



Investing in the future of Florida's citrus industry

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



When you have a home for 100 years, there are always repairs and upgrades to do, especially when you plan to live in it for another 100 years.

When that home is a world-class research operation like the Citrus Research and Education Center (CREC), even a list of seemingly simple projects can cost plenty. So before opening your checkbook, you have to ask: Am I going to be in this place long enough to justify the expense?

With respect to CREC, the answer is yes. The University of Florida's Institute of Food and Agricultural Sciences (UF/IFAS) is looking at its infrastructure needs across the state and choosing projects wisely based on the future payoff. The upgrades at CREC are not just fixes for aging facilities, they're an investment in the future of Florida's citrus industry.

Just as with everything else in this era, I look at every new bed, air conditioner and microscope as part of the larger effort by UF/IFAS to knock down HLB and give us another 100 years together.

We'd be doing this anyway, but knowing that many of you will be coming to our centennial celebration at CREC on Nov. 29 in Lake Alfred, we



High-tech equipment at the Citrus Research and Education Center used in flavor research includes a liquid chromatography/mass spectrometer (top) as well as a rotary evaporator with chiller and vacuum pump (bottom).

plan to show you some of what we've done to fix up the place.

The improvements have the double payoff of both instant and future returns on investment. We know we'll need a well-maintained house of research for your grandkids, because if the past century in citrus has taught us anything, it's that there's *always* a challenge that calls for a scientific solution.

KEEPING IT COOL

Part of the CREC makeover is necessary just to keep up with the influx of

new talent into our aging facilities. The machinery that Yu Wang has brought in for her flavor work generates so much heat that the current cooling system couldn't keep pace. The rising temperatures threatened to wreck her expensive equipment and delay her research.

So we're putting in a new HVAC system for the building that houses her lab. The new system will allow her to run full tilt on identifying the chemical makeup of HLB-tolerant fruit that consumers are most likely to pick up off the shelf or pluck from the juice

case. That'll help our breeders avoid wasting time developing fruit that neither psyllids nor humans will bite into.

With consumers increasingly in the driver's seat, flavor is going to be a challenge for the foreseeable future. We see Wang as a rising star who will be leading flavor breakthroughs for many years to come.

MORE IMPROVEMENTS

There's also a student dormitory under construction. It will be able to house eight graduate students — roughly double what we could fit in the old one, which was demolished in January. These students are our foot soldiers in the war on citrus greening, the people who are out in the field collecting the data, analyzing it in the lab under the direction of our scientists, and working on translating their discoveries into recommendations for the grove.

To recruit horticulturalist Christopher Vincent to CREC last year to research citrus tree physiology, we promised him an improved lab. We're following through on that now with lab upgrades, not to mention a recent infrastructure grant for equipment from IFAS that will help him examine how plants move materials to their different parts.

We also just finished significant renovations to the 35-year-old Ben Hill Griffin Jr. Citrus Hall. The list goes on.

CREC is a special case among UF/IFAS research campuses. It was the first to be established outside Gainesville. It's focused on the state's most iconic agricultural product. It works to improve and defend what is arguably the crop most beset by threats ranging from freezes to bugs to shifting consumer preferences.

The money we're putting into CREC is meant to keep it delivering solutions for decades to come. We want the center to be as timeless as citrus itself. 🍊

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.