◊ 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
- Tennessee 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 2016 through June 2017.
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 be spent after July 1st). Therefore, reported values represent good-faith commitments for funds and student participation within the stated period of the report. Further, the Honors College commits additional funds toward Undergraduate scholarship that are not reported herein, such as for the Boland Symposium, or professional development for the Director.

Note: In an effort both to celebrate ETSU student scholars and to make programs as transparent as possible, basic information about Travel Grant awards, Student Faculty Collaborative Grant awards, Summer Fellowship awards, participants for Tennessee’s Posters-at-the-Capitol event, and participants for the SoCon Undergraduate Research Forum (SURF) can be found at the following website:

www.etsu.edu/honors/ug_research/achievements.php

Please direct all questions/suggestions/corrections to:

Richard Ignace
ignace@etsu.edu
423 439-6073
II. Travel Grant Awards

Summary:

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requests:</td>
<td>13</td>
</tr>
<tr>
<td>Grants:</td>
<td>13</td>
</tr>
<tr>
<td>Students served:</td>
<td>13</td>
</tr>
<tr>
<td>Faculty advisors:</td>
<td>11</td>
</tr>
<tr>
<td>Colleges:</td>
<td>3</td>
</tr>
<tr>
<td>Departments:</td>
<td>8</td>
</tr>
<tr>
<td>Funds committed:</td>
<td>$5,699</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. A minority of travel grant awards were accompanied by additional funding from the student, advisor Department, or other sources, ranging from around $400 up to around $1000.

3. One grant for Research Abroad is not included in total for Travel Grants, but rather for SFCGs.

4. Average expenditure per student: $438.

5. Average expenditure per award: $438. The maximum award per individual is $500. Some requests can involve groups, and so awards can exceed $500 in such cases. There were no travel award requests by groups in 2016-17.

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 (SFCGs)

Summary:

Fall Cycle

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposals:</td>
<td>13</td>
</tr>
<tr>
<td>Awards:</td>
<td>10</td>
</tr>
<tr>
<td>Colleges:</td>
<td>4</td>
</tr>
<tr>
<td>Departments:</td>
<td>9</td>
</tr>
<tr>
<td>Requested:</td>
<td>$13,825</td>
</tr>
<tr>
<td>Awarded:</td>
<td>$10,781</td>
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</table>

Spring Cycle

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposals:</td>
<td>14</td>
</tr>
<tr>
<td>Awards:</td>
<td>14*</td>
</tr>
<tr>
<td>Colleges:</td>
<td>3</td>
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<tr>
<td>Departments:</td>
<td>9</td>
</tr>
<tr>
<td>Requested:</td>
<td>$15,916</td>
</tr>
<tr>
<td>Awarded:</td>
<td>$15,527</td>
</tr>
</tbody>
</table>

* One award was Research Abroad.

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): $1,102.

4. Average funding award (combined cycles): $1,096.

Long-Term Trends:

Refer to the figure in the following section for Summer Fellowships, where Long-Term Trends for all 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>5</td>
</tr>
<tr>
<td>Awards:</td>
<td>5</td>
</tr>
<tr>
<td>Colleges:</td>
<td>3</td>
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<tr>
<td>Departments:</td>
<td>5</td>
</tr>
<tr>
<td>Requested:</td>
<td>$14,434</td>
</tr>
<tr>
<td>Awarded:</td>
<td>$14,434</td>
</tr>
</tbody>
</table>

Comments:

1. Maximum possible award: $2,500 (scholarship) + $500 (research expenses).
2. Average funding request (combined cycles): $2,887.
3. Average funding award (combined cycles): $2,887.

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 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. Lab Safety is also offered to Summer Fellowship awardees via online course content.

VI. Workshops

Summary:

The oral presentation workshop was offered to students prior to the Boland Symposium. Around 30 students were in attendance. (Around 80 students presented at the Boland.)

