#### Exploring educational attainment of undergraduate minority students in Land-grant institutions

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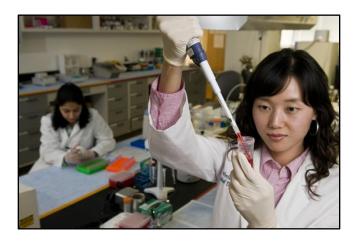
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#### Presentation overview

- Background
- Purpose
- Methodology
- Results
- Conclusions
- Recommendations







# Educational attainment for minority and non-minority students in the U.S.

- A gap exists between the educational attainment of minority and non-minority citizens (Engle et al., 2012). In 2011,
  - 44% of Caucasian Americans held college degrees
  - 30% of African Americans and 21% of Hispanic Americans have college degrees (U.S. Census Bureau, 2011)
- Colleges of agriculture and life sciences across the country are creating initiatives to increase the educational attainment of minority students
- Previous studies have measured educational attainment using college enrollment (Garibaldi, 1997; Marchant and Williamson, 1994; Wilds, 2000)
  WirginiaTech



## Purpose of study

- To investigate changes in Baccalaureate enrollment among minority students in colleges of agriculture and life sciences at U.S. Land-grant institutions
- Guiding research questions:
  - I. How has Baccalaureate enrollment for minority students changed over time compared to non-minority students?
  - 2. Is there a differentiation in minority Baccalaureate enrollment across disciplines within agriculture and life science disciplines?





## Methodology

- Quantitative study
  - Data from Food and Agricultural Education Information System (FAEIS) database (http://faeis.usda.gov)
- Data collection
  - Baccalaureate enrollment for 2007 to 2011
  - African American, Asian, Hispanic, and Caucasian
  - Agricultural economics, animal sciences, and foods and nutrition programs
  - 49 Land Grant Colleges and Unversities
- Data analysis
  - Imputation used to fill in missing data points (6.3%)
  - Conducted trend analysis using SPSS v. 20

