NORTH DAKOTA STATE UNIVERSITY
FARGO, N.D.

FY2016 • SPONSORED PROGRAMS ADMINISTRATION
External Funding Awards Annual Report
Introduction

With a commitment to excellence, we support the pursuits of our faculty in obtaining external funding to support their research and scholarly activity priorities in order to advance their respective academic fields. Faculty, students and staff at NDSU are encouraged to engage in research that expands the boundaries of scientific discovery, making a difference in the lives of our citizens. NDSU exemplifies diversity in our research and creative activities, ranging from the use of unmanned aerial vehicles in precision agriculture, controlled delivery of pharmaceuticals, disease resistance in crops, and the expansion of high-performance and advanced-research computing capabilities.

At NDSU, faculty have been encouraged to work together on interdisciplinary teams to solve grand challenges, with a focus on three identified areas: food systems and security; healthy populations and vital communities; and sustainable energy, environment and societal infrastructure. These teams build upon the strengths of the university and also create opportunities for strategic collaborations with industry and other partners, all while being cognizant of the needs in our state.

As we work to continuously enhance the external sponsored funding awarded to the outstanding faculty, students and staff at NDSU, we pause to celebrate the successes of the past year. This report provides an abbreviated quantitative snapshot of FY2016 awards.

Breakdown of external awards and federal formula funds:

<table>
<thead>
<tr>
<th></th>
<th>FY 2014</th>
<th>FY 2015*</th>
<th>FY 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External Awards</strong></td>
<td>$64,103,594</td>
<td>$65,486,657</td>
<td>$70,620,367</td>
</tr>
<tr>
<td><strong>Total External Awards</strong></td>
<td>$64,103,594</td>
<td>$65,486,657</td>
<td>$70,620,367</td>
</tr>
<tr>
<td>Hatch/McIntire-Stennis Funds</td>
<td>$3,223,580</td>
<td>$3,184,546</td>
<td>$3,184,348</td>
</tr>
<tr>
<td>Extension Service Smith-Lever Formula Funds</td>
<td>$3,906,862</td>
<td>$3,920,040</td>
<td>$3,919,415</td>
</tr>
<tr>
<td>Student Financial Aid</td>
<td>$11,210,498</td>
<td>$11,021,451</td>
<td>$10,530,068</td>
</tr>
<tr>
<td><strong>Total Federal Formula Funds</strong></td>
<td>$18,340,940</td>
<td>$18,126,037</td>
<td>$17,633,831</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>$82,444,534</td>
<td>$83,612,694</td>
<td>$88,254,198</td>
</tr>
</tbody>
</table>

By the numbers, for FY2016, we noted a 7.8 percent increase in external awards over FY15, with growth in the areas of federal and state funding over the previous year. Estimated R&D expenditures reported to the National Science Foundation total $156.3 million for NDSU in FY2016.

* Adjustments were made to the previously published FY 2015 External Awards total. The adjusted total is included here.
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Each year, the National Science Foundation requests data from universities and colleges on their respective fiscal year research and development expenditures. The survey is developed and conducted by the NSF Division of Science Resources Statistics (SRS) and fulfills the legislative mandate of the National Science Foundation Act to “provide a central clearinghouse for the collection, interpretation, and analysis of data on scientific and engineering resources”. The SRS develops and directs about 14 surveys and annually produces about 30 publications related to resources devoted to science, engineering, and technology. The surveys contribute to decisions affecting higher education, Congress, the executive branch, and education associations using institutional data.

The data represented below is generated from funding awarded to NDSU. Sources of funding include: Federal government, State and local government, industry, institution, and other sources such as non-profit foundations. Institutional funds include state appropriations, tuition and fees, and gifts expended for research and development activities. In addition, un-reimbursed indirect costs and cost sharing are included as part of the institutional data.

<table>
<thead>
<tr>
<th>Field</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>12,114,000</td>
<td>12,678,000</td>
<td>13,009,000</td>
</tr>
<tr>
<td>Physical Sciences</td>
<td>11,551,000</td>
<td>10,951,000</td>
<td>10,684,000</td>
</tr>
<tr>
<td>Environmental Sciences</td>
<td>541,000</td>
<td>705,000</td>
<td>439,000</td>
</tr>
<tr>
<td>Mathematical Sciences</td>
<td>741,000</td>
<td>777,000</td>
<td>979,000</td>
</tr>
<tr>
<td>Computer Sciences</td>
<td>5,106,000</td>
<td>3,949,000</td>
<td>2,878,000</td>
</tr>
<tr>
<td>Life Sciences</td>
<td>94,302,000</td>
<td>95,345,000</td>
<td>103,685,000</td>
</tr>
<tr>
<td>Psychology</td>
<td>3,697,000</td>
<td>3,590,000</td>
<td>4,105,000</td>
</tr>
<tr>
<td>Social Science</td>
<td>15,425,000</td>
<td>16,906,000</td>
<td>12,250,000</td>
</tr>
<tr>
<td>Other Sciences (Interdisciplinary)</td>
<td>4,875,000</td>
<td>4,033,000</td>
<td>4,077,000</td>
</tr>
<tr>
<td>Non-Science &amp; Engineering</td>
<td>6,085,000</td>
<td>4,608,000</td>
<td>4,191,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>154,437,000</strong></td>
<td><strong>153,542,000</strong></td>
<td><strong>156,297,000</strong></td>
</tr>
</tbody>
</table>

