



# Productive partnerships

By Jack Payne, jackpayne@ufl.edu, @JackPayneIFAS

**T**he Florida Department of Citrus (FDOC) moved its scientists into our Lake Alfred center just after World War II. They've been there ever since.

It's like having a long-time roommate. Except it's a roommate who will occasionally ask, "Got any liquid nitrogen?" And one you can count on to share her liquid chromatograph when yours is already running full tilt and you need more samples analyzed.

FDOC and the University of Florida's Institute of Food and Agricultural Sciences (UF/IFAS) have both been in the citrus science business for a long time. They've officially been in it together in one place since July 1, 1947. That's long enough that the Citrus Research and Education Center (CREC) had a different name back then. So did FDOC and UF/IFAS, for that matter.

So you can't get too deep into the history during this year's 100<sup>th</sup> anniversary of the establishment of CREC without FDOC figuring into it.

## FACES OF FDOC

Mohamed Ismail was there for 38 years. He was a scientist and ultimately the scientific research director for FDOC. He was also adjunct faculty for



**Rosa Walsh, scientific research director for the Florida Department of Citrus (FDOC), stands in front of the typewriter Edwin Moore, a key player in the development of orange juice concentrate, used as an FDOC scientist in the 1940s and 1950s.**

the University of Florida. In fact, UF faculty got a vote on his promotion from assistant professor to associate professor to full professor.

Ismail recalls that the relationship was so close that it was difficult to distinguish who worked for whom.

Eldon Brown remembers it the same way from his 34 years in Lake Alfred as an FDOC scientist from the 1960s through the 1990s. He sure didn't act like a renter or a house guest. He helped teach a fresh-fruit-handling class. He pitched his official employer to pay much of the cost of installing an electron microscope in the UF-owned center. UF scientists also made great use of it.

Sharing machines and space is a legacy based in law. The Florida Citrus Code mandates that FDOC outfit its scientists with the tools they need to do their work, "making use of the laboratory facilities and equipment of the University of Florida, insofar as it is practicable...."

I'd argue that it's not only practicable, it's essential. I think Rosa Walsh would agree with me. She's FDOC's scientific research director, and she splits her time between Lake Alfred and Bartow.

Walsh is the heir to the legacy of Ismail and Brown and hundreds of past FDOC employees. Since she arrived in 2015, she has only experienced the UF/IFAS-FDOC partnership in the context of the current citrus crisis.

## SHARED RESOURCES AND KNOWLEDGE

Walsh knows that the strain on growers has made every box-tax dollar a sacrifice. Sharing labs and offices with UF/IFAS stretches those dollars. It avoids the costs of duplicate machinery for operations in separate places. It allows for easy hand-me-downs as scientists retire or move on to other jobs and leave expensive gadgetry behind. Most importantly, the scientific collaboration that occurs in shared space means both growers and the public get the best science for their investments in citrus brainpower.

The returns on that investment include advances in processing, mechanical harvesting, food safety, wastewater treatment, flavor chemistry and more.

FDOC hasn't been the only tenant. It was in Lake Alfred that U.S. Department of Agriculture scientists developed the process for making

frozen concentrated orange juice. Today, the Citrus Research and Development Foundation is headquartered inside CREC.

On the 70<sup>th</sup> anniversary of FDOC's move-in date, it's more than legacy and law that keeps us together. It's a recognition that we're in this together. It reminds us academics that the University of Florida doesn't have a monopoly on expertise. We know the industry wants answers, and growers don't necessarily make note of the logo on the lab coats of the scientists who deliver them.

The centennial celebration of CREC on November 29 gives us occasion to pay homage to a history of joint discovery that makes CREC a great house of science. Starting the journey into a second century with partners increases the chances that more discovery is to come so that CREC can also continue to be a house of hope. 🍊

*Jack Payne is the University of Florida's senior vice president for agriculture and natural resources and head of UF's Institute of Food and Agricultural Sciences.*



## Letter to the Editor

**I** continue to not only read but look forward to each issue of Citrus Industry magazine. The California Corner is very interesting.



Ellis

California and Florida have many common interests regarding our citrus industry. Please continue the comments and updates from our sister state as we strive to make citrus available to the entire world.

Thanks to you guys for a job well done.

**Jim Ellis**  
Bartow citrus grower

# What Have We Learned?

By Harold Browning



**W**ithin the Citrus Research and Development Foundation (CRDF), the daily challenge of keeping up with a wide array of HLB topics, more than 75 currently funded projects, and monthly committee and board meetings translates into a constant flow of information. Project managers meet weekly to discuss progress and oversee the portfolio, and many CRDF staff, project managers and those funded by CRDF communicate to Florida growers and other industry groups. Project investigators file quarterly progress reports from each funded project, and project managers provide written summaries of Commercial Product Delivery Committee topics internally and to the public via our webpage.

Despite these efforts, a common question persists: **“What is coming from the grower commitment to HLB research and delivery of solutions?”** While CRDF is swimming in project details, our communication of broader progress is being lost in the struggle that growers face every day in making decisions that affect their groves, budgets and businesses. Among the needs for communication, we recognize that the industry needs more summaries and compilations of progress on given topics to complement the specific reports and presentations that are readily available. The conclusions across topics of interest like Asian citrus psyllid management, therapies to reduce disease in HLB-infected trees and progress in delivery of resistant rootstocks and scions have become common threads in CRDF conversations.

To address these needs, CRDF will summarize and communicate to industry what it has learned via the following methods:

1. CRDF project managers are developing a series of topical reports written for growers that summarize the body of work funded by CRDF since 2009. These brief reports will be distributed and posted as a series on the CRDF webpage as they are completed. They will include a list of the projects funded to complement the written summaries. Early topics include research on plant nutrition in the presence of HLB; ACP attraction, repellency, and responses of ACP to color, volatiles, sound, etc.; and thermal therapy. A range of other topics will follow as they are completed.
2. Per the 2015 CRDF strategic plan that recommended the development of a playbook for growers, the University of Florida/Institute of Food and Agricultural Sciences has been developing a summary of information and recommendations for citrus production in the presence of HLB. This effort will provide valuable information to growers on work sponsored by CRDF and by other sources.
3. The National Academy of Sciences portfolio review is well underway. The outcome of this project will be an independent report of research results and identification of recommended priorities for further investment. This group will be reviewing published results and interviewing researchers to gain an evidence-based view of results and needs.
4. CRDF committee members and directors are your representatives. Please view them as informed sources of information on what CRDF is doing and how it matters to the industry.

These communications will help fill the gap in information on management of citrus with HLB and will guide CRDF forward.

*Harold Browning is Chief Operations Officer of CRDF. The foundation is charged with funding citrus research and getting the results of that research to use in the grove.*



Column sponsored by the Citrus Research and Development Foundation