RISE: Pathways to Diversity in Food Science Careers

Objectives:

Undergraduate and especially graduate programs in food science in both the United States and abroad are experiencing declining enrollments, and some reports have estimated that, as a result, approximately 2700 U.S. positions in food science and closely related disciplines each year remain vacant. RISE: Pathways to Diversity in Food Science Careers will provide information and opportunities to undergraduate, graduate students and K-12 educators interested in Food Safety and related disciplines of Food Science/Technology and Manufacturing with the final objective of increase the number of highly qualified Hispanic students that pursues advanced degrees in Food Science Careers.

The objectives of the RISE Program will be: 1) to collect, set up and organize information to undergraduate and graduate students interested in entering graduate programs leading to the MS and the Ph.D. in Food Safety and related disciplines of Food Science/Technology and Manufacturing, 2) to manage efforts and activities among individuals and institutions (UPRA and IAUSG) to recruit students and enrich the pool of candidates interested in Food Safety and related disciplines of Food Science/Technology and Manufacturing , 3) to design and plan opportunities to 20 students (10 B.S. and 10 M.S) interested in entering graduate programs leading to MS and Ph.D. in Food Safety and related disciplines of Food Science/Technology and Manufacturing and 4) to prepare K-12 educators that incorporate lessons about Food Safety and related disciplines of Food Science/Technology and Manufacturing into their curriculum.

Outcomes/Activities/Indicators:

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Activities</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide information and opportunities to undergraduate and graduate students interested in entering graduate programs leading to the MS and the Ph.D. in Food Safety and related disciplines of Food Science/Technology and Manufacturing.</td>
<td>Orientation: Careers and Opportunities in Food Science Summer Workshop RISE Trainee Candidates Off-Campus Learning Experiences Attendance to Science Meetings Workshop on Academic Skills Improvement RISE Journal Club Special Topics Courses</td>
<td># of orientations offered # of students contacted # of students enrolled as RISE recruitment efforts # of experiential learning opportunities at academic institutions, USDA agencies, other Federal agencies, state/local government # of experiential learning opportunities at summer workshop, off-campus experiences, journal club, special topic courses, scientific meeting # of institutional partnerships # of tutoring hours # of poster or presentation given # of student enrolled in advanced degree programs</td>
</tr>
<tr>
<td>Integrating K-12 teachers to the area of Food Science and Technology</td>
<td>Summer workshop</td>
<td># of K-12 teacher contacted # of K-12 teacher that participated on summer workshop # of experiential learning opportunities introduced at school by K-12 teachers # of students contacted by lectures and/or laboratories</td>
</tr>
</tbody>
</table>

Expected impact:

Increase the number of underrepresented groups to reflect the nation's population demographics and to attain post-secondary and post graduate degrees in the food science.

Facilitate the skill and competency development of Hispanic students in order to be competitive for jobs in the food and agriculture sector and at the U.S. Department of Agriculture (USDA) and other federal agencies.

Assessment and META Evaluation:

1. Project Implementation
2. College and University
3. Collaboration Student Participation and Demographics
4. Number of USDA agency partnerships and internships.

This project will be supported by Agriculture and Food Research Initiative Competitive Grant USDA-NIFA-HIS-003956 from the USDA National Institute of Food and Agriculture.