Annual Report for the Office of Undergraduate Research & Creative Activities 2014-15

Richard Ignace

Director of Undergraduate Research & Creative Activities

Honors College

East Tennessee State University

2016 January
◊ **MOTTO:**

Pursue your passion.

◊ **MISSION:**

To promote and advance the sciences, humanities, and arts by engaging and supporting undergraduates in research.

◊ **VISION:**

To make undergraduate research an integral part of the university experience at ETSU.
I. Introduction

The Director of Undergraduate Research & Creative Activities performs a number of functions and oversees several programs and events. These include:

Programs:

- Student-Faculty Collaborative Grants (SFCGs)
- Summer Fellowships (SFGs)
- Research Discovery Grants (RDGs)
- Travel Grant Awards (TGAs)

Events:

- Boland Symposium
- Lab Safety Workshop
- Oral Presentation Workshop
- Posters-at-the-Capitol

Service:

- Member of the Honors College
- Research Advisory Committee
- Member of the Council for Undergraduate Research (CUR)
- Other committee service or advisory roles

Purpose of the Office:

The Office is charged with supporting and/or providing educationally enriching activities for undergraduate students in the area of scholarly engagement. In terms of scope, the Office has adopted a definition of “research” as taken from the Council of Undergraduate Research (www.cur.org):

"An inquiry or investigation conducted by an undergraduate student that makes an original intellectual or creative contribution to the discipline."

The Annual Report

The annual report details the activities of the Office from fall through summer. This report covers the period of July 2014 through June 2015.
Note: Professor Foster Levy, the previous Director, retired in December 2014; Professor Richard Ignace became the new Director in January 2015.

Note: Stated funding values come from records kept by the Director. The funds represent commitments made by the Director for the various programs. It is possible that some funds went unspent, or that some funds were expended outside the reporting year (e.g., some funds associated with summer fellowships may have been spent after July 1st). Therefore, reported values represent good-faith commitments for funds and student participation within the stated period of the report.

Please direct all questions/suggestions/corrections to:

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423 439-6073
II. Travel Grant Awards

Summary:

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposals:</td>
<td>23</td>
</tr>
<tr>
<td>Grants:</td>
<td>22</td>
</tr>
<tr>
<td>Students served:</td>
<td>94</td>
</tr>
<tr>
<td>Faculty advisors:</td>
<td>15</td>
</tr>
<tr>
<td>Departments:</td>
<td>12</td>
</tr>
<tr>
<td>Colleges:</td>
<td>3</td>
</tr>
<tr>
<td>Funds committed:</td>
<td>$11,055</td>
</tr>
</tbody>
</table>

Comments:

1. The majority of travel grant awards were requested by and provided to students in the College of A&S.

2. The majority of travel grant awards were accompanied with funding from the student’s or advisor’s Department, ranging from tens of dollars up to around $1000. In some cases assistance came from other sources, such as fund raising, a grant from the conference itself, or the advisor.

3. Average expenditure per student: $118.

4. Average expenditure per award: $502. The maximum award per individual is $500. Some requests involve groups, and so awards can exceed $500 in such cases. Awards for individual students is typically between $300-$500.

Long-Term Trends:

- The figure at right displays the number of students served with travel grants for each year (top panel), the total funding for travel grants each year (middle panel), and funds spent per grant and per student each year (bottom panel).

- For the latter the amount per grant is the short dashed line, and the amount per student is the long dashed line. Although the majority of grants support travel for individual students, some grants support travel for groups, thereby explaining the difference between these two curves.
III. Student-Faculty Collaborative Grant Awards

Summary:

Fall Cycle

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposals:</td>
<td>20</td>
</tr>
<tr>
<td>Awards:</td>
<td>19</td>
</tr>
<tr>
<td>Colleges:</td>
<td>4</td>
</tr>
<tr>
<td>Departments:</td>
<td>8</td>
</tr>
<tr>
<td>Requested:</td>
<td>$23,040</td>
</tr>
<tr>
<td>Awarded:</td>
<td>$17,010</td>
</tr>
</tbody>
</table>

Spring Cycle

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposals:</td>
<td>16</td>
</tr>
<tr>
<td>Awards:</td>
<td>10</td>
</tr>
<tr>
<td>Colleges:</td>
<td>4</td>
</tr>
<tr>
<td>Departments:</td>
<td>11</td>
</tr>
<tr>
<td>Requested:</td>
<td>$17,839</td>
</tr>
<tr>
<td>Awarded:</td>
<td>$9,050</td>
</tr>
</tbody>
</table>

Comments:

1. The majority of student-faculty collaborative grant awards were requested by and provided to students in the College of A&S.


