Undergraduate research is a high-impact practice that enhances student engagement, retention, completion, and success.

URSA Activities

URSA Student Project Awards
Funding for original research and creative scholarly projects pairing undergraduates with faculty mentors at all UAF campuses.

URSA Student Travel Awards
Funding for travel by undergraduates to support or present their original research.

URSA Mentoring Awards
Funding for mentors (faculty, postdoctoral researchers, graduate students) to enhance or develop opportunities for undergraduate research, especially recurring opportunities.

Curriculum Support and Development
Development of curricular opportunities for undergraduate research through creation of URSA courses and assistance developing departmental courses such as the Museum Research Apprenticeship Program (MRAP).

UAF Research and Creative Activity Day
An annual celebration and presentation of research by undergraduate students at UAF.

- Presentations by undergraduates of their research at national and international meetings.

- Publications co-authored by undergraduates in peer-reviewed professional journals.

- Acceptance of UAF baccalaureate graduates to top graduate programs, professional schools and employment locally and nationally.

For all graphs, bar width indicates total funding dollar amount and bar height indicates number of awards.

	Fall	Spring	Summer	Total
A'				
A'				
A'				
A'				
A'				
A'				

University of Alaska Fairbanks
Undergraduate Research and Scholarly Activity (URSA)
Major Accomplishments

1. URSA Administration
   a. Trent Sutton, UAF Fisheries Department continues as the URSA Director (18% of time year-round).
   b. Kate Pendleton continues to serve as the full-time URSA Coordinator during the academic year and half-time during the summer.
   c. The URSA Advisory Board was expanded to include the following UAF faculty: Brian Hemphill and Charles Mason from CLA, Nicole Cundiff and Josh Lupinek from SOM, Carie Green and JoAnne Healy from SOE, Steffi Ickert-Bond and Kris Hundertmark from CNSM, Sunwoo Kim and Xiangdong Zhang from CEM, David Valentine and David Verbyla from SNRE, Andrew Seitz from CFOS, and Alexandra Fitts, Vice-Provost.
   d. The URSA Review Panel includes the following UAF faculty: Sine Anahita, Andrea Bersamin, Wendy Croskrey, Hector Douglas, Greg Finstad, Alexandra Fitts, Javier Fochessato, Carie Green, Jennifer Guerard, Brian Hemphill, Falk Huettman, Ute Kaden, Sun Woo Kim, Ilana Kingsley, Ellen Lopez, Charles Mason, Joy Morrison, Josh Reuther, Andrew Seitz, Sarah Stanley, Dave Verbyla, Peter Webley, and Peter Westley.
   e. The URSA Innovative Technology and Equipment (ITE) Review Panel was created and consisted of the following individuals: Alexandra Fitts (Vice-Provost), Andres Dajles and John Smelter (staff), Andrew Seitz and Sveta Yamin-Pasternak (faculty), Elizabeth Molina (graduate student), and Deidre Neeley and Jenny Dale (undergraduate students).

2. Funding Awards
   a. The total funds awarded through URSA in FY2016-17 were $291,002 (93 awards total).
   b. A total of $225,100 was allocated during AY2016-17 for undergraduate research (fall/spring projects and Summer Undergraduate Research), undergraduate travel, Research and Creative Activity Day awards, and mentoring awards. The funding for these awards derive from UAF's reinvestment of 1% ICR into undergraduate student research and creative activity. Funding was allocated as follows:
      i. Fall and Spring Undergraduate Project Awards (26 awards [89 applicants] totaling $61,343)
      ii. Undergraduate Student Travel Awards (20 awards [58 applicants] totaling $32,108)
      iii. Summer Undergraduate Research Awards (10 awards [38 applicants] totaling $49,221)
      iv. Mentoring Awards (13 awards [37 applicants] totaling $89,400)
      v. Research and Creative Activity Day Awards (14 awards [109 applicants] totaling $3,780)
   c. Innovative Technology and Equipment (ITE) Awards (10 awards [20 applicants] totaling $55,150). The ITE Awards represented a funding line (former UAF Technology Advisory Board [TAB] funds) through URSA starting in 2015, which was used to support equipment and associated software in support of undergraduate and graduate education and research at UAF. These funds derive from 20% of the student technology fee.

3. Clearinghouse for Undergraduate Student Opportunities
   a. URSA continues to serve as UAF's clearinghouse for undergraduate student opportunities to engage in unique projects conducting research or creative scholarly activities. However, the process is informal (reliant on passive communication) and thus quantifying URSA's role as clearinghouse or student-faculty matchmaker is difficult because URSA is not a student program; rather, URSA is an embodiment of UAF's institutional support for undergraduate student and faculty collaboration in research and creative projects.

b. Nineteen UAF students enrolled URSA and MRAP (Museum Research Apprenticeship Program) courses during AY2016-17 (see 5. Curriculum Development below).

c. Fifty-two UAF students received URSA funding in support of research or creative scholarship during the fall, spring, and summer of AY2016-17, and another 132 students applied but did not receive funding. Some of these students may have been matched with their project either directly by URSA or indirectly through URSA's request for proposals. In addition, walk-in students seeking advice with respect to identifying research opportunities and/or mentors are frequent in the URSA

a.

d. Noah Khalsa (CFOS - Fisheries). Khalsa sought to understand the relatively unknown distribution of Chinook salmon that has led to management issues in response to their recent population decline. He tested 200 water samples taken from the flats for traces of Chinook salmon DNA to identify locations where Chinook salmon overwinter in the flats. The data was recorded and compiled in R

for a replacement to freezing weather making it impossible to do any field work. This being my first research project I've ever done, I really had to think to solve all these problems."

k. Jessica Herzog (SNRE - Natural Resource Management) - Jessica studied niche partitioning among Alaskan golden eagles to better understand how males and females avoid competing with each other. She analyzed diet samples (i.e., uneaten prey remains and regurgitated pellets) collected from golden eagle nest sites on the Seward Peninsula, Alaska, in 2014 and 2015. Herzog went on to win First Place Overall at the 2017 UAF Research and Creative Activity Day for her research poster from this project.

l. Trisha Levasseur (SNRE - Natural Resource Management)

undergraduate students in an entry-level public speaking course at the UAF. Funding was used to

OneTree Alaska STEM to STEAM Studio as an informal science center and K-12 field trip destination.

i. Joe Little (SOM - Economics) - This award supported two undergraduate student research positions with two research trips directly related to the School of Management's National Park Service (NPS) and Ocean Alaska Science Learning Center (OASLC) research. The undergraduate researchers of this project gained experience in the NPS Office of Management and Budget (OMB) research approval process, social network analysis (SNA) methodology, data collection, and data analysis.

purposes. In addition to all of this is the need to conduct outcome assessment to determine whether URSA is making a difference in enhancing the educational experience for UAF undergraduates. Part of the challenge here is identifying not only products (e.g., presentations, displays, publications, etc.) generated by students while they are enrolled at UAF but also identifying these same products once students have graduated from the university. Another component to this is tracking where URSA-

Table 1. The number of URSA applications (student project, student travel, mentoring, and ITE combined), awards, and awarded dollars for each college/school for AY2016-2017. The dollar amount awarded also includes awards to students for UAF Research and Creative Activity Day poster presentations.

College/School	Number of Applications	Number of Awards	Dollar Amount

Table 3. The number of URSA applications (AP), awards (Aw), and dollar amount (DA) for each college/school by awards type for AY2016