



United States Department of Agriculture

Agricultural Research Service

ARS Overview

prepared for NAREEE Board
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by
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Administrator

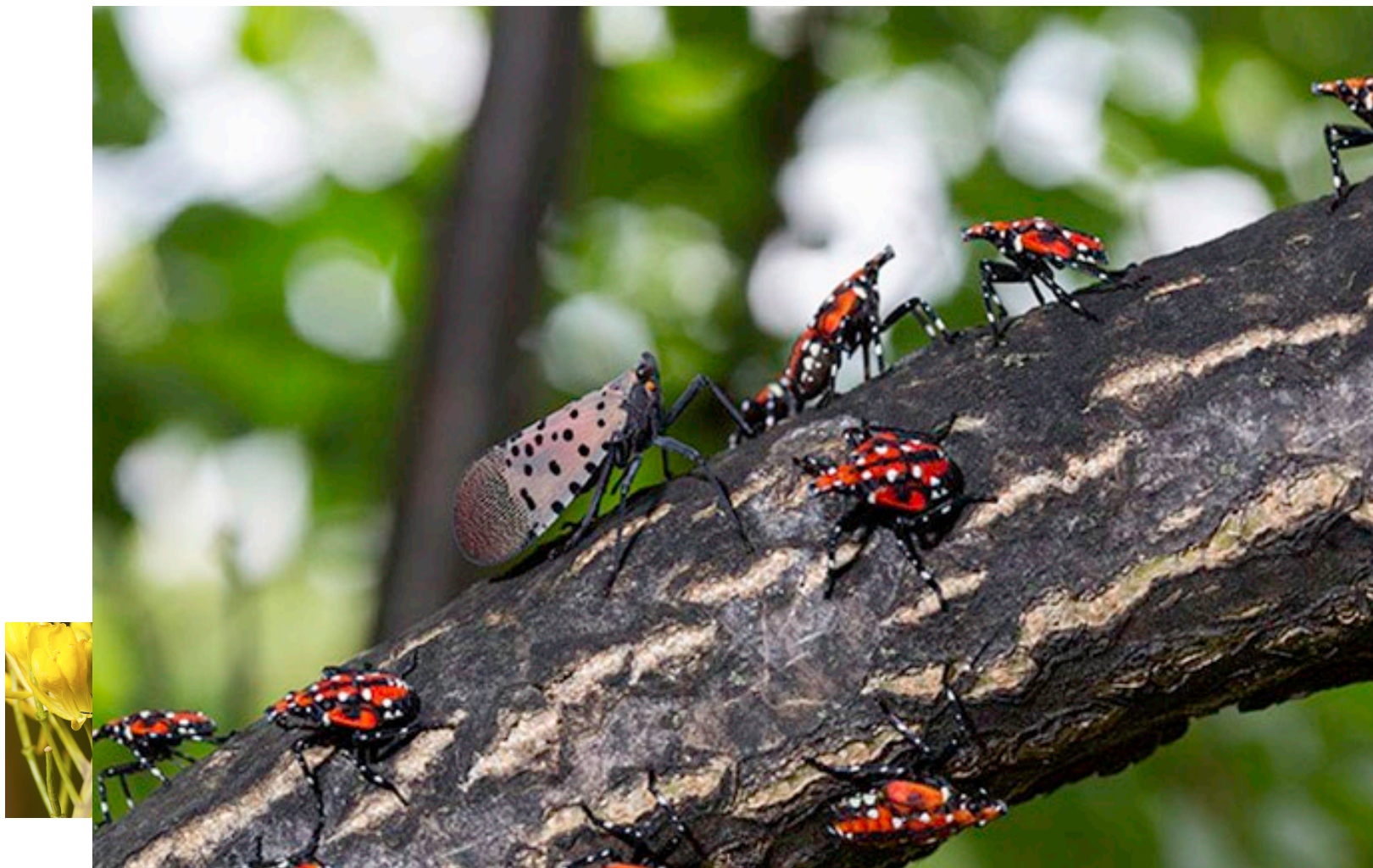




United States Department of Agriculture

Agricultural Research Service

Revolutionary Research for a Growing World



Agricultural Research Service



ARS Mission

ARS delivers scientific solutions to national and global agricultural challenges



ARS Vision

Global leadership in agricultural discoveries through scientific excellence

660 research projects
15 National Programs

\$1.8 billion annual budget

2,000 scientists & postdocs
6,000 support employees

90 locations throughout US
4 overseas labs



United States Department of Agriculture

Agricultural Research Service

Administrator's Council



Steven M. Kappes
Associate Administrator,
National Programs



Chavonda Jacobs-Young
Administrator



Simon Y. Liu
Associate Administrator,
Research Operations

Program Planning and Coordination (National Program Staff)

