Food Safety: A USDA-NIFA Societal Challenge Area

Exploring the Educational Pipeline for Food Science Studies

The USDA National Institute of Food and Agriculture (NIFA) has identified five societal challenge areas within agriculture and the life sciences that have national, regional, and multi-state importance. This newsletter looks at higher education programs related to Food Safety, specifically the educational pipeline of undergraduate and graduate student enrollment in programs related to food science studies.

Undergraduate Enrollment in Food Science Studies

Four Classification of Instruction Programs (CIP) codes relating to food science studies were included in this data analysis. For a full list of the CIP codes, review Page 3. Higher education institutions were included that provided data consistently for the five years of 2006-2010. In total, 35 Land-grant institutions and six non-Land-grant institutions were included in the analysis. Figure 1 offers the undergraduate headcount for the reporting years. Based on the analysis, the number of students enrolled in the CIP codes related to food science studies increased between 2006 and 2010 by 59.2%. Review detailed reports of institutions contributing to Figure 1.

Figure 1. Undergraduate Student Enrollment in Food Science Studies from 2006-2010 (n = 41)
Investigating Graduate Student Enrollment

Comparisons between Masters and Doctoral Students in Higher Education Institutions

The enrollment data for graduate students in CIP codes related to food science studies were compared for higher education institutions that supplied enrollment data to FAEIS for the reporting years of 2006 – 2010. Of the 41 higher education institutions offering programs in food science studies, only 40 of those institutions offered Masters programs and only 32 offered Doctorate programs. See Page 3 for a list of CIP codes included in this analysis.

Figure 2 (below) shows that Masters students increased between 2006 and 2010 by 40.2%. Doctoral students increased between 2006 and 2010 by 16.2%. Review detailed reports of institutions with Masters programs contributing to Figure 2. Review detailed reports of institutions with Doctorate programs contributing to Figure 2.

Figure 2. Graduate Student Enrollment in Food Science Studies from 2006 - 2010

The FAEIS funding organization, the USDA National Institute of Food and Agriculture (NIFA), has identified five societal challenge areas: 1) Childhood Obesity Prevention, 2) Climate Change, 3) Food Safety, 4) Global Food Security, and 5) Sustainable Energy.

A review of the FAEIS College Enrollment Surveys for program changes in food science studies indicates six institutions added programs between 2010 and 2011. During this time, four institutions dropped programs related to food science studies. See the programs changes report.

On behalf of USDA-NIFA and our partner organizations, the FAEIS team says THANK YOU to all who have contributed their time and data to make this report possible.
Investigating Graduate Student Enrollment

Comparisons between Masters and Doctoral Students in Higher Education Institutions

The enrollment data for graduate students in CIP codes related to food science studies were compared for higher education institutions that supplied enrollment data to FAEIS for the reporting years of 2006 – 2010. Of the 41 higher education institutions offering programs in food science studies, only 40 of those institutions offered Masters programs and only 32 offered Doctorate programs. See Page 3 for a list of CIP codes included in this analysis.

Figure 2 (below) shows that Masters students increased between 2006 and 2010 by 40.2%. Doctoral students increased between 2006 and 2010 by 16.2%. Review detailed reports of institutions with Masters programs contributing to Figure 2. Review detailed reports of institutions with Doctorate programs contributing to Figure 2.

Figure 2. Graduate Student Enrollment in Food Science Studies from 2006 - 2010

* 40 institutions with Masters programs were included in the analysis.
* 32 institutions with Doctorate programs were included in the analysis.

Academic Disciplines in the Food Safety Educational Pipeline

The FAEIS funding organization, the USDA National Institute of Food and Agriculture (NIFA), has identified five societal challenge areas: 1) Childhood Obesity Prevention, 2) Climate Change, 3) Food Safety, 4) Global Food Security, and 5) Sustainable Energy.

To better understand the societal challenge area of food safety, we have explored FAEIS CIP codes that focus on food science studies. The comparison studies conducted for this newsletter included the following CIP codes:

- 01.0309 – Viticulture and Enology (new for 2010)
- 01.1001 – Food Science
- 01.1002 – Food Technology and Processing
- 01.1099 – Food Science and Technology, Other

A review of the FAEIS College Enrollment Surveys for program changes in food science studies indicates six institutions added programs between 2010 and 2011. During this time, four institutions dropped programs related to food science studies. See the programs changes report.

On behalf of USDA-NIFA and our partner organizations, the FAEIS team says THANK YOU to all who have contributed their time and data to make this report possible.

Contributors

Editors
Dr. Mary A. Marchant
Bill Richardson
Dr. Eric Smith
Dr. Eric Vance
Dr. Timothy P. Mack

Data Analyst and Graphic Designer
Lisa Hightower

The FAEIS Team
Bill Richardson
Dr. Mary A. Marchant
Dr. Eric Smith
Dr. Eric Vance
Dr. Timothy P. Mack
Michael Albanese

Photos provided by
Michael Kiernan
Jim Stroup

Contributors >>>