# Table of Contents

I. Expenditures
- Total Expenditures Five Year Trend Chart (NSF HERD) 3
- Total Expenditures By Source of Funds FY2019 (NSF HERD) 3
- Expenditures Five Year Trend Chart (Funds 20, 19 and 82) 4
- 2020 Expenditures Table (Funds 20, 19 and 82) 4

II. Awards
- Sponsored Research Awards Five Year Trend Chart 5
- 2020 Awards by Organization Chart 5
- 2019 and 2020 Awards Comparison Organization 6
- 2019 and 2020 Awards Comparison Table 6
- 2020 Sponsored Research Awards Summary Organization Table 7
- 2020 Awards Five Year Comparison Table 7
- 2020 Sponsored Research Awards By College, Department Table 8
- 2020 Sponsored Research Awards By Program Type Chart 11
- 2020 Awards By Funding Source Chart 11
- 2019 and 2020 Sponsored Research Awards Fund Source Chart 12
- 2020 Federal Awards By Funding Source Chart 12
- 2020 Research Awards By Sponsor Table 13

III. Submissions
- Submissions Counts Six Year Comparison Chart 21
- 2019 and 2020 Submissions Counts By Organizational Unit Chart 21

IV. Appendix
- 2020 Awards By College, Unit and Investigator Table 22

---

**On the cover:**
Top Left: Ragweed pollen
Top Right: Stomata, the pores on the leaf surface through which gases pass across. Stomata allow atmospheric carbon dioxide into the leaf and molecular oxygen out.
Bottom Left: Hairs on a fruit fly
Bottom Right: Red blood cell
Clemson University NSF HERD - Total Expenditures Five Year Trend

Clemson University NSF HERD - Total Expenditures Fiscal Year 2019

<table>
<thead>
<tr>
<th>Clemson University Total Expenditures (NSF HERD)</th>
<th>FY2019 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>$ 81,080,000</td>
</tr>
<tr>
<td>State &amp; Local</td>
<td>$ 24,259,000</td>
</tr>
<tr>
<td>Institutional</td>
<td>$ 87,791,000</td>
</tr>
<tr>
<td>Business</td>
<td>$ 18,812,000</td>
</tr>
<tr>
<td>Nonprofit</td>
<td>$ 6,643,000</td>
</tr>
<tr>
<td>All Other</td>
<td>$ 175,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$ 218,760,000</strong></td>
</tr>
</tbody>
</table>
Summary of Expenditures

Clemson University Expenditures (Funds 20, 19 and 82) Five Year Trend

Clemson University Fiscal Year 2020 Expenditures (Funds 20, 19 and 82)

<table>
<thead>
<tr>
<th>College/Business Unit</th>
<th>FY 2020 Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Agriculture, Forestry and Life Sciences</td>
<td>$16,355,139</td>
</tr>
<tr>
<td>College of Architecture, Arts and Humanities</td>
<td>$1,590,507</td>
</tr>
<tr>
<td>College of Behavioral, Social and Health Sciences</td>
<td>$6,665,367</td>
</tr>
<tr>
<td>College of Business</td>
<td>$748,012</td>
</tr>
<tr>
<td>College of Education</td>
<td>$2,387,121</td>
</tr>
<tr>
<td>College of Engineering, Computing and Applied Sciences</td>
<td>$46,352,607</td>
</tr>
<tr>
<td>College of Science</td>
<td>$17,284,345</td>
</tr>
<tr>
<td>Clemson Computing and Information Technology</td>
<td>$71,388</td>
</tr>
<tr>
<td>Vice President for Research and Interdisciplinary Institutes</td>
<td>$9,507,042</td>
</tr>
<tr>
<td>All Other</td>
<td>$4,335,316</td>
</tr>
<tr>
<td>Sponsored Research Expenditures</td>
<td>$105,296,842</td>
</tr>
</tbody>
</table>
Summary of Awards

Clemson University Sponsored Research Awards Five Year Trend

FY19 includes two large awards totaling $33M

Clemson University Fiscal Year 2020 Awards by Organization

FY 2020

<table>
<thead>
<tr>
<th>Clemson Computing &amp; Information Technology</th>
<th>College of Agriculture, Forestry &amp; Life Sciences</th>
<th>College of Architecture, Arts &amp; Humanities</th>
<th>College of Behavioral, Social &amp; Health Sciences</th>
<th>College of Business</th>
<th>College of Education</th>
<th>College of Engineering, Computing &amp; Applied Sciences</th>
<th>College of Science</th>
<th>Public Service Activities</th>
<th>VP for Research and Interdisciplinary Institutes</th>
<th>All Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>$113,148</td>
<td>$22,345,078</td>
<td>$1,406,862</td>
<td>$7,697,553</td>
<td>$1,152,075</td>
<td>$2,325,644</td>
<td>$47,976,714</td>
<td>$14,181,330</td>
<td>$4,144,136</td>
<td>$14,561,063</td>
<td>$2,246,348</td>
</tr>
</tbody>
</table>
Summary of Awards

Clemson University Sponsored Research Awards Comparison

FY19 includes two large awards totaling $33M

Clemson University Fiscal Years 2019 and 2020 Awards Comparison

<table>
<thead>
<tr>
<th>College/Business Unit</th>
<th>FY 2019 Awards</th>
<th>FY 2020 Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Agriculture, Forestry and Life Sciences</td>
<td>$14,177,063</td>
<td>$22,345,078</td>
</tr>
<tr>
<td>College of Architecture, Arts and Humanities</td>
<td>$2,046,243</td>
<td>$1,406,862</td>
</tr>
<tr>
<td>College of Behavioral, Social and Health Sciences</td>
<td>$5,918,350</td>
<td>$7,697,553</td>
</tr>
<tr>
<td>College of Business</td>
<td>$774,856</td>
<td>$1,152,075</td>
</tr>
<tr>
<td>College of Education</td>
<td>$3,318,465</td>
<td>$2,325,644</td>
</tr>
<tr>
<td>College of Engineering, Computing and Applied Sciences</td>
<td>$50,373,481</td>
<td>$47,976,714</td>
</tr>
<tr>
<td>College of Science</td>
<td>$18,676,177</td>
<td>$14,181,330</td>
</tr>
<tr>
<td>Clemson Computing and Information Technology</td>
<td>$100,165</td>
<td>$313,148</td>
</tr>
<tr>
<td>Vice President for Research and Interdisciplinary Institutes</td>
<td>$6,203,355</td>
<td>$14,561,063</td>
</tr>
<tr>
<td>All Other</td>
<td>$721,191</td>
<td>$2,246,348</td>
</tr>
<tr>
<td>Competitive Research Awards</td>
<td>$106,341,285</td>
<td>$118,349,951</td>
</tr>
</tbody>
</table>
Summary of Awards

Clemson University Fiscal Year 2020 Sponsored Research Awards Summary

<table>
<thead>
<tr>
<th>College/Business Unit</th>
<th>FY20 Direct</th>
<th>FY20 Indirect</th>
<th>FY20 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Agriculture, Forestry and Life Sciences</td>
<td>$19,546,258</td>
<td>$2,798,820</td>
<td>$22,345,078</td>
</tr>
<tr>
<td>College of Architecture, Arts and Humanities</td>
<td>$1,189,639</td>
<td>$217,223</td>
<td>$1,406,862</td>
</tr>
<tr>
<td>College of Behavioral, Social and Health Sciences</td>
<td>$6,508,347</td>
<td>$1,189,206</td>
<td>$7,697,553</td>
</tr>
<tr>
<td>College of Business</td>
<td>$1,076,351</td>
<td>$75,724</td>
<td>$1,152,075</td>
</tr>
<tr>
<td>College of Education</td>
<td>$2,078,530</td>
<td>$247,114</td>
<td>$2,325,644</td>
</tr>
<tr>
<td>College of Engineering, Computing and Applied Sciences</td>
<td>$38,432,839</td>
<td>$9,543,875</td>
<td>$47,976,714</td>
</tr>
<tr>
<td>College of Science</td>
<td>$10,808,280</td>
<td>$3,373,051</td>
<td>$14,181,330</td>
</tr>
<tr>
<td>Clemson Computing and Information Technology</td>
<td>$313,148</td>
<td>-</td>
<td>$313,148</td>
</tr>
<tr>
<td>Vice President for Research and Interdisciplinary Institutes</td>
<td>$12,552,975</td>
<td>$2,008,088</td>
<td>$14,561,063</td>
</tr>
<tr>
<td>All Other</td>
<td>$1,719,379</td>
<td>$526,970</td>
<td>$2,243,401</td>
</tr>
<tr>
<td>Competitive Research Awards</td>
<td>$97,600,510</td>
<td>$20,749,441</td>
<td>$118,349,951</td>
</tr>
</tbody>
</table>

Clemson University Fiscal Year 2020 Awards Five Year Comparison

<table>
<thead>
<tr>
<th>College/Business Unit</th>
<th>FY2016</th>
<th>FY2017</th>
<th>FY2018</th>
<th>FY2019</th>
<th>FY2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Agriculture, Forestry &amp; Life Sciences</td>
<td>$8,619,438</td>
<td>$10,898,288</td>
<td>$13,902,433</td>
<td>$14,177,063</td>
<td>$22,345,078</td>
</tr>
<tr>
<td>College of Architecture, Arts &amp; Humanities</td>
<td>$1,400,972</td>
<td>$1,519,688</td>
<td>$1,887,224</td>
<td>$2,046,243</td>
<td>$1,406,862</td>
</tr>
<tr>
<td>College of Behavioral, Social &amp; Health Sciences</td>
<td>$5,065,880</td>
<td>$4,564,531</td>
<td>$8,136,917</td>
<td>$5,918,350</td>
<td>$7,697,553</td>
</tr>
<tr>
<td>College of Business</td>
<td>$783,916</td>
<td>$1,179,733</td>
<td>$113,107</td>
<td>$774,856</td>
<td>$1,152,075</td>
</tr>
<tr>
<td>College of Education</td>
<td>$2,945,717</td>
<td>$2,774,422</td>
<td>$4,535,438</td>
<td>$3,318,465</td>
<td>$2,325,644</td>
</tr>
<tr>
<td>College of Engineering, Computing &amp; Applied Sciences</td>
<td>$45,535,064</td>
<td>$54,000,082</td>
<td>$80,832,074</td>
<td>$50,373,481</td>
<td>$47,976,714</td>
</tr>
<tr>
<td>Public Service Activities</td>
<td>$12,965,629</td>
<td>$7,908,591</td>
<td>$6,575,012</td>
<td>$4,031,939</td>
<td>$4,144,136</td>
</tr>
<tr>
<td>College of Science</td>
<td>$15,605,625</td>
<td>$19,899,415</td>
<td>$14,690,280</td>
<td>$18,676,177</td>
<td>$14,181,330</td>
</tr>
<tr>
<td>Clemson Computing &amp; Information Technology</td>
<td>$819,396</td>
<td>$477,594</td>
<td>$1,340,010</td>
<td>$100,165</td>
<td>$313,148</td>
</tr>
<tr>
<td>VP for Research &amp; Interdisciplinary Institutes</td>
<td>$5,139,315</td>
<td>$5,030,743</td>
<td>$15,064,289</td>
<td>$6,203,354</td>
<td>$14,561,063</td>
</tr>
<tr>
<td>All Other</td>
<td>$1,980,188</td>
<td>$1,235,065</td>
<td>$1,721,366</td>
<td>$721,191</td>
<td>$2,246,348</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$100,861,190</td>
<td>$109,488,152</td>
<td>$148,798,150</td>
<td>$106,341,284</td>
<td>$118,349,951</td>
</tr>
</tbody>
</table>

