

### Bee-INSPIRED

INtegrating Service Projects Into REsearch and Design

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## Program Rationale

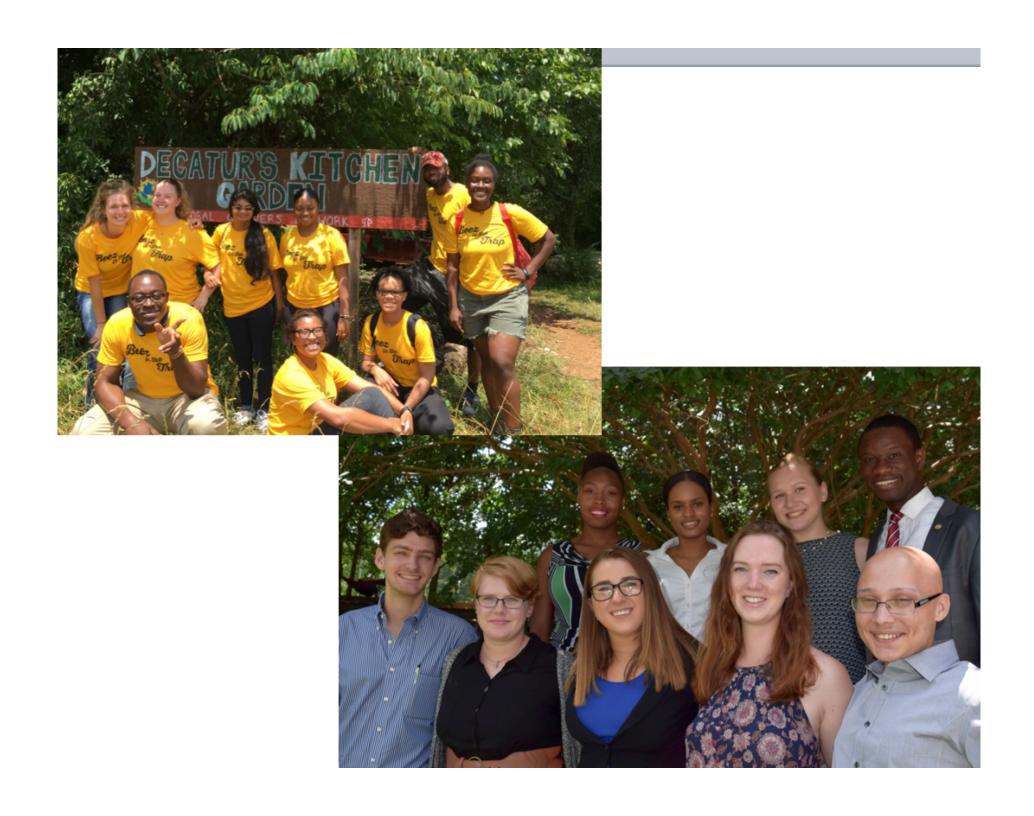
- Factors shown to improve STEM retention
  - Early Research Experiences
  - Active Learning in Introductory Courses
  - Membership in STEM learning communities
- Service learning has been shown to:
  - Improve academic and life skill development
  - Improve intrinsic motivation
  - Improve sense of autonomy, self-efficacy and empowerment

#### The Model

- 10 weeks
- Residential (North Avenue Apartments)
- \$5000 stipend plus travel
- 4 days/week in research
- 1 day/week working with community partners
- Professional development and cohort building activities

## Recruitment and Representation

- Columbus State, University
- Clark Atlanta University
- Georgia Institute of Technology
- Jackson State University (Mississippi)
- Kennesaw State University
- Middle Georgia State University
- Purdue University
- University of Alabama, Birmingham
- University of Florida
- University of Georgia
- University of Rhode Island
- Spelman College
- Tuskegee University



#### Research

Effect of Pollenkitt in honeybee grooming

Structural Studies of LTC4S Protein

High-speed sensing of bees

Association of prior feeding success with the use of specific ambush sites in sidewinder rattlesnakes (Crotalus cerastes)

Dominance Among Captive Non-Breeding Female African Elephants (Loxodonta africana)

Antibiotic molecules in geographically distinct

honeys

Honey Bee Pollen Baskets

Patterns in Sexual Dimorphism and Mate

Choice of Anoles and Geckos: The Exceptions

Impact of Climate Change on Bee Habitats

Investigation of Histone H3 Methylations of

the Honeybee

Identification of local Caenorhabditis species

Effects of Mechanical Stretching on Cellulose

Nanocrystal Polymer Composites

**Environmental Enteric Dysfunction and** 

Improved Sanitation in Maputo, Mozambique

Dispersal rates: species abilities to track viable

Effects of oxalic acid on honey bee larval development

habitats



# **Community Partnerships**

- Aluma Farm
- ArkFab
- Atlanta Food and Farm PBC
- Atlanta Community Food Bank
- City of Atlanta Bee City USA
- CEISMC GE Girls, PUSH, Horizons and G.I.R.L.S. camps
- Emory Urban Health Initiative
- Fulton County Cub Scouts
- Global Growers
- Greening Youth Foundation
- Historic Westside Gardens, Inc.
- Piedmont Park Conservancy
- Ponce City Farmers market
- Truly Living Well
- Urban Fresh
- West End Community Garden
- Zoo Atlanta



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