"Engaging Row-Crop Clientele Through Sod-based Rotation and Brassica Carinata Projects: Success and Key Pointers for Young Faculty"

David Wright
Our lab at a recent field day
Keys to knowing clientele and gaining trust

• Be dependable and timely
• Speak at farm, field meetings, professional societies, etc.
• Write for popular press and do interviews
• Growers will call with real questions and you will spend a lot of time searching for answers with research, etc.
• If you are doing a good job, they will keep calling
An old saying -
“they don’t care what you know until they know that you care”

• Return calls promptly
• Take time to figure out challenges, bring in other experts, etc.
• Be available
• Clientele and students are the reason we are here
• You have only one chance to make a good first impression, especially social media, be careful with comments
Acquiring and sustaining funding:

• Take opportunities that present themselves (farm challenges, contacts, etc.)
• Be open to new collaborations (industry and academic)
• Be flexible with short term activities
• Cooperate, cooperate, cooperate
  “do not compete – cooperate”
• Lots of funding sources and there are funds for good ideas
Steps to building a program:

• Start with a good idea- “think big” reclaiming the Sahara desert (solves food and CO₂ challenge) involve industry, others

• Choose something that is unique to your situation – such as invasive species (Lincoln, ML King, Ghandi, GW Carver, Gates, etc.).

• Make it relevant to as large an audience as possible

• Use stakeholders to flesh out objectives and operating procedures

• Gather preliminary data with little or no funding

• Talk to everyone about your idea and listen carefully

• Get involved with people in similar areas

• Be open to others strengths

• Give lots of talks- every talk for a student is an interview
Use what you have to work with. Transportation company—may not be Uber but a start
It Takes a Team of at Least Two

Team up with someone to work closely with that has a different perspective than you do, different discipline. This will keep both of you in check, allows for supervision of your program when one is traveling (all successful projects require a lot of travel), and will allow the most suitable speaker for a particular audience. People in your program will not know who is paying them (partnership).
Funding Level?

Need at least $100,000 per year for a significant project. Expenditures of $200,000 to $400,000 per year will fund 2 post docs, 2 graduate students, technical support, and provide operating funds and travel. Some projects can be very small, especially if nested in larger ones or just looking for preliminary data.
You will have dry years where you need a safety net to carry your lab through intact, having two faculty working together usually ensures that one has funding.
Organization of your program:

• Have a post doc or visiting scientist at the head of each major objective. Encourage post docs to write grants as well as conduct research and write papers. Present results at all relevant meetings.

• Have a graduate student when appropriate and make sure they have a clearly defined project – do not let them get swallowed up in the larger program - keep them from becoming technicians for the post docs/scientists
Organization of your program- cont.:

• Keep 2-3 large projects going at the same time and have grant applications at all times. Try to mix smaller but more secure funding (commodities, business, state agencies) with higher risk applications (NSF, NIFA, etc).

• Keep a good technical staff in place (key). Provide training, equipment needs, and travel. Make sure everyone is having fun learning and staying on task.
Host groups that ask. Outreach pays back many times. Cooperate with other institutions.
Center-Based Program Advantages

• Close to problem
• Diversity of talent and expertise available (10 depts. at our center)
• Field plots close by
• Usually field resources are excellent
• Stakeholders are close and involved
• Specialized equipment may be more distant
• Graduate student access may be less than on campus
Hardlock of Cotton-funded by Cotton Inc, FDACS, and commercial companies $250K per year for 5-6 years.
Soybean Rust- 50 man years of research in 10 years at NFREC with $400-700K funding/year- $300 mil. impact estimated saving to growers the first year with sentinel plots. (significant funding for equipment from UF VP and Deans Offices).

Hurricane Ivan
Sod Based Rotation- $16+ mil. in funding in 20 years with partners-
40+ scientific papers, 100’s of abstracts, several student degrees
Root surface area of peanuts after winter covers in a sod based rotation, 3yr. Avg. minirhizotrons

50-70% less irrigation and half the N fertility in cotton- Data used in tri-state water debate.
SPARC

$15 mil. USDA NIFA CAP grant
$2-3 mil. in industry support
$1.1 mil. FDACS Office of Energy

Carinata- 7 years of research
Carinata the jet fuel crop-
Partners-Agrisoma, ARA, CAAFI, DON, DOD, 6 SE Universities, 4 USDA/ARS facilities and others

Back to renewable power
People and partnerships make your program.
Thank you!