

## IR-4 Project Student Intern proposal for CERSA for Summer 2023

**Location:** IN PERSON (with hybrid options) at the IR-4 Project Headquarters, Venture IV Building on NC State Centennial Campus, Raleigh, NC

**Duration:** ~ 3 months

**Mentor:** Dr. Jerry Baron, Executive Director, IR-4 Project

**Description:**

The IR-4 Project is a national agriculture research/regulatory program whose mission is to support the extension of pesticides (chemical and biologically-based) registrations on fruits, vegetables, nuts, herbs and other specialty crops. The IR-4 Project is supported by the United States Department of Agriculture, North Carolina State University, other land-grant universities and the private sector to develop appropriate data needed by the United States Environmental Protection Agency (EPA) to register safe pesticide uses on specialty crops. Interns will acquire skills desired by the crop protection industry, contract research organizations and governmental regulatory authorities. Skills may be transferable to the pharma industry.

Working with existing Study Directors, staff members, and other mentors-, participate in the management of the US Environmental Protection Agency 860G Guideline study to support the registration of crop protection chemicals on specialty crops. Specific involvement includes assisting in:

- the development of research protocols that are designed to measure the level of pesticide/pesticide metabolites on fruits and/or vegetables,
- active management of field trials throughout the United States and Canada,
- application of characterized test substance in field trials held at IR-4 field research farms in North Carolina
- harvest of residue studies from IR-4 sponsored field trials
- residue analysis of parent chemical and/or metabolites utilizing modern analytical equipment
- critical assessment of data field datebooks and analytical summary reports
- addressing the findings of inspections and audits performed by IR-4 or private quality assurance inspectors
- following established procedures, draft study reports of studies

During the course of the internship, participant will be exposed and potentially trained in the US Environmental Protection Agency Good Laboratory Practice Standards.

The participant/intern may be able to work with IR-4 research planning group/biologists to better understand difficult to manage pests and potential solutions to limit pest damage.

Depending on the interest of the participant, the intern may have an opportunity to travel (expenses paid) to IR-4 field research farms, analytical laboratories and partnering crop protection companies.