Clemson University
Research and Sponsored Programs
Fiscal Year 2020 Annual Research Report
### Summary of Awards

**Clemson University Fiscal Year 2020 Sponsored Research Awards By College, Department**

#### CLEMSON COMPUTING & INFORMATION TECHNOLOGY

<table>
<thead>
<tr>
<th>Department</th>
<th>Direct</th>
<th>Indirect</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCIT Research Support</td>
<td>$156,574</td>
<td>-$</td>
<td>$156,574</td>
</tr>
<tr>
<td>Computer Systems and Operation</td>
<td>$156,574</td>
<td>-$</td>
<td>$156,574</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>313,148</strong></td>
<td>-$</td>
<td><strong>313,148</strong></td>
</tr>
</tbody>
</table>

#### CLEMSON UNIVERSITY RESEARCH FOUNDATION (CURF)

<table>
<thead>
<tr>
<th>Department</th>
<th>Direct</th>
<th>Indirect</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clemson Univ Research Fdn</td>
<td>$2,948</td>
<td>-$</td>
<td>$2,948</td>
</tr>
</tbody>
</table>

#### COLLEGE OF AGRICULTURE, FORESTRY & LIFE SCIENCES

<table>
<thead>
<tr>
<th>Department</th>
<th>Direct</th>
<th>Indirect</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>4H Youth Development</td>
<td>$317,784</td>
<td>$51,293</td>
<td>$369,077</td>
</tr>
<tr>
<td>Advanced Plant Technology</td>
<td>$3,564,953</td>
<td>$623,269</td>
<td>$4,188,222</td>
</tr>
<tr>
<td>Agricultural Sciences</td>
<td>$697,920</td>
<td>$212,532</td>
<td>$910,452</td>
</tr>
<tr>
<td>Anderson</td>
<td>$4,021</td>
<td>-$</td>
<td>$4,021</td>
</tr>
<tr>
<td>Animal &amp; Veterinary Sciences</td>
<td>$665,482</td>
<td>$215,727</td>
<td>$881,209</td>
</tr>
<tr>
<td>Bamberg</td>
<td>$1,000</td>
<td>-$</td>
<td>$1,000</td>
</tr>
<tr>
<td>Baruch Institute</td>
<td>$574,629</td>
<td>$61,689</td>
<td>$636,318</td>
</tr>
<tr>
<td>CAFLS Associate Dean for Research</td>
<td>$1,594,122</td>
<td>$153,838</td>
<td>$1,747,960</td>
</tr>
<tr>
<td>Charleston</td>
<td>$61,243</td>
<td>$3,062</td>
<td>$64,305</td>
</tr>
<tr>
<td>Chester</td>
<td>$18,190</td>
<td>$310</td>
<td>$18,500</td>
</tr>
<tr>
<td>Coastal Research &amp; Education Center</td>
<td>$373,137</td>
<td>$141,061</td>
<td>$514,198</td>
</tr>
<tr>
<td>Colleton</td>
<td>$5,875</td>
<td>$1,199</td>
<td>$7,073</td>
</tr>
<tr>
<td>Darlington</td>
<td>$5,875</td>
<td>$1,199</td>
<td>$7,073</td>
</tr>
<tr>
<td>Dorchester</td>
<td>$2,000</td>
<td>-$</td>
<td>$2,000</td>
</tr>
<tr>
<td>Edgefield</td>
<td>$450</td>
<td>-$</td>
<td>$450</td>
</tr>
<tr>
<td>Edisto Research &amp; Education Center</td>
<td>$61,586</td>
<td>$4,787</td>
<td>$66,373</td>
</tr>
<tr>
<td>Field Operations</td>
<td>$587,752</td>
<td>$42,096</td>
<td>$629,848</td>
</tr>
<tr>
<td>Food, Nutrition &amp; Packaging Science</td>
<td>$1,219,044</td>
<td>$207,000</td>
<td>$1,426,044</td>
</tr>
<tr>
<td>Forestry &amp; Environmental Conservation</td>
<td>$1,989,946</td>
<td>$217,776</td>
<td>$2,207,722</td>
</tr>
<tr>
<td>Greenville</td>
<td>$6,225</td>
<td>-$</td>
<td>$6,225</td>
</tr>
<tr>
<td>Lexington</td>
<td>$36,819</td>
<td>$8,939</td>
<td>$45,758</td>
</tr>
<tr>
<td>Oconee</td>
<td>$877</td>
<td>-$</td>
<td>$877</td>
</tr>
<tr>
<td>Orangeburg</td>
<td>$76,779</td>
<td>-$</td>
<td>$76,779</td>
</tr>
<tr>
<td>Pee Dee Research &amp; Education Center</td>
<td>$252,385</td>
<td>$21,592</td>
<td>$273,977</td>
</tr>
<tr>
<td>Pickens</td>
<td>$1,565</td>
<td>-$</td>
<td>$1,565</td>
</tr>
<tr>
<td>Plant &amp; Environmental Sciences</td>
<td>$7,344,643</td>
<td>$817,845</td>
<td>$8,162,487</td>
</tr>
<tr>
<td>Sandhill Research &amp; Education Center</td>
<td>$35,247</td>
<td>$7,192</td>
<td>$42,439</td>
</tr>
<tr>
<td>Simpson Research</td>
<td>$3,789</td>
<td>$421</td>
<td>$4,210</td>
</tr>
<tr>
<td>Spartanburg</td>
<td>$3,550</td>
<td>-$</td>
<td>$3,550</td>
</tr>
<tr>
<td>T. Ed Garrison Arena</td>
<td>$10,000</td>
<td>-$</td>
<td>$10,000</td>
</tr>
<tr>
<td>York</td>
<td>$29,373</td>
<td>$5,993</td>
<td>$35,366</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19,546,258</strong></td>
<td><strong>2,798,820</strong></td>
<td><strong>22,345,078</strong></td>
</tr>
</tbody>
</table>

#### COLLEGE OF ARCHITECTURE, ARTS & HUMANITIES

<table>
<thead>
<tr>
<th>Department</th>
<th>Direct</th>
<th>Indirect</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Planning &amp; Real Estate Dev</td>
<td>$117,484</td>
<td>$21,059</td>
<td>$138,543</td>
</tr>
<tr>
<td>Dean of Architecture, Arts &amp; Humanities</td>
<td>$6,000</td>
<td>-$</td>
<td>$6,000</td>
</tr>
<tr>
<td>English</td>
<td>$85,389</td>
<td>$7,611</td>
<td>$93,000</td>
</tr>
<tr>
<td>Landscape Architecture</td>
<td>$27,131</td>
<td>$5,277</td>
<td>$32,408</td>
</tr>
<tr>
<td>Languages</td>
<td>$215,766</td>
<td>$17,261</td>
<td>$233,027</td>
</tr>
<tr>
<td>Nieri Dept of Construction Science &amp; Mangmt</td>
<td>$525,114</td>
<td>$147,121</td>
<td>$672,235</td>
</tr>
<tr>
<td>Performing Arts</td>
<td>$45,750</td>
<td>-$</td>
<td>$45,750</td>
</tr>
<tr>
<td>School of Architecture</td>
<td>$167,004</td>
<td>$18,894</td>
<td>$185,898</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,189,639</strong></td>
<td><strong>217,223</strong></td>
<td><strong>1,406,862</strong></td>
</tr>
</tbody>
</table>
## Summary of Awards

Clemson University Fiscal Year 2020 Sponsored Research Awards By College, Department

<table>
<thead>
<tr>
<th>COLLEGE OF BEHAVIORAL, SOCIAL &amp; HEALTH SCIENCES</th>
<th>COLLEGE OF BUSINESS</th>
<th>COLLEGE OF EDUCATION</th>
<th>COLLEGE OF ENGINEERING, COMPUTING &amp; APPLIED SCIENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>CU Institute for Parks</td>
<td>$28,500</td>
<td>-</td>
<td>Bioengineering</td>
</tr>
<tr>
<td>Dean-Beh, Social, &amp; Health Sci</td>
<td>$14,259</td>
<td>$7,370</td>
<td>Campbell Grad Engr Program</td>
</tr>
<tr>
<td>Department of Communication</td>
<td>$133,778</td>
<td>$23,604</td>
<td>Chemical &amp; Biomolecular Engineering</td>
</tr>
<tr>
<td>Institute on Family &amp; Neighborhood Life (IFNL)</td>
<td>$26,549</td>
<td>$3,451</td>
<td>Civil Engineering</td>
</tr>
<tr>
<td>JFSC-Academic Support</td>
<td>$316,661</td>
<td>$9,712</td>
<td>Dean of Engineering &amp; Science</td>
</tr>
<tr>
<td>MPA Program</td>
<td>$17,396</td>
<td>$7,067</td>
<td>Electrical &amp; Computer Engineering</td>
</tr>
<tr>
<td>Parks, Recreation, &amp; Tourism Management</td>
<td>$1,690,521</td>
<td>$316,743</td>
<td>Engineering &amp; Science Education</td>
</tr>
<tr>
<td>Policy Studies</td>
<td>$4,970</td>
<td>$2,019</td>
<td>Environmental Engineering &amp; Earth Science</td>
</tr>
<tr>
<td>Psychology</td>
<td>$776,476</td>
<td>$263,432</td>
<td>General Engineering</td>
</tr>
<tr>
<td>Public Health Sciences</td>
<td>$1,180,628</td>
<td>$199,556</td>
<td>Industrial Engineering</td>
</tr>
<tr>
<td>School of Nursing</td>
<td>$1,026,528</td>
<td>$32,999</td>
<td>Materials Science &amp; Engineering</td>
</tr>
<tr>
<td>Sociology, Anthropology and Criminal Justice</td>
<td>$920,064</td>
<td>$219,043</td>
<td>Mechanical Engineering</td>
</tr>
<tr>
<td>Strom Thurmond Institute</td>
<td>$3,831</td>
<td></td>
<td>School of Computing</td>
</tr>
<tr>
<td>Youth Development Programs</td>
<td>$368,185</td>
<td>$104,212</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$6,508,347</td>
<td>$1,189,206</td>
<td></td>
</tr>
<tr>
<td>COLLEGE OF BUSINESS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dean, Business</td>
<td>$18,427</td>
<td>$5,854</td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td>$58,284</td>
<td>$4,309</td>
<td></td>
</tr>
<tr>
<td>Marketing</td>
<td>$6,750</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Small Business Development Center</td>
<td>$992,890</td>
<td>$65,562</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$1,076,351</td>
<td>$75,724</td>
<td></td>
</tr>
<tr>
<td>COLLEGE OF EDUCATION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Call Me Mister Program</td>
<td>$316,900</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Dean-College of Education</td>
<td>$900</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Ed &amp; Org Leadership Dev</td>
<td>$56,421</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Education &amp; Human Dev</td>
<td>$1,085,693</td>
<td>$151,135</td>
<td></td>
</tr>
<tr>
<td>Teaching &amp; Learning</td>
<td>$618,616</td>
<td>$95,979</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$2,078,530</td>
<td>$247,114</td>
<td></td>
</tr>
<tr>
<td>COLLEGE OF ENGINEERING, COMPUTING &amp; APPLIED SCIENCES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bioengineering</td>
<td>$7,871,326</td>
<td>$2,350,425</td>
<td></td>
</tr>
<tr>
<td>Campbell Grad Engr Program</td>
<td>$1,452,304</td>
<td>$364,171</td>
<td></td>
</tr>
<tr>
<td>Chemical &amp; Biomolecular Engineering</td>
<td>$2,513,316</td>
<td>$626,704</td>
<td></td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>$3,041,185</td>
<td>$863,567</td>
<td></td>
</tr>
<tr>
<td>Dean of Engineering &amp; Science</td>
<td>$147,822</td>
<td>$65,057</td>
<td></td>
</tr>
<tr>
<td>Electrical &amp; Computer Engineering</td>
<td>$12,421,325</td>
<td>$1,968,839</td>
<td></td>
</tr>
<tr>
<td>Engineering &amp; Science Education</td>
<td>$100,670</td>
<td>$33,935</td>
<td></td>
</tr>
<tr>
<td>Environmental Engineering &amp; Earth Science</td>
<td>$1,480,211</td>
<td>$502,488</td>
<td></td>
</tr>
<tr>
<td>General Engineering</td>
<td>$420,495</td>
<td>$74,505</td>
<td></td>
</tr>
<tr>
<td>Industrial Engineering</td>
<td>$533,075</td>
<td>$176,167</td>
<td></td>
</tr>
<tr>
<td>Materials Science &amp; Engineering</td>
<td>$4,257,364</td>
<td>$1,059,772</td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>$1,959,753</td>
<td>$621,814</td>
<td></td>
</tr>
<tr>
<td>School of Computing</td>
<td>$2,233,994</td>
<td>$836,433</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$38,432,839</td>
<td>$9,543,875</td>
<td></td>
</tr>
</tbody>
</table>

Total: $7,697,553

Total: $1,152,075

Total: $2,325,644

Total: $47,976,714
### Summary of Awards

Clemson University Fiscal Year 2020 Sponsored Research Awards By College, Department

<table>
<thead>
<tr>
<th>COLLEGE OF SCIENCE</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Sciences</td>
<td>$2,010,639</td>
<td>$628,215</td>
<td>$2,638,854</td>
</tr>
<tr>
<td>Chemistry</td>
<td>$893,704</td>
<td>$274,347</td>
<td>$1,168,051</td>
</tr>
<tr>
<td>Genetics and Biochemistry</td>
<td>$1,058,732</td>
<td>$480,243</td>
<td>$1,538,975</td>
</tr>
<tr>
<td>Mathematical Sciences</td>
<td>$3,974,328</td>
<td>$899,038</td>
<td>$4,873,367</td>
</tr>
<tr>
<td>Physics and Astronomy</td>
<td>$2,870,877</td>
<td>$1,091,208</td>
<td>$3,962,085</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$10,808,280</td>
<td>$3,373,051</td>
<td>$14,181,330</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OTHER NON-COLLEGE RELATED DEPARTMENTS</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CU Restoration Institute (CURI)</td>
<td>$883,366</td>
<td>$385,426</td>
<td>$1,268,792</td>
</tr>
<tr>
<td>Emeritus College</td>
<td>$192,155</td>
<td>$55,151</td>
<td>$247,306</td>
</tr>
<tr>
<td>Honors Program</td>
<td>$83,077</td>
<td>$4,309</td>
<td>$87,385</td>
</tr>
<tr>
<td>Law Enforcement &amp; Safety</td>
<td>$44,775</td>
<td>$15,224</td>
<td>$59,999</td>
</tr>
<tr>
<td>Office of Global Engagement</td>
<td>$34,887</td>
<td>-</td>
<td>$34,887</td>
</tr>
<tr>
<td>Office Of Undergraduate Studies</td>
<td>$129,753</td>
<td>$31,738</td>
<td>$161,491</td>
</tr>
<tr>
<td>Provost &amp; Vice President for Academic Affairs</td>
<td>$251,401</td>
<td>$25,140</td>
<td>$276,541</td>
</tr>
<tr>
<td>Watt Family Innovation Center</td>
<td>$97,017</td>
<td>$9,983</td>
<td>$107,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$1,716,431</td>
<td>$526,970</td>
<td>$2,243,401</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PUBLIC SERVICE ACTIVITIES</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CU Regulatory Services</td>
<td>$431,366</td>
<td>$99,134</td>
<td>$530,500</td>
</tr>
<tr>
<td>Livestock &amp; Poultry Health</td>
<td>$618,433</td>
<td>$61,843</td>
<td>$680,276</td>
</tr>
<tr>
<td>LPH/Animal Health Programs</td>
<td>$34,395</td>
<td>$3,148</td>
<td>$37,543</td>
</tr>
<tr>
<td>LPH/SCMPID</td>
<td>$1,674,832</td>
<td>$490,171</td>
<td>$2,165,003</td>
</tr>
<tr>
<td>Plant Industry</td>
<td>$386,396</td>
<td>$38,639</td>
<td>$425,035</td>
</tr>
<tr>
<td>SC Water Resource Center</td>
<td>$131,210</td>
<td>$51,639</td>
<td>$182,849</td>
</tr>
<tr>
<td>Wood Utilization &amp; Design Institute</td>
<td>$98,134</td>
<td>$24,796</td>
<td>$122,930</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$3,374,766</td>
<td>$769,370</td>
<td>$4,144,136</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VP FOR RESEARCH AND INTERDISCIPLINARY INSTITUTES</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Clemson Light Imaging Facility</td>
<td>$332,782</td>
<td>-</td>
<td>$332,782</td>
</tr>
<tr>
<td>CU/GHS Research Collaboration</td>
<td>$1,181,009</td>
<td>$12,392</td>
<td>$1,193,401</td>
</tr>
<tr>
<td>VP for Research</td>
<td>$917,337</td>
<td>$5,544</td>
<td>$922,881</td>
</tr>
<tr>
<td>Youth Learning Institute</td>
<td>$10,121,848</td>
<td>$1,990,151</td>
<td>$12,111,999</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$12,552,975</td>
<td>$2,008,088</td>
<td>$14,561,063</td>
</tr>
</tbody>
</table>

| **Total** | $97,600,510 | $20,749,441 | $118,349,951 |
Summary of Awards

Clemson University Fiscal Year 2020 Sponsored Research Awards By Program Type

- Research: 83%
- Public Service: 16%
- Instruction: 1%

Clemson University Fiscal Year 2020 Awards By Funding Source

- Federal Government: 78%
- State and Local Governments: 10%
- Industry and Other Sources: 9%
- Revenue: 0%
- Associations, Boards, Foundations and Societies: 3%
- Private Univ, Research Fdns, Inst & Centers: 0%
Summary of Awards

Clemson University Fiscal Years 2019 and 2020 Sponsored Research Awards Fund Source

Clemson University Fiscal Year 2020 Federal Awards By Funding Source

Smaller Awarding Agencies FY20 Awarded
- National Aeronautics and Space Administration $2,298,121
- US Department of Education $1,344,808
- US Department of Transportation $1,420,000
- Department of the Interior $889,123
- Federal: Other $864,445
- Environmental Protection Agency $788,261
- US Department of Commerce $104,763

Federal Awards: $113,757,325
- National Science Foundation (NSF) $18,057,451
- US Dept of Agriculture $13,757,325
- Federal via Non-SC University, $7,979,263
- Department of Defense (DOD), $5,440,520
- Federal via Non-Governmental $5,004,188
- US Dept of Energy $10,978,398
- Dept of Health and Human Services $11,395,229
- Federal via State Agency $11,847,725

Competitive Research Awards ($M)

<table>
<thead>
<tr>
<th>Source</th>
<th>FY2019</th>
<th>FY2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associations, Foundations and Societies</td>
<td>$3,255,607</td>
<td>$3,173,578</td>
</tr>
<tr>
<td>Federal</td>
<td>$90,709,675</td>
<td>$92,169,619</td>
</tr>
<tr>
<td>Industry/Other</td>
<td>$6,119,495</td>
<td>$10,883,202</td>
</tr>
<tr>
<td>Private Univ, Research Fdns, Inst &amp; Centers</td>
<td>$0</td>
<td>$500,144</td>
</tr>
<tr>
<td>State of SC/Local</td>
<td>$6,241,507</td>
<td>$11,573,408</td>
</tr>
<tr>
<td>Miscellaneous Revenue</td>
<td>$15,000</td>
<td>$50,001</td>
</tr>
</tbody>
</table>

Clemson University Fiscal Year 2020 Annual Research Report
# Summary of Awards

Clemson University Fiscal Year 2020 Research Awards By Sponsor

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Sponsor Direct</th>
<th>Sponsor F&amp;A</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associations, Boards, Foundations and Societies</td>
<td>$2,926,512</td>
<td>$247,066</td>
<td>$3,173,578</td>
</tr>
<tr>
<td>American Chestnut Foundation (TACF)</td>
<td>$9,979</td>
<td>$-</td>
<td>$9,979</td>
</tr>
<tr>
<td>American College Personnel Association (ACP)</td>
<td>$3,000</td>
<td>$-</td>
<td>$3,000</td>
</tr>
<tr>
<td>American Floral Endowment</td>
<td>$28,390</td>
<td>$-</td>
<td>$28,390</td>
</tr>
<tr>
<td>American Heart Association</td>
<td>$70,000</td>
<td>$7,000</td>
<td>$77,000</td>
</tr>
<tr>
<td>American Kennel Club (AKC) Canine Health Foundation</td>
<td>$36,296</td>
<td>$1,944</td>
<td>$38,240</td>
</tr>
<tr>
<td>American Medical Association Foundation</td>
<td>$41,340</td>
<td>$15,462</td>
<td>$56,802</td>
</tr>
<tr>
<td>American Prairie Reserve</td>
<td>$2,436</td>
<td>$-</td>
<td>$2,436</td>
</tr>
<tr>
<td>AONE Foundation</td>
<td>$6,508</td>
<td>$-</td>
<td>$6,508</td>
</tr>
<tr>
<td>Association of Teachers of Technical Writing(ATTW)</td>
<td>$3,000</td>
<td>$-</td>
<td>$3,000</td>
</tr>
<tr>
<td>Beckman (Arnold and Mabel) Foundation</td>
<td>$78,000</td>
<td>$-</td>
<td>$78,000</td>
</tr>
<tr>
<td>Blue Cross and Blue Shield of South Carolina</td>
<td>$83,248</td>
<td>$-</td>
<td>$83,248</td>
</tr>
<tr>
<td>Bon Secours St. Francis Health System</td>
<td>$30,038</td>
<td>$-</td>
<td>$30,038</td>
</tr>
<tr>
<td>Boys and Girls Clubs of America</td>
<td>$19,452</td>
<td>$9,860</td>
<td>$29,312</td>
</tr>
<tr>
<td>Charles G. Koch Charitable Foudation, The</td>
<td>$94,979</td>
<td>$-</td>
<td>$94,979</td>
</tr>
<tr>
<td>Dabo's All In Team Foundation</td>
<td>$63,335</td>
<td>$-</td>
<td>$63,335</td>
</tr>
<tr>
<td>Duke University (FDP)</td>
<td>$7,929</td>
<td>$793</td>
<td>$8,722</td>
</tr>
<tr>
<td>Fats and Proteins Research Foundation, Inc.</td>
<td>$98,376</td>
<td>$8,588</td>
<td>$106,964</td>
</tr>
<tr>
<td>Foothills Community Foundation</td>
<td>$70,232</td>
<td>$14,010</td>
<td>$84,242</td>
</tr>
<tr>
<td>Greenville Health System (GHS)</td>
<td>$187,100</td>
<td>$8,361</td>
<td>$195,461</td>
</tr>
<tr>
<td>Greenwood Genetics Center</td>
<td>$30,489</td>
<td>$-</td>
<td>$30,489</td>
</tr>
<tr>
<td>Habitat for Humanity of Greenville County SC</td>
<td>$9,750</td>
<td>$-</td>
<td>$9,750</td>
</tr>
<tr>
<td>Insurance Institute for Business &amp; Home Safety (IBHS)</td>
<td>$13,876</td>
<td>$3,469</td>
<td>$17,345</td>
</tr>
<tr>
<td>Irmo Chapin Recreation Commission</td>
<td>$14,750</td>
<td>$-</td>
<td>$14,750</td>
</tr>
<tr>
<td>Johns Hopkins University</td>
<td>$45,000</td>
<td>$5,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>Lutz Foundation, Clarence H and Anna Elizabeth</td>
<td>$15,000</td>
<td>$-</td>
<td>$15,000</td>
</tr>
<tr>
<td>MidwayUSA Foundation, Inc</td>
<td>$3,486</td>
<td>$-</td>
<td>$3,486</td>
</tr>
<tr>
<td>NASPA-Student Affairs Admn in Higher Ed</td>
<td>$3,420</td>
<td>$-</td>
<td>$3,420</td>
</tr>
<tr>
<td>National Concrete Masonry Association</td>
<td>$43,039</td>
<td>$4,302</td>
<td>$47,341</td>
</tr>
<tr>
<td>National Roofing Contractors Association</td>
<td>$44,237</td>
<td>$4,363</td>
<td>$48,600</td>
</tr>
<tr>
<td>Nature Conservancy</td>
<td>$68,888</td>
<td>$6,889</td>
<td>$75,777</td>
</tr>
<tr>
<td>Nemours Foundation</td>
<td>$122,868</td>
<td>$-</td>
<td>$122,868</td>
</tr>
<tr>
<td>New Morning Foundation</td>
<td>$187,153</td>
<td>$7,246</td>
<td>$194,399</td>
</tr>
<tr>
<td>North American Society for Trenchless Technology</td>
<td>$3,000</td>
<td>$-</td>
<td>$3,000</td>
</tr>
<tr>
<td>NRA Foundation, Inc.</td>
<td>$2,100</td>
<td>$-</td>
<td>$2,100</td>
</tr>
<tr>
<td>OMNOVA Solutions Foundation</td>
<td>$1,190</td>
<td>$310</td>
<td>$1,500</td>
</tr>
<tr>
<td>Patient-Centered Outcomes Research Institute (PCORI)</td>
<td>$36,798</td>
<td>$11,224</td>
<td>$48,022</td>
</tr>
<tr>
<td>Precast/Prestressed Concrete Institute</td>
<td>$40,000</td>
<td>$-</td>
<td>$40,000</td>
</tr>
<tr>
<td>Prisma Health</td>
<td>$42,572</td>
<td>$-</td>
<td>$42,572</td>
</tr>
<tr>
<td>Private Donor</td>
<td>$10,268</td>
<td>$483</td>
<td>$10,751</td>
</tr>
<tr>
<td>SAE International</td>
<td>$69,254</td>
<td>$27,805</td>
<td>$97,059</td>
</tr>
<tr>
<td>Society of Petroleum Engineers</td>
<td>$5,000</td>
<td>$-</td>
<td>$5,000</td>
</tr>
<tr>
<td>Southeastern Center for Electrical Engineering Education</td>
<td>$27,500</td>
<td>$-</td>
<td>$27,500</td>
</tr>
<tr>
<td>Spencer Foundation</td>
<td>$50,001</td>
<td>$-</td>
<td>$50,001</td>
</tr>
</tbody>
</table>
### Summary of Awards

<table>
<thead>
<tr>
<th>Organization</th>
<th>Amount (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunshine Lady Foundation, Inc.</td>
<td>$249,400</td>
</tr>
<tr>
<td>Synchronicity</td>
<td>$5,390</td>
</tr>
<tr>
<td>The Bee Cause</td>
<td>$1,753</td>
</tr>
<tr>
<td>The Green Heart Project</td>
<td>$15,898</td>
</tr>
<tr>
<td>The Hole in the Wall Gang</td>
<td>$2,856</td>
</tr>
<tr>
<td>Tri-State Turf Research Foundation</td>
<td>$5,999</td>
</tr>
<tr>
<td>U.S. Endowment for Forests and Communities, Inc.</td>
<td>$114,761</td>
</tr>
<tr>
<td>United States Institute for Theatre Technology, INC</td>
<td>$49,627</td>
</tr>
<tr>
<td>United Way of Chester County</td>
<td>$2,000</td>
</tr>
<tr>
<td>United Way of Greenville County</td>
<td>$26,549</td>
</tr>
<tr>
<td>United Way of the Piedmont</td>
<td>$20,000</td>
</tr>
<tr>
<td>Vanguard Charitable</td>
<td>$49,010</td>
</tr>
<tr>
<td>Water Research Foundation</td>
<td>$138,942</td>
</tr>
<tr>
<td>Industry and Other Sources</td>
<td>$48,395</td>
</tr>
<tr>
<td>Toyota Motor Corporation</td>
<td>$48,395</td>
</tr>
<tr>
<td>Prisma Health</td>
<td>$372,655</td>
</tr>
<tr>
<td>Greenville Health System (GHS)</td>
<td>$1,180</td>
</tr>
<tr>
<td>Prisma Health</td>
<td>$373,835</td>
</tr>
<tr>
<td>Federal Government</td>
<td>$73,732,172</td>
</tr>
<tr>
<td>Federal via Non SC University</td>
<td>$6,096,059</td>
</tr>
<tr>
<td>Albert Einstein College of Medicine</td>
<td>$22,107</td>
</tr>
<tr>
<td>Auburn University</td>
<td>$112,582</td>
</tr>
<tr>
<td>Colorado State University (FDP)</td>
<td>$35,746</td>
</tr>
<tr>
<td>Cornell University (FDP)</td>
<td>$366,109</td>
</tr>
<tr>
<td>East Carolina University</td>
<td>$96,410</td>
</tr>
<tr>
<td>Georgia Institute of Technology (FDP)</td>
<td>$393,497</td>
</tr>
<tr>
<td>Iowa State University(ISU)(FDP)</td>
<td>$89,182</td>
</tr>
<tr>
<td>Johns Hopkins University</td>
<td>$276,526</td>
</tr>
<tr>
<td>Kansas State University</td>
<td>$47,568</td>
</tr>
<tr>
<td>Louisiana State University</td>
<td>$16,779</td>
</tr>
<tr>
<td>Louisiana Tech University</td>
<td>$22,112</td>
</tr>
<tr>
<td>Massachusetts Institute of Technology (FDP)</td>
<td>$430,928</td>
</tr>
<tr>
<td>New Mexico State University</td>
<td>$81,841</td>
</tr>
<tr>
<td>North Carolina Central University</td>
<td>$138,105</td>
</tr>
<tr>
<td>North Carolina State University (FDP)</td>
<td>$190,046</td>
</tr>
<tr>
<td>Northern Arizona University</td>
<td>$4,709</td>
</tr>
<tr>
<td>Ohio State University</td>
<td>$94,306</td>
</tr>
<tr>
<td>Oregon Health &amp; Science University</td>
<td>$10,000</td>
</tr>
<tr>
<td>Pennsylvania State University (FDP)</td>
<td>$6,600</td>
</tr>
<tr>
<td>Purdue University (FDP)</td>
<td>$6,742</td>
</tr>
<tr>
<td>Research Foundation of SUNY (FDP)</td>
<td>$44,128</td>
</tr>
<tr>
<td>Rice University</td>
<td>$62,246</td>
</tr>
<tr>
<td>Rowan University</td>
<td>$163,864</td>
</tr>
<tr>
<td>State Center Community College District</td>
<td>$19,017</td>
</tr>
<tr>
<td>State University of New York at Stony Brook</td>
<td>$50,219</td>
</tr>
<tr>
<td>Texas A&amp;M University</td>
<td>$58,071</td>
</tr>
<tr>
<td>Tufts University</td>
<td>$4,590</td>
</tr>
<tr>
<td>University of Alabama (FDP)</td>
<td>$58,071</td>
</tr>
</tbody>
</table>
## Summary of Awards

