

# Plants for Human Health

I N S T I T U T E

## Advanced Instrumentation and Research Capacity

### Esposito Lab

- Buchi Mini Spray Dryer B-290 Advanced

### Ferruzzi Lab

- Waters I Class UPLC-MS/MS (Xevo TQD - Triple Quad Detector)
- Waters H Class UPLC-MS (qDa - Single Quad Detector)
- Static 3-stage upper GI models for investigating food disintegration, nutrient bioaccessibility and intestinal absorption

### Hsieh Lab

- Agilent 2100 Bioanalyzer
- Covaris M220 Focused-Ultrasonicator

### Iorrizo Lab

- Roche LightCycler 480
- 3730xl DNA Analyzer

### Kay Lab

- SCIEX UPLC coupled 6500<sup>+</sup> MS/MS-QTRAP equipped with an Electrospray Ionisation (ESI) Turbo-V Source and IonDrive
- Beckman Coulter Biomek FXP Dual Span-8 Liquid Handling Automation Workstation for automated 96-well Solid Phase Extraction and ELISA

### Komarnytsky Lab

- ABI 9700 PCR and ABI 7500 Real-Time PCR
- Biotek Synergy H1 Microplate Reader
- ThermoFisher EVOS FL Cell Imaging System
- BD Accuri C6 Flow Cytometer
- Seahorse XF-24 Extracellular Flux Analyzer

### Li Lab

- Agilent 6530 LC-QTOF
- Hitachi semi-prep HPLC
- Agilent 7820A GC-FID
- GE FPLC
- PELCO easiSlicer Vibratome

### Lila Lab

- Agilent 1260 Infinity HPLC equipped with DAD and ELSD detectors
- Agilent 1200 HPLC equipped with DAD and RID detectors
- Agilent 1200 HPLC equipped with DAD and FLD detectors
- Shimadzu LCMS-IT-TOF (m/z 150 – 2500, 1 ppm error)
- Agilent QTOF G6510A (m/z 150 – 2500, 5 ppm error)
- Agilent 7890 with 5975C inert XL EI/CI MSD triple axis detector
- Jasco J-815 Cd Spectrometer
- Jasco P-2000 Polarimeter
- Grace Reveleris® Prep purification system
- Dynamic Extractions Ltd - Midi-HPLCCC with Armen high-pressure pump equipped with UV/Vis detector
- Waters Xevo G2-XS QToF, equipped with an Acquity I UPLC

### Perkins-Veazie Lab

- Hitachi High Performance Liquid Chromatograph
- Hunter Xenon Calorimeter

For more information, visit [plantsforhumanhealth.ncsu.edu](http://plantsforhumanhealth.ncsu.edu)

## Let's Collaborate!

The Plants for Human Health Institute opened its doors in 2008 as a multi-departmental research institute within CALS. Our mission at PHHI is to lead the discovery and delivery of innovative plant-based solutions to advance human health. We welcome the opportunity to collaborate with fellow faculty to further leverage our available resources — in expertise and instrumentation.

## Additional Facilities

### Greenhouse and Growth Chambers

The Plants for Human Health Institute oversees controlled environment spaces for plant growth and research. The greenhouses, located a half-mile from the PHHI building, offer more than 7,000 square feet of growing space. Eight growth chambers, each approximately 100 square feet, are located in the PHHI building.

PHHI faculty have priority use of the greenhouse and growth chambers. Additional space is available for lease to N.C. State faculty, campus partners or other industry. A PHHI staff member oversees daily management of the greenhouse and growth chamber facilities and handles space requests. All questions about PHHI growing facilities should be directed to the Greenhouse Operations and Outreach Specialist, Doug Vernon, 704-250-5473.

### Faculty House

Faculty House is a lodging option for visiting faculty, researchers and other visitors offering a comfortable and convenient place for single or multiple night stays, while also serving as a place for intellectual interaction among the faculty of the universities and NCRC business partners. Located at 105 S. Ridge Avenue, Faculty House is directly across from the N.C. Research Campus, and near the train station. Amtrak runs daily from Raleigh to Kannapolis. For questions or availability inquiries, contact Dona Miller, 704-250-5449.