Temple University’s Office of the Vice President for Research empowers student, faculty, staff and alumni innovators to develop research that impacts economic development, solves societal problems, opens new fields of discovery and creates sustainable technologies and businesses for the next generation.

**Ranked 93rd** for research activity, NSF HERD Survey

**88th** for federal research expenditures

**Top 5** research activity in Pennsylvania

**R1** highest research activity Carnegie Classification

**110** research-based inventions per year

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**Temple University Research Expenditures**

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Temple University</td>
<td>$159,931,000</td>
<td>$171,927,000</td>
<td>$178,313,000</td>
<td>$187,687,000</td>
<td>$200,275,000</td>
</tr>
<tr>
<td>Fox Chase Cancer Center</td>
<td>N/A</td>
<td>$42,072,000</td>
<td>$57,852,000</td>
<td>$54,287,000</td>
<td>$56,759,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$159,931,000</td>
<td>$213,999,000</td>
<td>$236,165,000</td>
<td>$241,974,000</td>
<td>$257,034,000</td>
</tr>
</tbody>
</table>

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**Research Portfolio by School/College**

- Lewis Katz School of Medicine, 39%
- Fox Chase Cancer Center, 14%
- College of Science and Technology, 13%
- College of Public Health, 8%
- College of Liberal Arts, 8%
- College of Education, 7%
- Offices of the President and Provost, 5%
- College of Engineering, 2%
- School of Pharmacy, 1%
- Beasley School of Law, 1%
- Fox School of Business, 1%
- Kornberg School of Dentistry, 1%
- Klein College of Media and Communication, <1%
- Tyler School of Art, <1%
- School of Podiatric Medicine, <1%

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*September 2017*
### Research Awards and Proposals

<table>
<thead>
<tr>
<th>Year</th>
<th>Dollars Awarded</th>
<th>Dollars Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$120,677,726</td>
<td>$668,314,333</td>
</tr>
<tr>
<td>2013</td>
<td>$145,124,230</td>
<td>$689,965,510</td>
</tr>
<tr>
<td>2014</td>
<td>$140,041,124</td>
<td>$821,048,298</td>
</tr>
<tr>
<td>2015</td>
<td>$180,118,146</td>
<td>$998,589,045</td>
</tr>
<tr>
<td>2016</td>
<td>$181,198,031</td>
<td>$1,053,141,196</td>
</tr>
<tr>
<td>2017</td>
<td>$177,066,969</td>
<td>$1,075,448,294</td>
</tr>
</tbody>
</table>

### Number of Proposals Submitted by School/College 2017

- **599** Lewis Katz School of Medicine
- **315** Fox Chase Cancer Center
- **257** College of Science and Technology
- **189** College of Public Health
- **145** College of Liberal Arts
- **116** College of Engineering
- **76** College of Education
- **46** School of Pharmacy
- **22** Offices of the President and Provost
- **19** Fox School of Business

Total proposals: 1,830

### Funding Sources 2017

- **Federal Government**
  - National Institutes of Health
  - Department of Defense
  - National Science Foundation

- **Commonwealth Funding**, 10%
- **Industry Funding**, 5%
- **Foundation Funding**, 9%
- **Local Government Funding**, 2%
- **Other Sources**, 8%

September 2017
### Technology Commercialization Growth

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>Increase over prior year</th>
<th>2012 - 2017</th>
<th>Increase over prior 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventions</td>
<td>110</td>
<td>+22%</td>
<td>435</td>
<td>+130%</td>
</tr>
<tr>
<td>Patents Filed</td>
<td>67</td>
<td>+29%</td>
<td>190</td>
<td>+217%</td>
</tr>
<tr>
<td>Licenses/Options</td>
<td>15</td>
<td>-11%</td>
<td>52</td>
<td>+174%</td>
</tr>
<tr>
<td>Licensing Income</td>
<td>$579,632</td>
<td>+42%</td>
<td>$13.1M</td>
<td>+172%</td>
</tr>
<tr>
<td>Awarded Patents</td>
<td>13</td>
<td>+30%</td>
<td>53</td>
<td>+130%</td>
</tr>
<tr>
<td>Startups</td>
<td>7</td>
<td>+40%</td>
<td>21</td>
<td>+163%</td>
</tr>
</tbody>
</table>

- **Increase over prior year**
- **2012 - 2017**
- **Increase over prior 5 years**

**Companies formed based on Temple discoveries account for:**

- **$394 M Investment**
- **93 Active Jobs**
- **35 Startups**

**$13.1 Million in licensing income in the past 5 years**

**Faculty Highlights**

- 18th Worldwide in Google Scholar Citations
- 2 Nobel Prize winners
- 15 Guggenheim Fellows
- 2 MacArthur Fellows

**Award Highlights**

- $20 million cooperative agreement with Army Research Lab, largest single year award ever
- $12 million Department of Energy Frontiers in energy research grant
- 2017 Keck Award, College of Science and Technology

Temple’s licensing/technology transfer rate tripled in 2016 with 18 commercialization deals.

This high level was sustained with 15 deals in 2017.

This growth represents a 174% increase over the previous 5-year period.