<table>
<thead>
<tr>
<th>Institution</th>
<th>FY13 Grant Amount</th>
<th>FY14 Grant Amount</th>
<th>FY15 Grant Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Alaska Fairbanks</td>
<td>$182,799</td>
<td>$95,970</td>
<td>$278,769</td>
</tr>
<tr>
<td>University of Arizona</td>
<td>$51,667</td>
<td>$20,902</td>
<td>$72,569</td>
</tr>
<tr>
<td>University of Arkansas</td>
<td>$102,008</td>
<td>$38,172</td>
<td>$140,180</td>
</tr>
<tr>
<td>University of California, Davis (FDP)</td>
<td>$68,722</td>
<td>$33,318</td>
<td>$102,040</td>
</tr>
<tr>
<td>University of Colorado</td>
<td>$50,127</td>
<td>$23,188</td>
<td>$73,315</td>
</tr>
<tr>
<td>University of Connecticut</td>
<td>$44,099</td>
<td>$16,547</td>
<td>$60,646</td>
</tr>
<tr>
<td>University of Delaware</td>
<td>$26,672</td>
<td>$14,003</td>
<td>$40,675</td>
</tr>
<tr>
<td>University of District of Columbia</td>
<td>$15,955</td>
<td>$8,376</td>
<td>$24,331</td>
</tr>
<tr>
<td>University of Florida (FDP)</td>
<td>$27,273</td>
<td>$2,727</td>
<td>$30,000</td>
</tr>
<tr>
<td>University of Georgia</td>
<td>$736,807</td>
<td>$99,267</td>
<td>$836,074</td>
</tr>
<tr>
<td>University of Illinois at Urbana-Champaign</td>
<td>$162,984</td>
<td>$69,516</td>
<td>$232,500</td>
</tr>
<tr>
<td>University of Kentucky (FDP)</td>
<td>$12,256</td>
<td>$3,186</td>
<td>$15,442</td>
</tr>
<tr>
<td>University of Maryland</td>
<td>$68,000</td>
<td>- $</td>
<td>$68,000</td>
</tr>
<tr>
<td>University of Michigan (FDP)</td>
<td>$230,287</td>
<td>$92,665</td>
<td>$322,952</td>
</tr>
<tr>
<td>University of Missouri (FDP)</td>
<td>$8,879</td>
<td>$4,661</td>
<td>$13,540</td>
</tr>
<tr>
<td>University of Nebraska - Lincoln (FDP)</td>
<td>$150,084</td>
<td>$75,042</td>
<td>$225,126</td>
</tr>
<tr>
<td>University of New Hampshire</td>
<td>$147,747</td>
<td>$77,567</td>
<td>$225,314</td>
</tr>
<tr>
<td>University of North Carolina - Chapel Hill (FDP)</td>
<td>$122,117</td>
<td>$58,313</td>
<td>$180,430</td>
</tr>
<tr>
<td>University of North Carolina at Charlotte</td>
<td>$111,837</td>
<td>$52,915</td>
<td>$164,752</td>
</tr>
<tr>
<td>University of Texas</td>
<td>$47,798</td>
<td>$25,094</td>
<td>$72,892</td>
</tr>
<tr>
<td>University of Texas at Austin (FDP)</td>
<td>$26,885</td>
<td>$14,115</td>
<td>$41,000</td>
</tr>
<tr>
<td>University of Texas at El Paso</td>
<td>$7,407</td>
<td>$593</td>
<td>$8,000</td>
</tr>
<tr>
<td>University of Utah</td>
<td>$782,870</td>
<td>- $</td>
<td>$782,870</td>
</tr>
<tr>
<td>University of Virginia</td>
<td>$8,678</td>
<td>$4,556</td>
<td>$13,234</td>
</tr>
<tr>
<td>Federal via Non-Governmental</td>
<td>$3,896,604</td>
<td>$1,107,585</td>
<td>$5,004,188</td>
</tr>
<tr>
<td>American Physical Society</td>
<td>$6,896</td>
<td>$3,620</td>
<td>$10,516</td>
</tr>
<tr>
<td>Applied Engineering Concepts, Inc.</td>
<td>$3,935</td>
<td>$2,066</td>
<td>$6,000</td>
</tr>
<tr>
<td>California Institute of Technology (FDP)</td>
<td>$13,469</td>
<td>$7,071</td>
<td>$20,540</td>
</tr>
<tr>
<td>Center for Disease Dynamics, Economics &amp; Policy</td>
<td>$25,516</td>
<td>$13,396</td>
<td>$38,912</td>
</tr>
<tr>
<td>Center for Produce Safety</td>
<td>$154,744</td>
<td>$6,438</td>
<td>$161,182</td>
</tr>
<tr>
<td>CFD Research Corporation</td>
<td>$46,466</td>
<td>$21,534</td>
<td>$68,000</td>
</tr>
<tr>
<td>Circa Bioscience</td>
<td>$91,629</td>
<td>$38,668</td>
<td>$130,297</td>
</tr>
<tr>
<td>Coastal Carolina University</td>
<td>$3,275</td>
<td>- $</td>
<td>$3,275</td>
</tr>
<tr>
<td>Cornerstone Research Group, Inc</td>
<td>$29,507</td>
<td>$15,493</td>
<td>$45,000</td>
</tr>
<tr>
<td>CPWR (The Center for Construction Research and Trai</td>
<td>$25,842</td>
<td>$4,011</td>
<td>$29,853</td>
</tr>
<tr>
<td>Cummins Inc</td>
<td>$90,398</td>
<td>$35,861</td>
<td>$126,259</td>
</tr>
<tr>
<td>Elastrin Therapeutics</td>
<td>$75,411</td>
<td>$39,591</td>
<td>$115,002</td>
</tr>
<tr>
<td>Extension Foundation</td>
<td>$14,186</td>
<td>$3,689</td>
<td>$17,875</td>
</tr>
<tr>
<td>Fact Forward</td>
<td>$15,603</td>
<td>$4,057</td>
<td>$19,659</td>
</tr>
<tr>
<td>Food &amp; Drug Administration</td>
<td>$32,364</td>
<td>$15,406</td>
<td>$47,770</td>
</tr>
<tr>
<td>Harvard-Smithsonian Center for Astrophysics</td>
<td>$54,038</td>
<td>$21,766</td>
<td>$75,804</td>
</tr>
<tr>
<td>Idaho National Eng Laboratory</td>
<td>$100,803</td>
<td>$50,747</td>
<td>$151,550</td>
</tr>
<tr>
<td>Jet Propulsion Laboratory of Caltech</td>
<td>$27,736</td>
<td>$14,561</td>
<td>$42,297</td>
</tr>
<tr>
<td>Lawrence Livermore National Labs</td>
<td>$115,948</td>
<td>$48,985</td>
<td>$164,933</td>
</tr>
<tr>
<td>Lexington County School District One</td>
<td>$15,873</td>
<td>$4,127</td>
<td>$20,000</td>
</tr>
<tr>
<td>Award Description</td>
<td>Amount</td>
<td>Total 1</td>
<td>Total 2</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>--------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>National 4H Council</td>
<td>$183,999</td>
<td>$42,009</td>
<td>$226,008</td>
</tr>
<tr>
<td>National Technology and Engineering Solutions of San</td>
<td>$131,054</td>
<td>$58,897</td>
<td>$189,951</td>
</tr>
<tr>
<td>National Writing Project Corporation</td>
<td>$510,186</td>
<td>$40,677</td>
<td>$550,863</td>
</tr>
<tr>
<td>Nature Conservancy</td>
<td>$46,552</td>
<td>$8,464</td>
<td>$55,016</td>
</tr>
<tr>
<td>Noble (Samuel Roberts) Foundation</td>
<td>$71,736</td>
<td>$37,661</td>
<td>$109,397</td>
</tr>
<tr>
<td>NUBAD, LLC</td>
<td>$50,194</td>
<td>$26,352</td>
<td>$76,546</td>
</tr>
<tr>
<td>Oak Ridge National Laboratory</td>
<td>$27,231</td>
<td>$769</td>
<td>$28,000</td>
</tr>
<tr>
<td>Prisma Health</td>
<td>$42,537</td>
<td>$3,403</td>
<td>$45,940</td>
</tr>
<tr>
<td>Purilogics, LLC</td>
<td>$56,414</td>
<td>$24,899</td>
<td>$81,313</td>
</tr>
<tr>
<td>Savannah River National Laboratory</td>
<td>$180,183</td>
<td>$80,818</td>
<td>$261,001</td>
</tr>
<tr>
<td>Savannah River Nuclear Solutions</td>
<td>$795,596</td>
<td>$100,667</td>
<td>$896,263</td>
</tr>
<tr>
<td>SC EPSCOR</td>
<td>$60,000</td>
<td>-</td>
<td>$60,000</td>
</tr>
<tr>
<td>SC Research Authority (SCRA)</td>
<td>$184,269</td>
<td>$58,538</td>
<td>$242,807</td>
</tr>
<tr>
<td>Smithsonian Astrophysical Observatory</td>
<td>$39,882</td>
<td>$20,938</td>
<td>$60,820</td>
</tr>
<tr>
<td>SoarTech</td>
<td>$78,582</td>
<td>$35,152</td>
<td>$113,734</td>
</tr>
<tr>
<td>Solution Spray Technologies, LLC</td>
<td>$36,670</td>
<td>$13,142</td>
<td>$49,812</td>
</tr>
<tr>
<td>SRI</td>
<td>$11,736</td>
<td>$6,162</td>
<td>$17,898</td>
</tr>
<tr>
<td>Technical Data Analysis, Inc</td>
<td>$43,196</td>
<td>$16,232</td>
<td>$59,428</td>
</tr>
<tr>
<td>Tetramer Technologies, LLC</td>
<td>$10,492</td>
<td>$5,508</td>
<td>$16,000</td>
</tr>
<tr>
<td>Tissue Testing Technologies LLC</td>
<td>$255,656</td>
<td>$119,431</td>
<td>$375,087</td>
</tr>
<tr>
<td>Touchstone Research Laboratory</td>
<td>$26,468</td>
<td>$11,032</td>
<td>$37,500</td>
</tr>
<tr>
<td>toXcel</td>
<td>$110,332</td>
<td>$45,746</td>
<td>$156,078</td>
</tr>
<tr>
<td>Federal via State Agency</td>
<td>$9,555,314</td>
<td>$2,177,411</td>
<td>$11,732,725</td>
</tr>
<tr>
<td>College of Charleston</td>
<td>$170,098</td>
<td>$55,438</td>
<td>$225,536</td>
</tr>
<tr>
<td>Medical University of South Carolina (FDP)</td>
<td>$309,651</td>
<td>$130,776</td>
<td>$440,427</td>
</tr>
<tr>
<td>SC Dept of Agriculture</td>
<td>$241,382</td>
<td>-</td>
<td>$241,382</td>
</tr>
<tr>
<td>SC Dept of Education</td>
<td>$650,384</td>
<td>$37,628</td>
<td>$688,012</td>
</tr>
<tr>
<td>SC Dept of Natural Resources</td>
<td>$196,271</td>
<td>-</td>
<td>$196,271</td>
</tr>
<tr>
<td>SC Dept of Social Services</td>
<td>$2,700,774</td>
<td>$1,124,863</td>
<td>$3,825,637</td>
</tr>
<tr>
<td>SC Dept of Transportation</td>
<td>$929,804</td>
<td>$313,734</td>
<td>$1,243,538</td>
</tr>
<tr>
<td>SC DHEC</td>
<td>$523,260</td>
<td>$51,639</td>
<td>$574,899</td>
</tr>
<tr>
<td>SC DHHS</td>
<td>$686,671</td>
<td>$233,468</td>
<td>$920,139</td>
</tr>
<tr>
<td>SC EPSCOR</td>
<td>$70,000</td>
<td>-</td>
<td>$70,000</td>
</tr>
<tr>
<td>SC Sea Grant Consortium</td>
<td>$233,228</td>
<td>$14,110</td>
<td>$247,338</td>
</tr>
<tr>
<td>SC Space Grant Consortium</td>
<td>$318,836</td>
<td>$80,461</td>
<td>$399,297</td>
</tr>
<tr>
<td>South Carolina Humanities Council</td>
<td>$6,000</td>
<td>-</td>
<td>$6,000</td>
</tr>
<tr>
<td>University of South Carolina</td>
<td>$2,420,606</td>
<td>$135,294</td>
<td>$2,555,900</td>
</tr>
<tr>
<td>USDI (US DEPARTMENT OF THE INTERIOR)</td>
<td>$98,350</td>
<td>-</td>
<td>$98,350</td>
</tr>
<tr>
<td>Federal: Other</td>
<td>$712,179</td>
<td>$152,265</td>
<td>$864,445</td>
</tr>
<tr>
<td>Centers for Disease Control and Prevention/DHHS</td>
<td>$73,021</td>
<td>$18,985</td>
<td>$92,006</td>
</tr>
<tr>
<td>Corporation for National and Community Service</td>
<td>$18,404</td>
<td>$9,662</td>
<td>$28,066</td>
</tr>
<tr>
<td>Department of Veterans Affairs</td>
<td>$226,570</td>
<td>$3,635</td>
<td>$230,205</td>
</tr>
<tr>
<td>National Endowment for the Humanities</td>
<td>$82,389</td>
<td>$7,611</td>
<td>$90,000</td>
</tr>
<tr>
<td>National Security Agency</td>
<td>$15,167</td>
<td>-</td>
<td>$15,167</td>
</tr>
<tr>
<td>US Department of Justice</td>
<td>$285,628</td>
<td>$112,372</td>
<td>$398,001</td>
</tr>
<tr>
<td>Veterans Affairs</td>
<td>$11,000</td>
<td>-</td>
<td>$11,000</td>
</tr>
<tr>
<td>National Science Foundation (NSF)</td>
<td>$13,888,087</td>
<td>$4,169,364</td>
<td>$18,057,451</td>
</tr>
<tr>
<td>NSF (National Science Foundation)</td>
<td>$13,888,087</td>
<td>$4,169,364</td>
<td>$18,057,451</td>
</tr>
<tr>
<td>Department of Defense (DOD)</td>
<td>$4,579,604</td>
<td>$860,916</td>
<td>$5,440,520</td>
</tr>
<tr>
<td>Defense Advanced Research Projects Agency</td>
<td>$157,284</td>
<td>$64,887</td>
<td>$222,171</td>
</tr>
<tr>
<td>Defense Threat Reduction Agency</td>
<td>$236,772</td>
<td>$100,968</td>
<td>$337,740</td>
</tr>
<tr>
<td>Department of Defense</td>
<td>$188,673</td>
<td>$93,254</td>
<td>$281,927</td>
</tr>
<tr>
<td>Department of the Navy</td>
<td>$481,862</td>
<td>-</td>
<td>$481,862</td>
</tr>
</tbody>
</table>
### Summary of Awards

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Office of Naval Research</td>
<td>$442,735</td>
<td>$101,209</td>
<td>$543,944</td>
<td></td>
</tr>
<tr>
<td>US AIR FORCE</td>
<td>$36,590</td>
<td>$13,410</td>
<td>$50,000</td>
<td></td>
</tr>
<tr>
<td>US ARMY</td>
<td>$503,193</td>
<td>$152,762</td>
<td>$655,955</td>
<td></td>
</tr>
<tr>
<td>US Army Corp of Engineers</td>
<td>$33,700</td>
<td>-</td>
<td>$33,700</td>
<td></td>
</tr>
<tr>
<td>US Navy</td>
<td>$2,498,795</td>
<td>$334,427</td>
<td>$2,833,221</td>
<td></td>
</tr>
<tr>
<td>Dept of Health and Human Services</td>
<td>$8,622,752</td>
<td>$2,772,477</td>
<td>$11,395,229</td>
<td></td>
</tr>
<tr>
<td>Centers for Disease Control and Prevention/DHHS</td>
<td>$96,518</td>
<td>-</td>
<td>$96,518</td>
<td></td>
</tr>
<tr>
<td>Health Resources and Services Administration/DHHS</td>
<td>$947,478</td>
<td>$32,834</td>
<td>$980,312</td>
<td></td>
</tr>
<tr>
<td>NIH (National Institutes of Health/DHHS)</td>
<td>$7,204,921</td>
<td>$2,682,552</td>
<td>$9,887,472</td>
<td></td>
</tr>
<tr>
<td>Substance Abuse &amp; Mental Health Services Administration</td>
<td>$267,474</td>
<td>$3,320</td>
<td>$270,794</td>
<td></td>
</tr>
<tr>
<td>University of California</td>
<td>$106,360</td>
<td>$53,772</td>
<td>$160,132</td>
<td></td>
</tr>
<tr>
<td>Environmental Protection Agency</td>
<td>$608,136</td>
<td>$180,125</td>
<td>$788,261</td>
<td></td>
</tr>
<tr>
<td>EPA (Environmental Protection Agency)</td>
<td>$608,136</td>
<td>$180,125</td>
<td>$788,261</td>
<td></td>
</tr>
<tr>
<td>National Aeronautics &amp; Space Administration</td>
<td>$1,691,484</td>
<td>$606,367</td>
<td>$2,298,121</td>
<td></td>
</tr>
<tr>
<td>Embry-Riddle Aeronautical University</td>
<td>$258,550</td>
<td>$135,739</td>
<td>$394,289</td>
<td></td>
</tr>
<tr>
<td>NASA</td>
<td>$1,316,305</td>
<td>$462,913</td>
<td>$1,779,218</td>
<td></td>
</tr>
<tr>
<td>National Aeronautics &amp; Space Administration</td>
<td>$116,629</td>
<td>$7,985</td>
<td>$124,614</td>
<td></td>
</tr>
<tr>
<td>State Miscellaneous</td>
<td>$115,000</td>
<td>-</td>
<td>$115,000</td>
<td></td>
</tr>
<tr>
<td>SC DHEC</td>
<td>$115,000</td>
<td>-</td>
<td>$115,000</td>
<td></td>
</tr>
<tr>
<td>US DEPARTMENT OF EDUCATION</td>
<td>$1,337,803</td>
<td>$7,005</td>
<td>$1,344,808</td>
<td></td>
</tr>
<tr>
<td>SC DHEC</td>
<td>$400,000</td>
<td>-</td>
<td>$400,000</td>
<td></td>
</tr>
<tr>
<td>US DEPARTMENT OF EDUCATION</td>
<td>$937,803</td>
<td>$7,005</td>
<td>$944,808</td>
<td></td>
</tr>
<tr>
<td>US Department of Transportation</td>
<td>$1,174,835</td>
<td>$245,165</td>
<td>$1,420,000</td>
<td></td>
</tr>
<tr>
<td>Department of Transportation</td>
<td>$1,174,835</td>
<td>$245,165</td>
<td>$1,420,000</td>
<td></td>
</tr>
<tr>
<td>US Dept of Agriculture</td>
<td>$11,755,392</td>
<td>$2,001,933</td>
<td>$13,757,325</td>
<td></td>
</tr>
<tr>
<td>USDA (UNITED STATES DEPT OF AGRICULTURE)</td>
<td>$11,668,359</td>
<td>$2,001,933</td>
<td>$13,670,292</td>
<td></td>
</tr>
<tr>
<td>USDA Forest Service (FS)</td>
<td>$87,033</td>
<td>-</td>
<td>$87,033</td>
<td></td>
</tr>
<tr>
<td>US Dept of Commerce</td>
<td>$83,145</td>
<td>$21,618</td>
<td>$104,763</td>
<td></td>
</tr>
<tr>
<td>USDC (UNITED STATES DEPARTMENT OF COMMERCE)</td>
<td>$83,145</td>
<td>$21,618</td>
<td>$104,763</td>
<td></td>
</tr>
<tr>
<td>US Dept of Energy</td>
<td>$8,797,928</td>
<td>$2,180,470</td>
<td>$10,978,398</td>
<td></td>
</tr>
<tr>
<td>DOE (UNITED STATES DEPARTMENT OF ENERGY)</td>
<td>$8,797,928</td>
<td>$2,180,470</td>
<td>$10,978,398</td>
<td></td>
</tr>
<tr>
<td>US Dept of Interior</td>
<td>$817,851</td>
<td>$71,272</td>
<td>$889,123</td>
<td></td>
</tr>
<tr>
<td>USDA Forest Service (FS)</td>
<td>$817,851</td>
<td>$71,272</td>
<td>$889,123</td>
<td></td>
</tr>
<tr>
<td>Industry and Other Sources</td>
<td>$9,699,463</td>
<td>$1,183,739</td>
<td>$10,883,202</td>
<td></td>
</tr>
<tr>
<td>Foreign Not-for-Profit</td>
<td>$20,000</td>
<td>-</td>
<td>$20,000</td>
<td></td>
</tr>
<tr>
<td>Embassy of France in the USA</td>
<td>$20,000</td>
<td>-</td>
<td>$20,000</td>
<td></td>
</tr>
<tr>
<td>Private Corporations &amp; Firms</td>
<td>$9,679,463</td>
<td>$1,183,739</td>
<td>$10,863,202</td>
<td></td>
</tr>
<tr>
<td>Advion, Inc</td>
<td>$36,476</td>
<td>$19,150</td>
<td>$55,626</td>
<td></td>
</tr>
<tr>
<td>Affiliated Engineers, Inc</td>
<td>$24,504</td>
<td>$2,450</td>
<td>$26,954</td>
<td></td>
</tr>
<tr>
<td>Allison Transmission</td>
<td>$91,748</td>
<td>$35,338</td>
<td>$127,085</td>
<td></td>
</tr>
<tr>
<td>Alucent Biomedical Inc</td>
<td>$8,000</td>
<td>$4,200</td>
<td>$12,200</td>
<td></td>
</tr>
<tr>
<td>Amazon.com</td>
<td>$59,870</td>
<td>-</td>
<td>$59,870</td>
<td></td>
</tr>
<tr>
<td>Ball Horticultural Company</td>
<td>$10,000</td>
<td>-</td>
<td>$10,000</td>
<td></td>
</tr>
<tr>
<td>BASF Corporation</td>
<td>$29,436</td>
<td>$7,654</td>
<td>$37,089</td>
<td></td>
</tr>
<tr>
<td>Battlefield Farms, Inc</td>
<td>$10,000</td>
<td>-</td>
<td>$10,000</td>
<td></td>
</tr>
<tr>
<td>Bayer HealthCare Pharmaceuticals, Inc</td>
<td>$632,127</td>
<td>$294,338</td>
<td>$926,465</td>
<td></td>
</tr>
<tr>
<td>Bihi Engineering, LLC</td>
<td>$10,339</td>
<td>$1,410</td>
<td>$11,749</td>
<td></td>
</tr>
<tr>
<td>BMW Manufacturing Corporation</td>
<td>$188,521</td>
<td>$72,442</td>
<td>$260,963</td>
<td></td>
</tr>
</tbody>
</table>
# Summary of Awards