Area and NAL Directors

Program Support and Operations (Headquarters)



Jeffery Silverstein
Deputy Administrator,
National Program Staff
Animal Production
& Protection



Pamela Starke-Reed
Deputy Administrator,
National Program Staff
Nutrition, Food
Safety & Quality



Marlen Eve
Deputy Administrator,
National Program Staff
Natural Resources & Sustainable
Agricultural Systems



Archie Tucker
Director,
Southeast Area



Larry Chandler
Director,
Plains Area



Alberto Pantoja
Director,
Midwest Area



Joon Park
Deputy Administrator,
Administrative & Financial
Management



Michael Arnold
Director, Budget & Program
Management Staff



Jill Stetka
Acting Chief of Staff,
Executive Secretary of the
Administrator's Council



Bryan Norrington
Director, Office of
International Research
Engagement and
Cooperation



Deepak Bhatnagar
Acting Deputy Administrator,
National Program Staff
Crop Production &
Protection



Thomas Shanower
Director,
Northeast Area



John Dyer
Acting Director,
Pacific West Area



Paul Wester
Director,
National Agricultural Library



Heather Gossel
Director, Office of
Communications



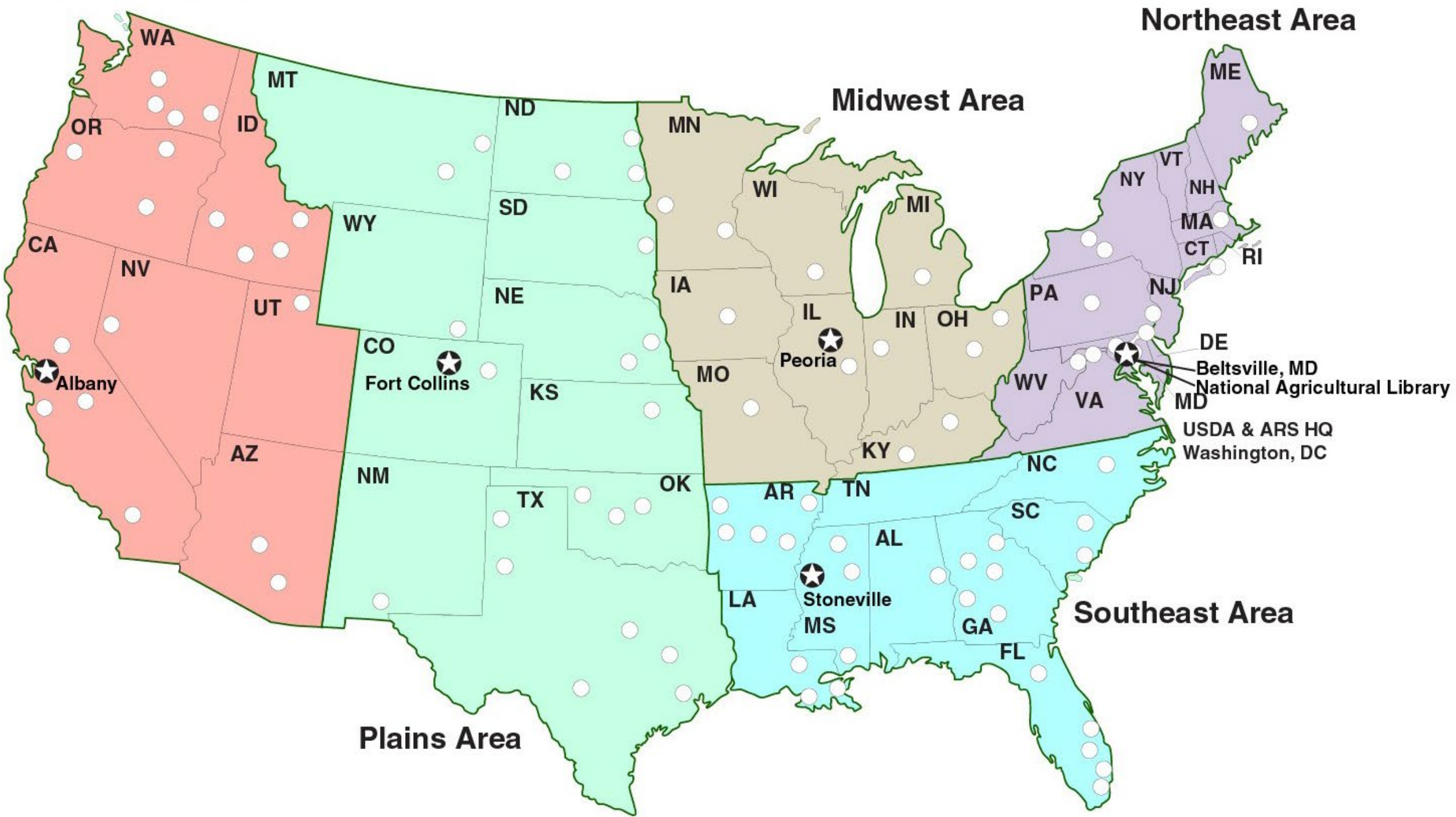
Brian Nakanishi
Deputy Assistant Administrator,
Office of Technology Transfer