# Map of 49 Land-grant institutions included in the analysis



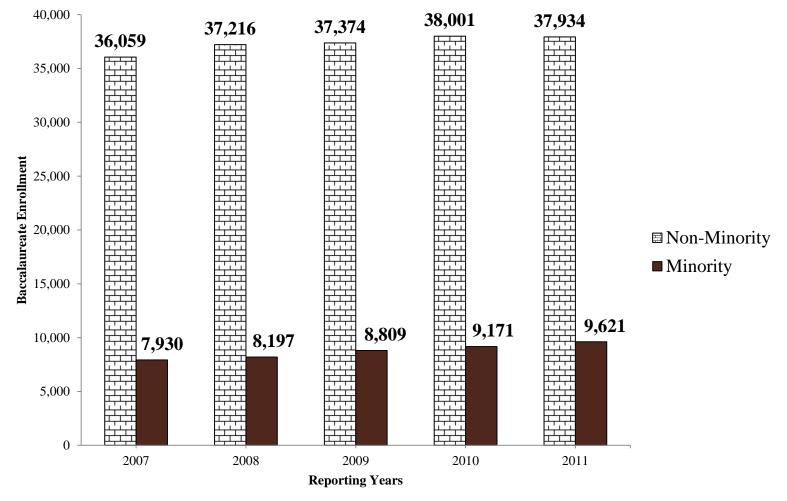
## RESULTS



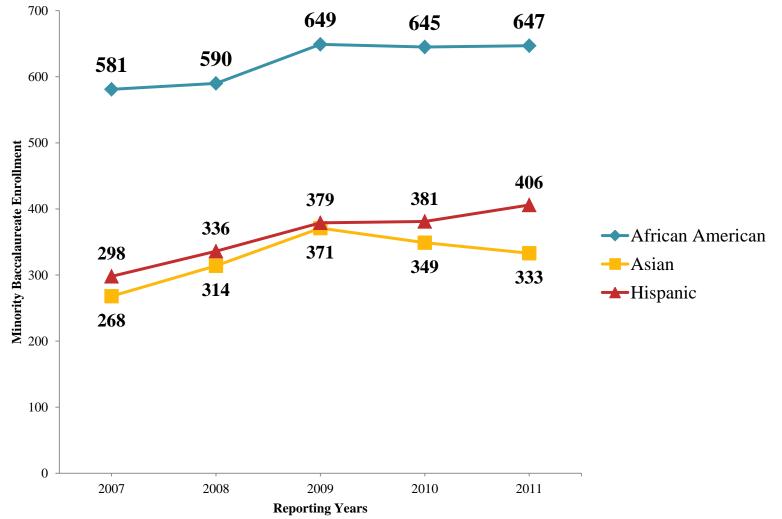




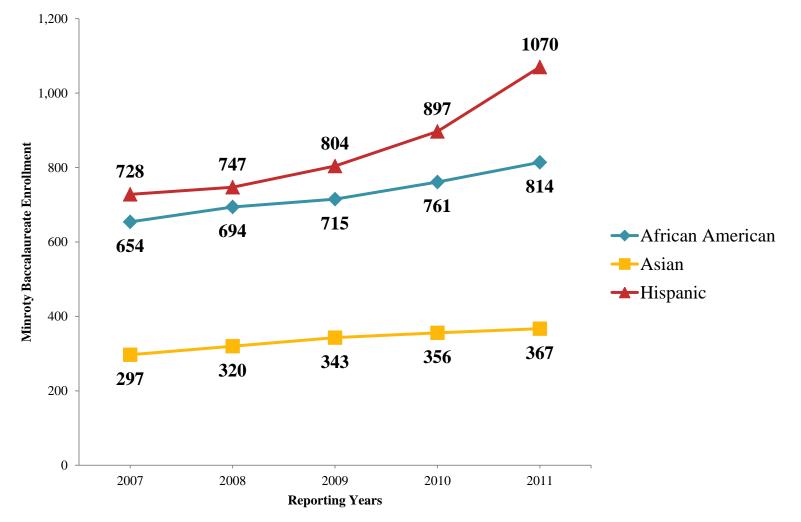
# Baccalaureate Enrollment for Minority and Non-Minority Students



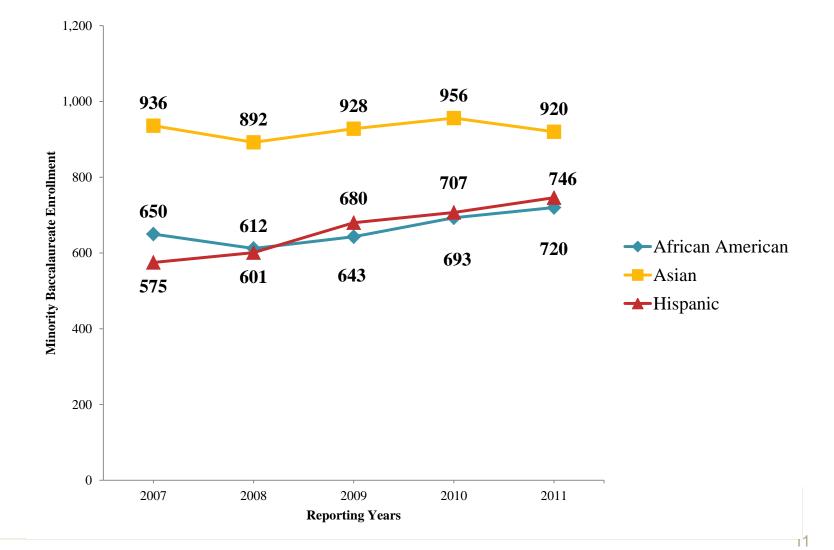
#### Minority Baccalaureate Enrollment in Agricultural Economics Programs



#### Minority Baccalaureate Enrollment in Animal Science Programs



#### Minority Baccalaureate Enrollment in Foods and Nutrition Programs





#### Conclusion

- Minority Baccalaureate enrollment is increasing at a faster rate (21%) than non-minority Baccalaureate enrollment (5%)
- Differences in minority Baccalaureate enrollment exist across agriculture and life science disciplines
  - Agricultural economics: Enrollment highest among African American students
  - Animal science: Enrollment highest among Hispanic students
  - Foods and nutrition: Enrollment highest among Asian students
- Largest rate of increase in minority Baccalaureate enrollment is for Hispanic students across the disciplines



#### **Recommendations for practice**

- Current efforts to recruit Hispanic students are effective
- Recruitment efforts should focus on the following student groups
  - In agricultural economics programs, recruit African American and Asian students
  - In animal science programs, recruit Asian and African American students
  - In foods and nutrition programs, recruit Asian students





#### References

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# Thank you.



# Any questions?

