

## ODA-Lab Services

- ### Laboratory Services
- Serve as analytical laboratory for the Department
    - Food Microbiology
    - Food Chemistry
    - Fertilizers
    - CAFO
    - Shellfish
    - Export
    - Pesticides

- ### Laboratory Services
- Lab Space - ~8400 sq ft
  - 3 LC-QQQ
  - 1 GC-QQQ
  - 2 GC-MS
  - 2 HPLC with multiple detectors
  - 1 GC-dual ECD
  - 1 GC-FID
  - 1 ICP-OES

- ### Laboratory Services
- Staff
    - Laboratory Manager
    - Quality Assurance Officer
    - 4 Chemist 3
    - 3 Chemist 2
    - 3 Chemist 1
    - 1 Lab Tech 2
    - 2 Microbiologist 3
    - 1 Microbiologist 2
    - 2 Microbiologist 1
    - 3 Lab Tech 2

### Laboratory Services

- Operate under a Quality Management System based on ISO/IEC 17025:2017
  - ISO Accredited in Microbiological analyses by A2LA
  - Certified by EPA for Drinking Water Analyses
  - Certified by FDA – Dairy and Shellfish
- Participate in various proficiency programs
  - Wisconsin Pesticide (soil and vegetation)
  - Phenova – Cannabis potency + pesticides
  - Univ Kentucky – HEMP
  - ERA – Glyphosate & Carbamates
  - FERN – Toxins, Metals

### Laboratory Services

- Pesticides
  - Samples received from investigators
    - Foliage
    - Soil
    - Swabs
    - Contaminants in fertilizer type products
    - Animal stomach contents
    - Goose crops

### Laboratory Services

- Pesticides
  - Single analyte
  - Multiple analytes
  - Screen

### Laboratory Services

- Pesticides
  - Challenges
    - Samples
    - Matrix effects
    - Co-eluting compounds
    - Unique combination of matrix and analytes
    - Clean-ups
    - LC-QQQ (matrix suppression or enhancement)
    - GC-QQQ (clean sample)
    - Accurate, Quality, Fast