Cornell’s Geneva Campus
a.k.a.
The New York State
Agricultural Experiment Station

Susan K. Brown
The Goichman Family Director of the New York State Agricultural Experiment Station and Associate Dean of the College of Agriculture at Cornell
Director Tom Burr, stepping down after 10 years of service!
My new role as Director and my daughter’s adventure

• There is some similarity!
• I’ve taken the leap as well, and I have had good mentoring from Tom Burr. I am eager to spread the news of the positive work of NYSAES.
BREEDING PROGRAMS
Bioenergy Innovation: Shrub Willow in New York

- Renewable energy source that grows on marginal land.
- Dr. Larry Smart is breeding new willows for commercial bioenergy and has a strong outreach program to share research results (www.willows.cornell.edu).
- Pre-commercial stage: incentives and energy subsidies are needed.
- 850 acres of commercial willow-most in northern New York.
Dr. Bruce Reisch breeds new wine grapes

- Arandell (2013)
- Aromella (2013)
- Noiret (2006)
- Corot Noir (2006)
- Valvin Muscat (2006)
- Traminette (1996)
- Chardonel (1990)
‘SnapDragon’™ and ‘RubyFrost’™: Cornell partnering with NYAG LLC.
Amazing!
Dr. Courtney Weber - Small Fruits
Vegetable Breeding: Dr. Phillip Griffiths (Griff)
USDA-ARS Partners at Geneva: Plant Genetics Research Unit (PGRU) & Grape Genetics Research (GGRU)

**Plant Genetic Resources Unit:**

**Clonal Group:**
- Thomas Chao | Horticulture (Curator)
- Gennaro Fazio | Plant Genetics (Rootstock Breeding)
- Heidi Schwaninger | Plant Genetics (Molecular)

**Vegetables:**
- Joanne Labate | Molecular Biology
- Larry Robertson | Plant Genetics

**GGRU (Grapes Genetic Resource Unit):**
- Lance Cadle-Davidson | Plant Pathology
- Jason Londo | Plant Genetics (Cold Hardiness)
- Christopher Owens | Molecular Biology
- Yingshen Yang | Plant Genetics
- Gan-Yuan Zhong | Plant Genetics (Research Leader)
New apple rootstocks (Cornell and USDA)
Production Systems
FOOD SCIENCE
New York State Businesses
Assisted with a New Food Product by the
New York State Food Venture Center
January 2002 - December 2012
Sample of Products Produced With FVC/NECFE Assistance
Stony Brook WholeHeartedFoods

John B. Martin and Sons Inc.


Kelly and Greg Woodworth
Cheribundi (formerly CherryPharm)

- Rangers sports drink of choice.
- Expanding market along with expanded product line - teas.
- Started at Food Science and then crossed to the Ag-tech park.
Wine: Vinification and Brewing Laboratory and NYS Wine Analytical Laboratory
CROP PROTECTION

PLANT PATHOLOGY AND MICROBE BIOLOGY (PPMB) AND ENTOMOLOGY
Newest Faculty at NYSAES: 
and the Year of “Soil Health”

Kyle Wickings

Sarah Pethybridge
Invasive Insects

Spotted wing *Drosophila* (fruit fly)

Tarnished Plant Bug

Shot- hole borer aka Ambrosia beetle
Phytophthora

- A major problem, especially after flooding and its spread in the flood.

- Only farm dedicated to this disease. We are at the forefront.
Facility Improvements
New Barton Range Greenhouses

- State funded, $47 M
- 21,000 sq. ft.
- State of the art facility for plant research
- Ribbon cutting: October, 2014
Finger Lakes Community College (FLCC) Viticulture Center

- Located on Pre-Emption Road at the Ag Technology Campus
- Will train workforce for the NY wine and grape industry.
- Enhances the relationship between FLCC and Cornell.
- Articulation agreement.
Solar at NYSAES

• A new ten-acre, two-megawatt solar farm at NYSAES will offset ~40% of the Stations annual energy demand.
Research Area and a Research Resource

- Controlled cultivation: Hoop Houses and high tunnels.
- Extends harvest timing
- Will explore unique pest and pathogen challenges
- Examine economics
Hops and bines
Agricultural Sciences Research Laboratory

Priority capital project

Will house research and extension programs involved with development of fruit and vegetable-based food and beverage products that impact economic development across NY.

Programs in ASRL:
- Food Venture Center
- Vinification and Brewing Lab
- Wine Analytical Lab
- Good Agricultural Practices (GAPs) Program
- Fruit and Vegetable Breeding and Genetics
Agricultural Sciences Research Laboratory

- Project is shovel-ready - $47M
- Can be strategically phased dependent of sources of funds
- Is compatible with Start-Up NY initiative

In 2012, the NYS Food Venture Center
- Handled 2,500 food marketing inquiries
- Completed safety evaluations of 1,030 specialty products for 391 food entrepreneurs
- Analyzed 774 samples of food prototypes
- Conducted 10 workshops for 292 food business innovators
DID YOU KNOW?
John Sanford: Co-Inventor of the “Gene Gun”

The original design was based on a true gun, and a “stopping plate” stopped the bullet and DNA-coated gold particles transformed the cells.

Useful in corn, wheat and other crops, and in medical studies.
Papaya resistant to a devastating virus

- Papaya ring spot virus (PRSV)
- ‘Rainbow’ and ‘Sun-up’ papayas resistant in a technique similar to vaccination
- Still a transgenic- so some backlash
Wendell Roelofs

- Received the Wolf prize in 1982 for his research on insect pheromones ("scents") for pest control.
- Received the National Medal of Science in 1983 in a ceremony at the White House.
A promising future!

- Traction on renovation of the ASRL - Agricultural Sciences Research Laboratory - with modern distance-learning conference rooms.
- Possible campaign to air-condition the Jordan Hall auditorium.
- Five new faculty promised with the completion of our strategic plan.
- New faculty are exceptional and our faculty are mobilized to plan for the future.
- We appreciate your assistance and welcome any suggestions!
Thank you very much!