Annual Report for the Office of Undergraduate Research & Creative Activities 2018-19

Richard Ignace

Director of Undergraduate Research & Creative Activities

Honors College

East Tennessee State University

2019 May
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 activities. These include:

Programs:

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

Events:

- Boland Symposium
- 180 Research Competition
- 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 2018 through June 2019.
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 the Boland Symposium, professional development for the Director, or support for students to attend SURF, Posters-at-the-Capitol, and NCHC meetings. Combined, the financial support for these activities are annually in the neighborhood of $10K.

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:

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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>20</td>
</tr>
<tr>
<td>Grants</td>
<td>20</td>
</tr>
<tr>
<td>Students served</td>
<td>22</td>
</tr>
<tr>
<td>Faculty advisors</td>
<td>15</td>
</tr>
<tr>
<td>Colleges</td>
<td>5</td>
</tr>
<tr>
<td>Departments</td>
<td>13</td>
</tr>
<tr>
<td>Funds committed</td>
<td>$8,905</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. Average expenditure per student: $405.
3. Average expenditure per award: $445. The maximum award per individual is $500. Some requests can involve groups, and so awards can exceed $500 in such cases.

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>15</td>
</tr>
<tr>
<td>Awards:</td>
<td>13</td>
</tr>
<tr>
<td>Colleges:</td>
<td>3</td>
</tr>
<tr>
<td>Departments:</td>
<td>6</td>
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<tr>
<td>Requested:</td>
<td>$16,903</td>
</tr>
<tr>
<td>Awarded:</td>
<td>$14,864</td>
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</table>

Spring Cycle

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposals:</td>
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<tr>
<td>Awards:</td>
<td>10</td>
</tr>
<tr>
<td>Colleges:</td>
<td>2</td>
</tr>
<tr>
<td>Departments:</td>
<td>4</td>
</tr>
<tr>
<td>Requested:</td>
<td>$11,145</td>
</tr>
<tr>
<td>Awarded:</td>
<td>$11,145</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): $1,122.

4. Average funding award (combined cycles): $1,131.

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. ETSU Summer Fellowships and Society Fellowship Awards

Summary:

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposals:</td>
<td>27</td>
</tr>
<tr>
<td>Awards:</td>
<td>7</td>
</tr>
<tr>
<td>Colleges:</td>
<td>5</td>
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<tr>
<td>Departments:</td>
<td>14</td>
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<tr>
<td>Requested:</td>
<td>$101,062</td>
</tr>
<tr>
<td>Awarded:</td>
<td>$32,431</td>
</tr>
</tbody>
</table>

Comments:

1. Maximum possible award: $3,000 (scholarship) + $500 (research expenses) for ETSU; $4500 (student) + $750 (faculty honorarium) for Society.
2. Average funding request: $3,743.
3. Average funding award: $4,633.

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 ETSU Fellowships and Society Fellowships combined.

- Note that for the middle panel, the dashed line (black) indicates the combined funds for both the SFCG and Fellowship grants in $1000s, while the bottom is per grant in $100s.
V. External Funding (Grants/Donations)

Society Fellowships:
In 2018, Ignace renewed an award from the Charles Koch Foundation. The award for the 2nd year provides for 3 summer fellowships (dubbed “Society Fellowships”) in the amount of $4500 per student (increased from $4000) to conduct research in areas that relate to free societies and/or societal well-being.

Victory Cooper Awards:
Due to the generosity of Victory Cooper, a fund of $2000 was provided in support of undergraduate research. One award was granted in the amount of $1200 to assist a student in Philosophy to attend a prestigious summer school in Colorado.

VI. 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.

VII. Workshops

Summary:
The oral presentation workshop was offered to students prior to the Boland Symposium. Around 30 students were in attendance. (Around 90 students presented at the Boland.)

VIII. SoCon Undergraduate Research Forum (SURF)

Summary:
Ten students were in attendance for the annual SURF event. The event includes universities from the athletic conference, with around 150 participants.

IX. Posters at the Capitol

Summary:
Eight 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.
X. Undergraduate Research Symposium, or Boland Symposium

Summary:

The breakdown for symposium contributions is:

- 90 presentations in total with 97 presenters (some had multiple presenters)
- 77% of presenters were seniors; 23% were not. None were freshmen.
- 64% of presentations were for thesis; 36% were not.
- Categories: (count for presenters)
  - 25 (28%) in Arts & Humanities
  - 13 (14%) in Performance/Visual Art Display
  - 17 (19%) in Social Sciences
  - 35 (39%) in Science & Technology

Comments:

The majority of presentations came from the College of Arts & Sciences. Participation in Performance was substantial, owing in part to a continuation of a program on performance that was initiated in spring 2017, occurring after the lunch break, and in parallel with Visual Arts Display.

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 a third of the presentations.
XI. 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 30 students, the annual funding-equivalent value of the Research Discovery Program is roughly 30 x $1,600 = $48,000.

Long-Term Trends:

Note that in the plot, “Year” refers to start of the academic year and through following summer.
XII. Summary Remarks

- In collaboration with Dr Jennifer Adler of the ETSU Roan Scholars program, a new Undergraduate 180 Research Competition event was inaugurated this year in conjunction with the Boland Symposium. Eligibility was limited to ETSU undergraduates who are also presenters at the Boland Symposium. Students were invited to summarize their scholarly work in 180 seconds through a video presentation. Videos could be submitted ahead of the Boland. Videos could also be made at the Boland. With around 90 presenters for the 2019 Boland, there were 12 participants in the first 180 competition. The videos were made available to a group of 4 judges. The top three received monetary prizes, and a random drawing among the others was used to award a 4th prize.

- The Advisory Board for the Office of Undergraduate Research & Creative Activities completed its second full year of service. Board members William Stone, Leah Ross, Keisha Shoun, Craig Young, and student representative Catherine Pearson rotated off. Pearson recommended having two ETSU students on the Board. Similarly, Ignace decided to have two ETSU faculty members on the Board. A new Dean of Honors, Dr. Christopher Keller, will be hired. Board members for 2019-20 are:

  - P. J. Bailey
  - Malikai Bass
  - Matthew Cleek
  - Cara Harker
  - Richard Ignace
  - Noah Lyons
  - Paul Montgomery
  - Thomas Rutherford
  - Judith Slagle
  - Christopher Keller
  - Marcy Walker
  - Ryan Whitney

  Mortgage Loan Originator, Regions Bank
  Honors-In-Discipline, ETSU
  President, Intellithought
  Professor Theatre & Performance, ETSU
  Director of Undergraduate Research (ex officio)
  Honors-In-Discipline, ETSU
  Vice President of Access & Development, NeSCC
  Teacher, Sullivan South High School
  Professor in Literature & Language, ETSU
  Dean of the Honors College, ETSU (ex officio)
  Attorney, Hunter-Smith-Davis
  Senior Mechanical Engineer, Eastman Chemical

The Board meets in September and April of the academic year. Members are invited to attend the annual Boland Symposium. The Board is asked to help in some other supporting way with at least one event a year. For 2018-19, the Board was involved with a rehearsal for students presenting at the 2018 SoCon Undergraduate Research Forum (SURF) and a separate group presenting at the 2019 Posters-at-the-Capital event. A couple members were also judges in the 180 Research Competition event. The April 2019 meeting led to decisions for the Board to (a) hold rehearsals for students presenting at the 2019 SURF in November and the 2020 Posters event in February, and (b) be “on call” to aid a student or student group that pursues a
crowdfunding campaign in 2019-20. Board members will also be invited to again participate as judges in the 180 event for spring 2020.

- Funding from the Charles Koch Foundation in support of summer Society Fellowships was renewed and increased. Student awards were raised from $4000 to $4500, with faculty honoraria increased from $500 to $750. The funding supports 3 Society Fellows.
- Funding for SFCGs, traditional ETSU Summer Fellowships, and Travel grants were increased by $5000 by the Honors Dean. The increase was used to (a) increase Fellowship awards from $2500 to $3000 for the student portion, (b) add 2 more Travel grants of up to $1000 in total, and (c) use the remainder for SFCGs.
- A new undergraduate research club was formed and approved in April 2018. Although the club had several meetings, identification of officers has been a problem, and continuation of the club is uncertain at this time.
- Crowdfunding was available through ETSU and allows for undergraduate researchers to be involved as well. One student showed interest, but did not pursue.

Another notable was that Ignace’s submission entitled “Quantifying Undergraduate Participation in Scholarly Activities” to the journal, *Scholarship and Practice of Undergraduate Research* (SPUR) was tentatively accepted, with request for revisions. The journal is run through the Council of Undergraduate Research (CUR).

Ignace also served on the search committee for the new Dean of the Honors College.

**XIII. Appendix**

One of the goals for the Director is to elevate campus awareness about undergraduate research – offerings and outcomes. A small part of that is to inform ETSU faculty about research support programs offered through the Office of Undergraduate Research & Creative Activities. The Director also needs reviewers for the Student-Faculty Collaborative Grant and Summer Fellowship proposals. In an effort to recruit a diverse group of qualified reviewers, to minimize the overall burden of time upon faculty reviewers, and as an indirect means of promoting programs offered through the Office, the Director has generally reached out to different faculty to be proposal reviewers, seeking to minimize the number of faculty who serve more than once. Ignace has recruited nearly 60 faculty, from across ETSU, to serve as reviewers since becoming Director in 2013.