

## Strategic Action Plan for Entomology

### Major Activities

Entomology engaged in a series of strategic planning exercises since our last review to develop a strategic action plan. Although other needs to enhance programming and activities were identified, those discussed here are considered the most vital to advance entomology and IANR agendas in the following areas.

#### 1. ENHANCE OUR EXPERTISE IN STRESS BIOLOGY

**GOAL:** Entomology will provide campus-wide leadership in stress biology

Activities	Measures
Develop partnerships to support Stress Biology as an organized UNL activity with groups/units such as: <ul style="list-style-type: none"> <li>• IANR (e.g. Plant Pathology, Biochemistry, Agronomy and Horticulture) and other academic departments</li> <li>• Molecular Life Sciences</li> <li>• Food for Water</li> <li>• Virology</li> <li>• Gut Initiative, and</li> <li>• Innovation Campus (corporate partners)</li> </ul>	<ul style="list-style-type: none"> <li>• With partners, submit interdisciplinary grants</li> </ul>
Develop expertise and capacity	<ul style="list-style-type: none"> <li>• Together with multi-disciplinary partners anticipate needs and develop action steps to strengthen and enhance stress biology capacity</li> </ul>

#### 2. STRENGTHEN INFRASTRUCTURE AND STAFFING IN SUPPORT OF EDUCATIONAL ACTIVITIES

**GOAL:** Provide interactive learning opportunities for students and clients

Activities	Measures
Increase teaching assistant support for laboratory and other courses from revenue arising from entrepreneurial teaching activities	<ul style="list-style-type: none"> <li>• Increase the number of integrated and other proposal submissions; e.g., NSF / USDA / DOEd / Nebraska Environmental Trust</li> <li>• Develop on-line enrollment targets</li> <li>• Increase distance education returns through on-line enrollment, growth in certificate programs, and special undergraduate course offerings</li> </ul>

Enhance student professional development activities	<ul style="list-style-type: none"> <li>• Increase the number of undergraduate and graduate students gaining teaching experience</li> <li>• Partner with corporate and other sponsors to support teaching assistants</li> <li>• Set targets for student participation in professional meetings</li> <li>• Provide students professional development opportunities</li> </ul>
Further develop state-wide extension entomology capacity	<ul style="list-style-type: none"> <li>• Increase the numbers of extension staff enrolled in entomology degree and certificate programs</li> <li>• Pursue regional partnerships with other states to address extension needs</li> </ul>
Provide access to students needing our entomology courses and labs	<ul style="list-style-type: none"> <li>• Increase the number of lab sections offered</li> <li>• Provide instructors staff support to facilitate more lab sections and higher enrollment</li> </ul>
Review graduate research degrees	<ul style="list-style-type: none"> <li>• Assess program strengths and weakness</li> <li>• Develop action steps to better prepare students to succeed in today's science environment</li> </ul>

### 3. ELEVATE RESEARCH IMPACT

**GOAL:** Increase competitive grants, high impact journal submissions, national and international recognition, submission of patents and other activities

Activities	Measures
Grow a culture for new and existing faculty professional development	<ul style="list-style-type: none"> <li>• Develop a formalized mentoring program for new faculty</li> <li>• Ensure all faculty have attended a grant-writing workshop within the last five years</li> </ul>
Enhance external funding supporting research	<ul style="list-style-type: none"> <li>• Increase competitive grant submissions by 20% (by five years)</li> <li>• Take increased advantage of institutional supported grant preparation and Office of Proposal Development services</li> <li>• Cultivate industry / corporate sponsored research activities</li> </ul>
Increase submissions to high-impact journals	<ul style="list-style-type: none"> <li>• Increase number by 5%</li> </ul>

Enhance recognition of research	<ul style="list-style-type: none"> <li>• Increase the numbers of national and international presentations made, especially invited</li> <li>• Increase the numbers of regional and national awards received</li> </ul>
Increase our activities related to patenting and licensing intellectual property	<ul style="list-style-type: none"> <li>• Increase number of submissions to NUTech Ventures</li> </ul>

#### 4. ANTICIPATE IMPACTS OF POSSIBLE RETIREMENTS ON SIGNATURE PROGRAM VIABILITY

**GOAL:** Assess and prioritize impacts from faculty retirements

Activities	Measures
Estimate impact from the loss of one or more positions to viability of affected signature programs	<ul style="list-style-type: none"> <li>• Catalog possible retirements within five and ten year windows</li> <li>• Assess potential impacts on each signature area</li> <li>• By signature area assess need, possible redirection, funding availability, contributions to IANR and university goals, and potential for joint appointments</li> </ul>
Prioritize needs among and between signature program areas	<ul style="list-style-type: none"> <li>• Develop overall and by signature area priority lists</li> <li>• Develop position descriptions</li> </ul>