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Initial Payment</th>
<th>Final Payment</th>
<th>Total Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boeing</td>
<td>$289,049</td>
<td>$40,951</td>
<td>$330,000</td>
</tr>
<tr>
<td>BorgWarner, Inc</td>
<td>$62,056</td>
<td>$32,579</td>
<td>$94,635</td>
</tr>
<tr>
<td>Breakthrough Starshot Foundation, LLC</td>
<td>$141,357</td>
<td>$8,481</td>
<td>$149,838</td>
</tr>
<tr>
<td>City of Myrtle Beach</td>
<td>$16,000</td>
<td></td>
<td>$16,000</td>
</tr>
<tr>
<td>City of Travelers Rest</td>
<td>$12,500</td>
<td></td>
<td>$12,500</td>
</tr>
<tr>
<td>Cotton Incorporated</td>
<td>$345,201</td>
<td>$41,151</td>
<td>$386,352</td>
</tr>
<tr>
<td>Creek Watch Villas</td>
<td>$3,200</td>
<td></td>
<td>$3,200</td>
</tr>
<tr>
<td>Cummings &amp; McCrady Inc.</td>
<td>$5,390</td>
<td>$736</td>
<td>$6,126</td>
</tr>
<tr>
<td>Daikin America, Inc.</td>
<td>$13,500</td>
<td></td>
<td>$13,500</td>
</tr>
<tr>
<td>Depuy Synthes</td>
<td>$325,928</td>
<td>$158,920</td>
<td>$484,848</td>
</tr>
<tr>
<td>Dow AgroSciences LLC</td>
<td>$39,904</td>
<td>$10,375</td>
<td>$50,279</td>
</tr>
<tr>
<td>Dummen Orange</td>
<td>$10,000</td>
<td></td>
<td>$10,000</td>
</tr>
<tr>
<td>DuPont</td>
<td>$103,821</td>
<td>$54,506</td>
<td>$158,327</td>
</tr>
<tr>
<td>Earth Design</td>
<td>$4,419</td>
<td>$603</td>
<td>$5,022</td>
</tr>
<tr>
<td>Elanco</td>
<td>$53,740</td>
<td>$13,435</td>
<td>$67,175</td>
</tr>
<tr>
<td>Elastrin Therapeutics</td>
<td>$31,463</td>
<td>$16,518</td>
<td>$47,981</td>
</tr>
<tr>
<td>Emory Healthcare</td>
<td>$10,000</td>
<td></td>
<td>$10,000</td>
</tr>
<tr>
<td>Families 4 Change, Inc</td>
<td>$2,500</td>
<td></td>
<td>$2,500</td>
</tr>
<tr>
<td>Fenno Architecture</td>
<td>$5,390</td>
<td>$736</td>
<td>$6,126</td>
</tr>
<tr>
<td>General Electric (GE)</td>
<td>$5,226,000</td>
<td></td>
<td>$5,226,000</td>
</tr>
<tr>
<td>Herlong and Associates</td>
<td>$2,695</td>
<td>$368</td>
<td>$3,063</td>
</tr>
<tr>
<td>Honda R&amp;D Americas, Inc.</td>
<td>$17,645</td>
<td>$9,264</td>
<td>$26,909</td>
</tr>
<tr>
<td>Innovaplant de Costa Rica, SA</td>
<td>$12,000</td>
<td></td>
<td>$12,000</td>
</tr>
<tr>
<td>J Dabney Peeples Design Associates, Inc.</td>
<td>$5,302</td>
<td>$723</td>
<td>$6,025</td>
</tr>
<tr>
<td>KCI TECHNOLOGIES INC.</td>
<td>$56,663</td>
<td>$22,136</td>
<td>$78,799</td>
</tr>
<tr>
<td>Kevan Hoertdoerfer Architects</td>
<td>$2,695</td>
<td>$368</td>
<td>$3,063</td>
</tr>
<tr>
<td>Land O'Lakes, Inc.</td>
<td>$5,000</td>
<td></td>
<td>$5,000</td>
</tr>
<tr>
<td>LFK Architects, LLC</td>
<td>$5,390</td>
<td>$736</td>
<td>$6,126</td>
</tr>
<tr>
<td>Liollio Architecture</td>
<td>$5,390</td>
<td>$736</td>
<td>$6,126</td>
</tr>
<tr>
<td>Lockheed Martin Corporation</td>
<td>$64,981</td>
<td>$29,980</td>
<td>$94,961</td>
</tr>
<tr>
<td>LS3P Associates, LTD</td>
<td>$8,085</td>
<td>$1,104</td>
<td>$9,189</td>
</tr>
<tr>
<td>McMillan Pazdan Smith Architecture</td>
<td>$8,085</td>
<td>$1,104</td>
<td>$9,189</td>
</tr>
<tr>
<td>Medical Beam Laboratories</td>
<td>$41,473</td>
<td>$21,773</td>
<td>$63,246</td>
</tr>
<tr>
<td>Merck Sharp &amp; Dohme Corp</td>
<td>$15,000</td>
<td></td>
<td>$15,000</td>
</tr>
<tr>
<td>Metrolina Greenhouse</td>
<td>$10,000</td>
<td></td>
<td>$10,000</td>
</tr>
<tr>
<td>Milliken and Company</td>
<td>$70,123</td>
<td>$31,015</td>
<td>$101,138</td>
</tr>
<tr>
<td>MKSK Studios</td>
<td>$7,953</td>
<td>$1,085</td>
<td>$9,038</td>
</tr>
<tr>
<td>Monsanto</td>
<td>$71,701</td>
<td>$18,643</td>
<td>$90,343</td>
</tr>
</tbody>
</table>
### Summary of Awards

<table>
<thead>
<tr>
<th>Award Description</th>
<th>Revenue 1</th>
<th>Revenue 2</th>
<th>Revenue 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nephron Pharmaceuticals</td>
<td>$55,891</td>
<td>$23,544</td>
<td>$79,435</td>
</tr>
<tr>
<td>Novus Architects</td>
<td>$5,390</td>
<td>$736</td>
<td>$6,126</td>
</tr>
<tr>
<td>Omnibond Systems</td>
<td>$39,626</td>
<td>$10,303</td>
<td>$49,929</td>
</tr>
<tr>
<td>PDM US, LLC</td>
<td>$82,586</td>
<td>$37,414</td>
<td>$120,000</td>
</tr>
<tr>
<td>Perlara</td>
<td>$3,279</td>
<td>$1,721</td>
<td>$5,000</td>
</tr>
<tr>
<td>Reprise Biomedical</td>
<td>$3,000</td>
<td>$1,575</td>
<td>$4,575</td>
</tr>
<tr>
<td>Rosenblum Coe Architects, LLC</td>
<td>$2,695</td>
<td>$368</td>
<td>$3,063</td>
</tr>
<tr>
<td>Samaritan Biologics, LLC</td>
<td>$2,613</td>
<td>$1,372</td>
<td>$3,985</td>
</tr>
<tr>
<td>Samsung Electronics America, Inc.</td>
<td>$29,296</td>
<td>$11,246</td>
<td>$40,542</td>
</tr>
<tr>
<td>Simons Young + Associates</td>
<td>$2,695</td>
<td>$368</td>
<td>$3,063</td>
</tr>
<tr>
<td>SJWD Water District</td>
<td>$101,460</td>
<td>$53,267</td>
<td>$154,727</td>
</tr>
<tr>
<td>SMHa</td>
<td>$2,695</td>
<td>$368</td>
<td>$3,063</td>
</tr>
<tr>
<td>SmithBucklin Corporation</td>
<td>$290,285</td>
<td>-</td>
<td>$290,285</td>
</tr>
<tr>
<td>Smithers-Oasis</td>
<td>$10,000</td>
<td>-</td>
<td>$10,000</td>
</tr>
<tr>
<td>Sonoco Products Company</td>
<td>$95,859</td>
<td>$48,259</td>
<td>$144,118</td>
</tr>
<tr>
<td>Sonoco Products, Inc.</td>
<td>$59,790</td>
<td>$25,591</td>
<td>$85,381</td>
</tr>
<tr>
<td>Specialty Seed, Inc.</td>
<td>$3,284</td>
<td>$854</td>
<td>$4,138</td>
</tr>
<tr>
<td>Synchronicity</td>
<td>$5,390</td>
<td>$736</td>
<td>$6,126</td>
</tr>
<tr>
<td>Syngenta Crop Protection</td>
<td>$24,683</td>
<td>$6,417</td>
<td>$31,100</td>
</tr>
<tr>
<td>Syngenta Flowers, Inc.</td>
<td>$10,000</td>
<td>-</td>
<td>$10,000</td>
</tr>
<tr>
<td>Syngenta Seeds, Inc.</td>
<td>$10,641</td>
<td>$2,860</td>
<td>$13,501</td>
</tr>
<tr>
<td>Titan Farms</td>
<td>$606,460</td>
<td>-</td>
<td>$606,460</td>
</tr>
<tr>
<td>Toole Design Group</td>
<td>$12,726</td>
<td>$1,736</td>
<td>$14,462</td>
</tr>
<tr>
<td>Various Private Sponsors</td>
<td>$6,500</td>
<td>-</td>
<td>$6,500</td>
</tr>
<tr>
<td>Private Univ, Research Fdns, Inst &amp; Centers</td>
<td>$450,736</td>
<td>$49,408</td>
<td>$500,144</td>
</tr>
<tr>
<td>American Heart Association</td>
<td>$208,042</td>
<td>$20,804</td>
<td>$228,846</td>
</tr>
<tr>
<td>Arizona State University (FDP)</td>
<td>$39,994</td>
<td>$4,399</td>
<td>$44,393</td>
</tr>
<tr>
<td>Duke University (FDP)</td>
<td>$12,600</td>
<td>$1,260</td>
<td>$13,860</td>
</tr>
<tr>
<td>National 4H Council</td>
<td>$84,365</td>
<td>$8,636</td>
<td>$93,000</td>
</tr>
<tr>
<td>Oak Ridge Associated Universities</td>
<td>$4,000</td>
<td>-</td>
<td>$4,000</td>
</tr>
<tr>
<td>Roger Williams University</td>
<td>$9,146</td>
<td>-</td>
<td>$9,146</td>
</tr>
<tr>
<td>SC Research Authority (SCRA)</td>
<td>$82,589</td>
<td>$14,309</td>
<td>$96,898</td>
</tr>
<tr>
<td>Southern Region Small Fruit Consortium</td>
<td>$10,000</td>
<td>-</td>
<td>$10,000</td>
</tr>
<tr>
<td>Revenue</td>
<td>$46,937</td>
<td>$3,064</td>
<td>$50,001</td>
</tr>
<tr>
<td>Miscellaneous Revenue</td>
<td>$46,937</td>
<td>$3,064</td>
<td>$50,001</td>
</tr>
<tr>
<td>Clemson University (FDP)</td>
<td>$46,937</td>
<td>$3,064</td>
<td>$50,001</td>
</tr>
<tr>
<td>State and Local Governments</td>
<td>$10,744,690</td>
<td>$828,717</td>
<td>$11,573,408</td>
</tr>
<tr>
<td>State Agencies Outside SC</td>
<td>$339,728</td>
<td>$27,410</td>
<td>$367,138</td>
</tr>
<tr>
<td>Georgia Department of Natural Resources</td>
<td>$16,433</td>
<td>$2,958</td>
<td>$19,391</td>
</tr>
<tr>
<td>Michigan State University</td>
<td>$14,261</td>
<td>-</td>
<td>$14,261</td>
</tr>
<tr>
<td>Pennsylvania State University (FDP)</td>
<td>$41,296</td>
<td>$4,130</td>
<td>$45,426</td>
</tr>
<tr>
<td>University of North Carolina at Charlotte</td>
<td>$99,648</td>
<td>$9,346</td>
<td>$108,994</td>
</tr>
<tr>
<td>University of Pittsburgh (FDP)</td>
<td>$10,713</td>
<td>-</td>
<td>$10,713</td>
</tr>
<tr>
<td>University of Texas</td>
<td>$99,750</td>
<td>$8,594</td>
<td>$108,344</td>
</tr>
<tr>
<td>University of Texas M.D. Anderson Cancer Center - Sci</td>
<td>$41,750</td>
<td>-</td>
<td>$41,750</td>
</tr>
<tr>
<td>Virginia Commonwealth University</td>
<td>$15,877</td>
<td>$2,382</td>
<td>$18,259</td>
</tr>
<tr>
<td>Local Grants and Contracts</td>
<td>$432,445</td>
<td>$19,197</td>
<td>$451,642</td>
</tr>
<tr>
<td>Abbeville County</td>
<td>$25,000</td>
<td>-</td>
<td>$25,000</td>
</tr>
<tr>
<td>Anderson County</td>
<td>$55,714</td>
<td>-</td>
<td>$55,714</td>
</tr>
<tr>
<td>Berkeley County</td>
<td>$14,400</td>
<td>-</td>
<td>$14,400</td>
</tr>
</tbody>
</table>
## Summary of Awards

<table>
<thead>
<tr>
<th>Organization</th>
<th>Total</th>
<th>Revenue</th>
<th>Expenses</th>
<th>Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charleston Civic Design Center</td>
<td>$ 5,390</td>
<td>$ 736</td>
<td>$ 6,126</td>
<td></td>
</tr>
<tr>
<td>Charleston County</td>
<td>$ 16,450</td>
<td>-</td>
<td>$ 16,450</td>
<td></td>
</tr>
<tr>
<td>City of Clemson</td>
<td>$ 17,953</td>
<td>$ 1,085</td>
<td>$ 19,038</td>
<td></td>
</tr>
<tr>
<td>City of Greenville</td>
<td>$ 10,604</td>
<td>$ 1,446</td>
<td>$ 12,050</td>
<td></td>
</tr>
<tr>
<td>City of Spartanburg</td>
<td>$ 6,363</td>
<td>$ 868</td>
<td>$ 7,231</td>
<td></td>
</tr>
<tr>
<td>Dorchester County</td>
<td>$ 14,400</td>
<td>-</td>
<td>$ 14,400</td>
<td></td>
</tr>
<tr>
<td>Greenville County</td>
<td>$ 30,700</td>
<td>-</td>
<td>$ 30,700</td>
<td></td>
</tr>
<tr>
<td>Greenville County Planning Commission</td>
<td>$ 2,651</td>
<td>$ 362</td>
<td>$ 3,013</td>
<td></td>
</tr>
<tr>
<td>Lancaster County</td>
<td>$ 25,000</td>
<td>-</td>
<td>$ 25,000</td>
<td></td>
</tr>
<tr>
<td>Laurens County</td>
<td>$ 25,000</td>
<td>-</td>
<td>$ 25,000</td>
<td></td>
</tr>
<tr>
<td>Marion County</td>
<td>$ 18,000</td>
<td>-</td>
<td>$ 18,000</td>
<td></td>
</tr>
<tr>
<td>McCormick County</td>
<td>$ 14,400</td>
<td>-</td>
<td>$ 14,400</td>
<td></td>
</tr>
<tr>
<td>Pickens County</td>
<td>$ 105,460</td>
<td>-</td>
<td>$ 105,460</td>
<td></td>
</tr>
<tr>
<td>Richland County</td>
<td>$ 3,500</td>
<td>-</td>
<td>$ 3,500</td>
<td></td>
</tr>
<tr>
<td>Spartanburg County</td>
<td>$ 29,460</td>
<td>$ 14,700</td>
<td>$ 44,160</td>
<td></td>
</tr>
<tr>
<td>Union County, SC</td>
<td>$ 12,000</td>
<td>-</td>
<td>$ 12,000</td>
<td></td>
</tr>
<tr>
<td>SC CURF</td>
<td>$ 219,803</td>
<td>$ 34,833</td>
<td>$ 254,636</td>
<td></td>
</tr>
<tr>
<td>Clemson University Research Foundation (CURF)</td>
<td>$ 219,803</td>
<td>$ 34,833</td>
<td>$ 254,636</td>
<td></td>
</tr>
<tr>
<td>SC Dept of Education</td>
<td>$ 71,243</td>
<td>$ 3,062</td>
<td>$ 74,305</td>
<td></td>
</tr>
<tr>
<td>SC Dept of Education</td>
<td>$ 71,243</td>
<td>$ 3,062</td>
<td>$ 74,305</td>
<td></td>
</tr>
<tr>
<td>State Commissions/Boards</td>
<td>$ 539,492</td>
<td>-</td>
<td>$ 539,492</td>
<td></td>
</tr>
<tr>
<td>SC Arts Commission</td>
<td>$ 18,571</td>
<td>-</td>
<td>$ 18,571</td>
<td></td>
</tr>
<tr>
<td>SC Cattlemen's Association</td>
<td>$ 33,438</td>
<td>-</td>
<td>$ 33,438</td>
<td></td>
</tr>
<tr>
<td>SC Commission on Higher Education</td>
<td>$ 135,000</td>
<td>-</td>
<td>$ 135,000</td>
<td></td>
</tr>
<tr>
<td>SC Cotton Board</td>
<td>$ 116,842</td>
<td>-</td>
<td>$ 116,842</td>
<td></td>
</tr>
<tr>
<td>SC Dept of Disabilities and Special Needs</td>
<td>$ 4,000</td>
<td>-</td>
<td>$ 4,000</td>
<td></td>
</tr>
<tr>
<td>SC Peach Council &amp; Promotion Board</td>
<td>$ 53,500</td>
<td>-</td>
<td>$ 53,500</td>
<td></td>
</tr>
<tr>
<td>SC Peanut Board</td>
<td>$ 71,991</td>
<td>-</td>
<td>$ 71,991</td>
<td></td>
</tr>
<tr>
<td>SC Soybean Board</td>
<td>$ 75,915</td>
<td>-</td>
<td>$ 75,915</td>
<td></td>
</tr>
<tr>
<td>SC Tobacco Board</td>
<td>$ 30,235</td>
<td>-</td>
<td>$ 30,235</td>
<td></td>
</tr>
<tr>
<td>State EPSCoR</td>
<td>$ 89,677</td>
<td>-</td>
<td>$ 89,677</td>
<td></td>
</tr>
<tr>
<td>SC EPSCOR</td>
<td>$ 59,677</td>
<td>-</td>
<td>$ 59,677</td>
<td></td>
</tr>
<tr>
<td>University of South Carolina</td>
<td>$ 30,000</td>
<td>-</td>
<td>$ 30,000</td>
<td></td>
</tr>
<tr>
<td>State Miscellaneous</td>
<td>$ 9,030,457</td>
<td>$ 744,216</td>
<td>$ 9,774,673</td>
<td></td>
</tr>
<tr>
<td>Agribusiness Center for Research and Entrepreneurship</td>
<td>$ 74,000</td>
<td>-</td>
<td>$ 74,000</td>
<td></td>
</tr>
<tr>
<td>Francis Marion University</td>
<td>$ 30,621</td>
<td>$ 4,705</td>
<td>$ 35,326</td>
<td></td>
</tr>
<tr>
<td>Medical University of South Carolina (FDP)</td>
<td>$ 225,340</td>
<td>-</td>
<td>$ 225,340</td>
<td></td>
</tr>
<tr>
<td>SC Dept of Agriculture</td>
<td>$ 162,996</td>
<td>-</td>
<td>$ 162,996</td>
<td></td>
</tr>
<tr>
<td>SC Dept of Commerce</td>
<td>$ 1,208,512</td>
<td>$ 19,614</td>
<td>$ 1,228,126</td>
<td></td>
</tr>
<tr>
<td>SC Dept of Juvenile Justice</td>
<td>$ 6,238,442</td>
<td>$ 710,722</td>
<td>$ 6,949,164</td>
<td></td>
</tr>
<tr>
<td>SC Dept of Natural Resources</td>
<td>$ 176,550</td>
<td>-</td>
<td>$ 176,550</td>
<td></td>
</tr>
<tr>
<td>SC DHHS</td>
<td>$ 575,574</td>
<td>-</td>
<td>$ 575,574</td>
<td></td>
</tr>
<tr>
<td>South Carolina Emergency Management Division</td>
<td>$ 2,913</td>
<td>-</td>
<td>$ 2,913</td>
<td></td>
</tr>
<tr>
<td>South Carolina Governor's School for Science and Math</td>
<td>$ 37,879</td>
<td>-</td>
<td>$ 37,879</td>
<td></td>
</tr>
<tr>
<td>University of South Carolina</td>
<td>$ 296,730</td>
<td>$ 9,175</td>
<td>$ 305,905</td>
<td></td>
</tr>
<tr>
<td>Winthrop University</td>
<td>$ 900</td>
<td>-</td>
<td>$ 900</td>
<td></td>
</tr>
<tr>
<td>State SCUREFF</td>
<td>$ 21,846</td>
<td>-</td>
<td>$ 21,846</td>
<td></td>
</tr>
<tr>
<td>SC Dept of Natural Resources</td>
<td>$ 21,846</td>
<td>-</td>
<td>$ 21,846</td>
<td></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>$ 97,600,510</strong></td>
<td><strong>$ 20,749,441</strong></td>
<td><strong>$ 118,349,951</strong></td>
<td></td>
</tr>
</tbody>
</table>
Summary of Submissions

Clemson University Sponsored Research Submissions Counts Six Year Comparison

Clemson University Fiscal Year 2019 and 2020 Submissions Counts By Organizational Unit

<table>
<thead>
<tr>
<th>Total University</th>
<th>VP Research &amp; Interdisc Institutes</th>
<th>Public Service Activities</th>
<th>Other Non-College</th>
<th>Engineering, Computing &amp; Applied Sciences</th>
<th>Education</th>
<th>Economic Development</th>
<th>Clemson Computing &amp; Information Technology</th>
<th>Business</th>
<th>Behavioral, Social &amp; Health Sciences</th>
<th>Architecture, Arts &amp; Humanities</th>
<th>Agriculture, Forestry &amp; Life Sciences</th>
<th>College of Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY19 1417</td>
<td>25</td>
<td>33</td>
<td>14</td>
<td>562</td>
<td>39</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>105</td>
<td>69</td>
<td>377</td>
<td>186</td>
</tr>
<tr>
<td>FY20 1729</td>
<td>29</td>
<td>37</td>
<td>26</td>
<td>672</td>
<td>42</td>
<td>0</td>
<td>1</td>
<td>11</td>
<td>143</td>
<td>76</td>
<td>473</td>
<td>219</td>
</tr>
</tbody>
</table>
Appendix

Clemson University Sponsored Research Awards Summary
By College, Unit and Investigator
Fiscal Year 2020