* Publications:
  + Robert L. Meagher, Jr., Kristal Watrous, Shelby J. Fleischer, Rodney N. Nagoshi, James T. Brown, Kristen Bowers, Neil Miller, Stephen D. Hight, Jesusa C. Legaspi, and John K. Westbrook. *Visitation of Pollinators to Sunn Hemp and Community Composition Among Different Cover Crop Plants* Environmental Entomology (pending publication)
  + Meagher Jr, R.L., Nagoshi, R.N., Brown, J.T., Fleischer, S.J., Westbrook, J.K., Chase, C.A*. Flowering of the cover crop sunn hemp, Crotalaria juncea L*. HortScience. 52(7):986-990 (2017).
* Graduate Student Committee Member
  + Member: IFAS Center for Stress Resilliance Fellowship Committee
  + President: Entomology and Nematology Student Organization
* Presentations:
  + Invited speaker at 2018 ACS AGRO Division in Boston, MA.
* Outreach
  + Volunteer entomology guide at 2018 Learning Gate Community School BioBlitz in Lutz, FL.
  + Invited guest at 2018 Glen Springs Insect Day in Gainesville, FL.
  + Invited guest at 2018 University of Florida Bug Camp in Gainesville, FL.
  + Invited judge at 2018 University of Florida 4H Insectathon
* Undergraduate Volunteers (400+ mentoring hours)
  + Jeremiah Martinez
    - January 2018 - Present
  + Erin Lapasaran
    - December 2018 – Present

**Element 1: Assists with and conducts experiments**

* Maintained a 3.66 GPA at the University of Florida
* Maintain a colony of European corn borer, *Ostrinia nubilalis,* here at the USDA-ARS CMAVE courtesy of Dr. Daniel Hahn of the University of Florida.
  + Colony established on August 15, 2016 under diapause and non-diapause conditions
    - Diapause larvae maintained at 23°C, 12:12 L:D photoperiod, and 65% rH
    - Non-diapause larvae and maintained at 23°C, 12:16 L:D photoperiod, and 65% rH
  + Maintaing adequate biotic and abiotic conditions for health.
    - Insect artificial diet preparation and environmental control monitoring
    - Daily surveys of colony for general health growth, development, and growth.
    - Genetic variation within strains maintained by regular infusions of eggs from the University of Florida.
* Instructed lipid extractions from ECB colony reared at CMAVE and lipid analysis
  + Provide support and instruction to undergraduate student worker on how to safely and reproducibly extract non-polar lipids from ECB larvae using a modified Folch extraction technique
* Extracted lipids analyzed using HPLC instrumentation.
  + Lipids separated into classes and the concentration of Triglycerides determined
* Prepared new undergraduate students to meet the performance standards of the lab.
  + Each student taught proper safety standards of the lab and the unit.
  + Each student taught to prepare calibration standards, calculate dilutions, manually inject samples, and analyze results for accuracy.

**Element 2: Practices Safety/SHEM/EEO/CR**

* Wearing PPE as required preventing injury, negligent practices are avoided, and violations and/or incidents are reported to supervisor.
* Performs duties and responsibilities in a manner that is fair and respectful.
* Aware of EO and CR policies.
* Demonstrates support to EEO and CR policies.
* Written and oral communications are free of discriminatory bias.
* Attempts to discourage unlawful discrimination by maintaining an unbiased atmosphere.
* Displays helpful attitude and willingness to assist persons of all kinds and creeds.

**Element 3: Maintains equipment and supplies and materials**

* Performs periodic cleaning, maintenance and calibrations on instruments and equipment when necessary.
  + SpeedVac
    - Regular maintenance
  + Lyophillizer
    - Regular maintenance
  + Ultra Performance Liquid Chromatography
    - Regular maintenance, repairs, disassembly, and troubleshooting
  + Gas Chromatography Mass Spectroscopy
    - Calibration and regular maintenance
  + Gas Chromatography Flame Ionization Detection
    - Calibration, regular maintenance, repair, and troubleshooting
* Maintains cleanliness of work areas after use.
  + Laboratory fume hood improvements
* Prepares solutions and reagents when needed.
* Ensures and predicts procurement of necessary supplies and equipment.

**Element 4: Processes Data**

* Digital and analog copies of data maintained electronically and in laboratory books
* Summary reports are prepared as prescribed by scientist.
* All relevant information and details are recorded in a manner that can be referenced and repeated.
* Laboratory data is recorded, summarized, and analyzed using R Studio.
* Experiment data is maintained, organized and accessible to the researcher and others
* Meeting with SY regularly for advice, guidance, and project status updates.
* Attending staff meetings when scheduling permits.