Tracey Troutman
Director, Office of Outreach,
Diversity, and Equal Opportunity



Marquee D. King
Director,
Office of Scientific Quality Review





United States Department of Agriculture

Agricultural Research Service

ARS National Programs

Animal Production & Protection

- Food Animal Production
- Animal Health
- Veterinary, Medical, & Urban Entomology
- Aquaculture

Nutrition, Food Safety & Quality

- Human Nutrition
- Food Safety (animal & plant products)
- Product Quality & New Uses

Natural Resources & Sustainable Ag Systems

- Water Availability & Watershed Management
- Soil and Air
- Grass, Forage, & Rangeland Agroecosystems
- Sustainable Agricultural Systems Research

Crop Production & Protection

- Plant Genetic Resources, Genomics & Genetic Improvement
- Plant Diseases
- Crop Protection & Quarantine
- Crop Production

FY 2022 Proposed ARS Budget

\$1.8 billion for salaries and expenses

\$357.8 million increase

\$45.4 million for facilities



ARS Accomplishments

SARS-CoV-2 research

- Livestock disease infection studies- cattle, pigs, deer
- Poultry disease infection studies- chicken, turkey, Japanese quail, Pekin duck and Chinese goose
- Mosquito and biting midge infection studies
- White-tailed deer studies

Climate Hubs

- Science syntheses and assessments
- Tool development and training
- Outreach and education

Asian Giant Hornet

- Invasive species first detected in North America in 2019
- ARS's Ag100Pest Initiative released the first complete genome of the Asian giant hornet
- APHIS collaboration to sequence all subspecies to determine origin to aid control
- Paradigm shift in responding to the invasive species
- Technology now applied to desert locust and Mormon cricket

Ag100 Pest

- ARS leads the Ag100Pest Initiative
- Goal is to sequence 100 top pests to U.S. agriculture
- High scientist demand for Ag100Pest

ARS Innovation Initiatives

- **SCINet**
 - Agency-wide data computing resource to improve USDA's research capacity
 - Access to high performance computing, improved data transfer and storage, and training
- **Partnerships for Data Innovation (PDI)**
 - Connecting research from lab to field- public private partnerships
- **Breeding Insight**
 - Transform breeding strategies into data-driven models to improve genomic selection in ARS breeding programs - partnership with Cornell University
 - Supports specialty crops, forage and minor livestock species
- **ARSX**
 - ARSX 2020 - Disruptive Pests and Pathogens
 - ARSX 2021 - Harvest for a Healthier Future
 - ARSX 2022 - coming soon!
- **Innovation Fund**
 - Competitive opportunity for ARS scientists to receive up to \$25,000 to expedite commercialization/adoption of research outcomes
 - Now in its 15th round and 6th year, the Innovation Fund has received 538 applications and funded 174 projects