* FY 2016 Preliminary Figures and subject to change
## Proposals Processed through Sponsored Programs Administration
And Total Dollars Requested from External Funding Sources
FY 2014 - FY 2016

<table>
<thead>
<tr>
<th>College/Unit*</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># Proposals</td>
<td>Requested</td>
<td># Proposals</td>
</tr>
<tr>
<td>College of Agriculture, Food Systems and Natural Resources</td>
<td>26</td>
<td>$1,887,583</td>
<td>9</td>
</tr>
<tr>
<td>Agriculture Experiment Station and Extension Service</td>
<td>723</td>
<td>$67,791,645</td>
<td>661</td>
</tr>
<tr>
<td>College of Arts, Humanities and Social Sciences</td>
<td>39</td>
<td>$1,544,812</td>
<td>61</td>
</tr>
<tr>
<td>College of Business</td>
<td>1</td>
<td>$14,443</td>
<td>2</td>
</tr>
<tr>
<td>College of Engineering</td>
<td>124</td>
<td>$32,276,806</td>
<td>173</td>
</tr>
<tr>
<td>College of Human Development and Education</td>
<td>33</td>
<td>$1,895,568</td>
<td>43</td>
</tr>
<tr>
<td>College of Health Professions</td>
<td>80</td>
<td>$41,645,507</td>
<td>78</td>
</tr>
<tr>
<td>College of Science and Mathematics</td>
<td>177</td>
<td>$81,681,277</td>
<td>147</td>
</tr>
<tr>
<td>University Miscellaneous Offices</td>
<td>120</td>
<td>$37,324,544</td>
<td>119</td>
</tr>
<tr>
<td>Upper Great Plains Transportation Institute</td>
<td>52</td>
<td>$11,839,849</td>
<td>38</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>1375</td>
<td>$277,902,034</td>
<td>1331</td>
</tr>
</tbody>
</table>

*College/unit categories are determined by the principal investigator’s department only; co-investigators’ departments are not reflected.*
<table>
<thead>
<tr>
<th>College/Unit*</th>
<th>FY 2014</th>
<th>FY 2015**</th>
<th>FY 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Agriculture, Food Systems &amp; Natural Resources</td>
<td>$559,126</td>
<td>$65,645</td>
<td>$245,373</td>
</tr>
<tr>
<td>Agriculture Experiment Station &amp; Extension Service</td>
<td>$19,918,393</td>
<td>$22,062,871</td>
<td>$25,964,700</td>
</tr>
<tr>
<td>College of Arts, Humanities &amp; Social Sciences</td>
<td>$803,113</td>
<td>$1,437,801</td>
<td>$1,481,788</td>
</tr>
<tr>
<td>College of Business</td>
<td>$14,426</td>
<td>$3,000</td>
<td>$27,000</td>
</tr>
<tr>
<td>College of Engineering</td>
<td>$1,389,889</td>
<td>$3,604,157</td>
<td>$3,514,252</td>
</tr>
<tr>
<td>College of Human Development &amp; Education</td>
<td>$999,069</td>
<td>$854,294</td>
<td>$1,684,601</td>
</tr>
<tr>
<td>College of Health Professions</td>
<td>$5,629,736</td>
<td>$4,247,266</td>
<td>$6,235,743</td>
</tr>
<tr>
<td>College of Science &amp; Mathematics</td>
<td>$13,301,933</td>
<td>$11,208,792</td>
<td>$12,428,450</td>
</tr>
<tr>
<td>University Miscellaneous Offices</td>
<td>$9,974,724</td>
<td>$14,764,781</td>
<td>$12,405,847</td>
</tr>
<tr>
<td>Upper Great Plains Transportation Institute</td>
<td>$11,513,186</td>
<td>$7,238,050</td>
<td>$6,632,614</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$64,103,594</strong></td>
<td><strong>$65,486,657</strong></td>
<td><strong>$70,620,367</strong></td>
</tr>
</tbody>
</table>

*College/unit categories are determined by the principal investigator's department only; co-investigators’ departments are not reflected.

**Adjustments were made to the previously published FY 2015 External Awards total. The adjusted total is included here.
## Summary of External Awards by Source*
### FY 2014 - FY 2016

<table>
<thead>
<tr>
<th>Source</th>
<th>FY 2014 Total</th>
<th><strong>FY 2015</strong> Total</th>
<th>FY 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commodity</td>
<td>$6,213,329</td>
<td>$8,021,977</td>
<td>$6,327,352</td>
</tr>
<tr>
<td>Federal</td>
<td>$43,545,478</td>
<td>$43,828,337</td>
<td>$48,693,023</td>
</tr>
<tr>
<td>Foundation/Non-Profit</td>
<td>$4,115,664</td>
<td>$3,943,861</td>
<td>$3,064,819</td>
</tr>
<tr>
<td>Other</td>
<td>$358,114</td>
<td>$408,479</td>
<td>$156,230</td>
</tr>
<tr>
<td>Other Governmental Offices</td>
<td>$353,463</td>
<td>$332,013</td>
<td>$272,052</td>
</tr>
<tr>
<td>Private</td>
<td>$1,880,835</td>
<td>$2,856,041</td>
<td>$2,331,270</td>
</tr>
<tr>
<td>State</td>
<td>$7,636,711</td>
<td>$6,095,949</td>
<td>$9,775,621</td>
</tr>
</tbody>
</table>

*Federal formula funds and state appropriated dollars are not included.

** Adjustments were made to the previously published FY 2015 External Awards total. The adjusted total is included here.