A poster presentation workshop was offered to students in the fall semester. The turnout was very low; however, this was the first year of its offering.

VII. Posters at the Capitol

Summary:

Seven students were in attendance for the annual Posters at the Capitol event. The event includes universities from across the state. Students met with their legislators and interacted with peers.
VIII. Undergraduate Research Symposium, or Boland Symposium

Summary:

The breakdown for symposium contributions is:

- 86 presentations in total
- 74% of presenters were seniors; 26% were not. (Note: There were a few late entrants for whom status had to be guessed.)
- 55% of presentations were for thesis; 45% were not.
- Categories:
  - 17 (20%) in Arts & Humanities
  - 11 (13%) in Performance/Visual Art Display
  - 20 (23%) in Social Sciences
  - 38 (44%) in Science & Technology

Comments:

The majority of presentations came from the College of Arts & Sciences. Participation in Performance were significantly increased, owing especially to an addition to the program following the lunch break, and in parallel with Visual Arts Display. Professor Scott Koterbay recruited students to organize the after-lunch performances. Submissions for Visual Arts Display were down; however, Professor Smith of Art & Design recruited several late entrants to exhibit works from a course he was teaching.

Long-Term Trends:

- The top figure (next page) 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).
- The lower figure (next page) is double-paneled showing a demographic breakdown for the Boland Symposium. The upper panel shows participation by student class (Sr=seniors, Jr=juniors, So=sophomores, Fr=freshmen). The lower 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). Naturally, Seniors dominate participation, with Juniors comprising most of what remains. Science & Technology accounts for about half of the presentations, a trend that has held for several years now.
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 per hour, the value of the work, 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.

With roughly equal numbers of FWS and APS students, the average cost equivalent value of the work per student is about $1600 in time for the academic year. Less funds are available for summer students, of which there are typically only a few involved with the program. Given that the program historically averages 27 students, the annual funding-equivalent value of the Research Discovery Program is roughly $43,000.

Long-Term Trends:
X. **Summary Remarks**

- Several especially notable events took place in the 2016-17 year concerning research opportunities for undergraduates:

  1. The inaugural meeting of the annual SoCon Undergraduate Research Forum (SURF) was held on the campus of the Wofford University in Spartanburg, SC in October 2016. The hosting institution will eventually alternate among member campuses of the athletic conference. SURF showcases undergraduate achievement in research and creative activities by gathering students from the institutions affiliated with SoCon. Ten students from ETSU participated.

  2. ETSU is developing a crowdfunding presence, which will also allow for student participation. The effort is being spearheaded through the ETSU Division of University Advancement. Processes and tools have been developed, and access to crowdfunding via ETSU is expected to be available by the Fall 2017 semester.

  3. The Director submitted a proposal to the Charles Koch Foundation in the amount of $75,000 to increase summer fellowships available to ETSU undergraduates. The proposal was for 4 fellowships per year for 3 years. Support would be primarily for the student, with a small honorarium for the faculty supervisor, plus an allotment of $500 per student for supplies, as needed. The Foundation awarded the proposal at a reduced level of 3 Fellowships for one year in the amount of $13,500 as a pilot program, with the possibility for continued funding.

  4. In conjunction with the Dean of Honors, the Director initiated the creation of a new Advisory Board for Undergraduate Research & Creative Activities. The objective for the Board is to advise the Director and the Dean in ways that will improve policies, processes, and efficiency, and in particular ways that will help elevate awareness about undergraduate research both at ETSU and in the broader community. Members were recruited, and the Board met for the first time in April 2017.

  5. Working with staff at the Sherrod Library, the Director became involved with an initiative to construct searchable databases to help connect research faculty mentors with ETSU undergraduates. The effort is ongoing, and in parallel with the Library’s project to create a database of faculty research profiles.

- The Director will attend and present at a meeting in late June 2017 on Undergraduate Research Collaborations, organized by the Council on Undergraduate Research (CUR).