduate Theses. 566. <https://stars.library.ucf.edu/honorstheses/566>

CONFERENCE

Pierre, K; Effects of urea coated with Zinc Oxide Nanoparticles on Tomato Plants in Greenhouse.
Poster presented at: 2019 International NanoFlorida Conference; November 2019; Tampa, FL.

CAMPUS INVOLVEMENT

- Global Medical Brigades

- Fundraising Director (2016-2018)
- Circle K International
 - Secretary (2016-2018)
 - Outstanding Secretary Award in Florida district (2018)
 - 100% Monthly Report Form Award
 - Member Recruitment and Retention committee
- Mid-Knight Mentors
 - Mentor to high school students
- YoungLife

VOLUNTEER EXPERIENCE

- AdventHealth Volunteer (2018-Present)
 - Receive and organize diagnostic slides and wedges containing patient biopsy, pap smear, etc.
 - Send out slides and wedges requested by doctors for patients
- Give Kids the World (2017-2018)
 - Worked in castle operating magic pillow tree
 - Operated rides for villagers
 - Worked in cafeteria handling and distributing breakfast and lunch
- Clean the World (2016-2017)
 - Separate and organize hygiene products donated by various organizations and establishments
- Sunday Knight Food Share with Volunteer UCF (2016-2017)
 - Cook and handout meals to the homeless in Downtown Orlando
- Arboretum (2016-2017)
 - Pulled weeds
 - Propagated plants
 - Spread mulch on a path
 - Rebuilt garden beds