3. Average funding request (combined cycles): $1,136.

4. Average funding award (combined cycles): $899.

Long-Term Trends:

Refer to the figure in the following section for Summer Fellowships, where Long-Term Trends for research grants are summarized.
IV. Summer Fellowship Grant Awards

Summary:

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposals:</td>
<td>24</td>
</tr>
<tr>
<td>Awards:</td>
<td>5</td>
</tr>
<tr>
<td>Colleges:</td>
<td>5</td>
</tr>
<tr>
<td>Departments:</td>
<td>15</td>
</tr>
<tr>
<td>Requested:</td>
<td>$53,614</td>
</tr>
<tr>
<td>Awarded:</td>
<td>$13,798</td>
</tr>
</tbody>
</table>

Comments:

1. The majority of summer fellowship awards were requested by students in the College of A&S, although CAS is less dominant in distribution of proposals as compared to the Travel Grant or Student-Faculty Collaborative Grant programs. However, the five awards went to three colleges.

2. Maximum possible award: $2,500 (scholarship) + $500 (research expenses).

3. Average funding request (combined cycles): $2,234.

4. Average funding award (combined cycles): $2,760.

5. Note that the Office had only enough funds for 4 awards. Due to the tremendous demand for fellowships in summer 2015, the Office of the Provost generously provided funding for a 5th award.

Long-Term Trends:

- The Figure displays the number of proposals awarded each year (top panel), the funds committed each year (middle panel), and the funds committed per grant each year (bottom panel). Blue is for the SFCG program; red is for the Summer Fellowships.

- Note that for the middle panel, the dashed line (black) indicates the combined funds for both the SFCG and Fellowship grants.
V. Laboratory Safety Class

Summary:

Two courses were provided: one early in the fall semester, and one early in the spring semester.

Comments:

Students awarded a summer fellowship and in need of the lab safety class will normally not have the opportunity until early in the fall semester, which is after the summer project is completed. Starting in 2016, the lab safety class will be offered prior to the beginning of the summer project. The course will be made available via the online version, as demand will be small.

VI. Workshops

Summary:

The oral presentation workshop was offered to students prior to the Boland Symposium. Around 30 students were in attendance. Around 60 students presented at the Boland.

Comments:

A need has been identified for providing a poster presentation workshop. A pilot presentation was offered in the form of a lecture, in collaboration with Dinah DeFord of the McNair program, during a meeting of the Honors course, Foundations for Research. It is expected that the lecture will be offered broadly to ETSU undergraduates on an annual basis starting in Fall 2016.

VII. Posters at the Capitol

Summary:

Seven students were selected, but ETSU participation was thwarted by inclement weather that prevented travel.
VIII. Undergraduate Research Symposium, or Boland Symposium

Summary:

The breakdown for symposium contributions is:

- 71 presentations in total
- 76% of presenters were seniors; 24% were not.
- 45% of presentations were for thesis; 55% were not.

Categories:
- 15 (21.1%) in Arts & Humanities
- 6 (8.5%) in Performance/Visual Art Display
- 15 (21.1%) in Social Sciences
- 35 (49.3%) in Science & Technology

Comments:

The majority of presentations came from the College of Arts & Sciences.

Long-Term Trends:

- The figure to the left shows the number of undergraduate presenters at ETSU meetings. Chief among these meetings are the Boland Symposium (specifically for undergrads; oral only presentations) and the Appalachian Forum (where undergrads can present posters).
- At right is a double panel figure showing a demographic breakdown for the Boland Symposium. The left panel shows participation by student class (Sr=seniors, Jr=juniors, So=sophomores, Fr=freshmen). The right panel indicates the distribution of presentations among the major categories of Science & Technology (S&T), Performance or Visual Display, Social Sciences, and Arts & Humanities (A&H).
IX. Research Discovery Program

Comments:

A typical federal work-study (FWS) student works about 10 hours a week for 15 weeks in each semester. That is 300 hours for the year. With a minimum wage of $7.25, the value of this time, per student, is $2,175. Students with Appalachian performance scholarships (APS) in the Research Discovery Program are expected to serve about half that number of hours. Although the APS students are not paid for their time, they do receive a scholarship, and they are required to work a certain number of hours as a requirement of receiving those funds. Consequently, the time served by APS students, evaluated at minimum wage, has a wage-equivalent value that can be calculated.

Given that the program currently averages 27 students per year, the funding-equivalent value of the Research Discovery Program is about 27 x $1,300 = $35,000.

Long-Term Trends: