



^ o š W Œ () Œ u v

hZ^ ^šµ vš Á Œ •	
zääää	ää Á Œ • šëåUæëä
zääää	æç Á Œ • šãâéUëèé
zääääæ	èâ Á Œ • šãæéUëää
zääääç	òó Á Œ • šãèéUâéè

{ hZ^ /vv}À ŸÀ d Zv}o}PÇ ~ µ Ÿ}v hZ^ d vš}Œ]vP Á Œ •
 &µv]vP š} vZ v šZ µ Ÿ}v o Œ% Œ]v }(
 •šµ vš• šZŒ}µPZ šZ]vv}À ŸÀ %%%o] Ÿ}v }(
 ç Á Œ •
 šãèUæëä

{ µŒŒ] µomu ^µ%%}Œš vv À o}%u vš
 À o}%u (všŒŒ] %ŒŒŒš(µŒŸµv ŒPŒ µ š
 Œ • Œ Z šZŒ}µPZ Œ Ÿ}v } (hZ^ }µŒ • • v •
 À o}%u]vP % Œš u vš o }µŒ • • µ Z • šZ Dµ •
 Z • Œ Z %ŒŒŒ vŸ • Z] % WŒ}PŒ u ~DZ W•X
 zääääæ

{ h & Z • Œ Z ^Z}Áu}všZoÇ • u]v Œ (šµŒ]vP
 µŒŒ vš %Œ}i š • š h &U u]vP •šµ ovšZ^ Á Œ vš(v u vš}Œ]vP Á Œ • Œ]À (Œ]vP
 }%%}Œšµv]Ÿ • ()Œ Œ • Œ Z vP P u iŸ/ Zv]v% Œµu]ŸvP • Œ Z
 ŸÀ Œ • Œ Z Œ}•• h & v šZ PŒ h š Œ & Œ Œ v i • d Zv}o}PÇ v µ
 }uuµv]ŒÇ
 šéèUââè

{ h & Z • Œ Z vÇvvµ o o Œ Ÿ}v v
 %Œ • vš Ÿ}v } (Œ • Œ Z Ç µv ŒPŒ
 h &X
 /d Á Œ • šµ Œ]À (Œ}u iî9 } (šZ •šµ vš š Zv

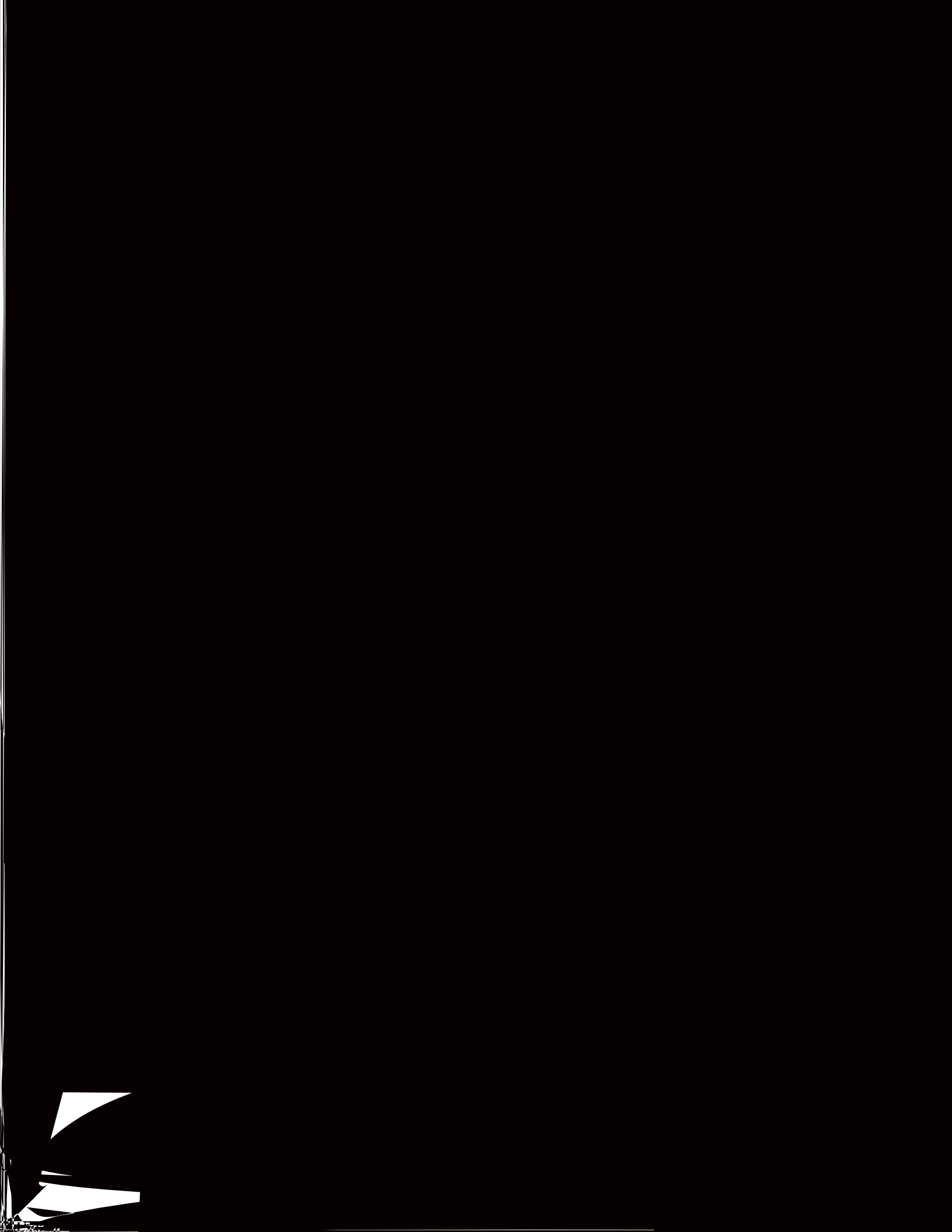
h & µv ŒPŒ µ š • vŒ}oo]v í }
 }µŒ • •

{ WŒ • vš Ÿ}v • Ç µv ŒPŒ µ š • } (šZ]ŒŒ • Œ
 v Ÿ}v o v]vš Œv Ÿ}v o u ŸvP•X
 zääää

{ Wµ o] Ÿ}v • }r µšZ}Œ Ç µv ŒPŒ µ š •]v %
 Œ À] Á %Œ} (••]v o i}µŒv o•X
 zääääæ

{ %š v } (h & o µŒ š PŒ µ šZ šç š %
 PŒ µ š %Œ}PŒ u•U %Œ} (••]v o • Z}o • v u %o}Ç u vš
 o} ooÇ v v Ÿ}v ooÇX

āâé	ääâ	āç	âèä
ãæê	ãèè	ãã	ãèç
ãâæ	ãâç	ãã	ãéâ
ääé	ääè	çç	æâè



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

1. URSA Administration
 - a. Barbara Taylor, UAF Department of Biology and Wildlife, changed from a ~~part~~ part-time URSA Director to quarter-time URSA Co-Director; Trent Sutton, UAF Fisheries Division, became a quarter-time URSA Co-Director effective 01 January 2015.
 - b. Kate Pendleton replaced Elizabeth Belknap as the full-time URSA Coordinator effective 01 January 2015.
 - c. The URSA Advisory Board was expanded to include the following UAF faculty: Cam Carlson, Wendy Croskey, Cheng Chen, Nicole Cundiff, Patrick Druckenmiller, Greg Finstad, Alexandra Fitts, Alex Hirsch, Kara Hoover, Ute Kaden, Sunwoo Kim, Mike Nakoneczny, Sarah Stanley, and Xiangdong Zhang.
 - d. The URSA Innovative Technology and Equipment (ITE) Review Panel was created and consisted of the following individuals: Alexandra Fitts (VP Provost), Mary Kreta (staff), Andrew Seitz and Sarah Stanley (faculty), Stacy Vega and Todd Jacobus (graduate students) and Lachlan Gillispie (undergraduate student).

2.

students seeking advice with respect to identifying research opportunities and/or mentors are frequent in the URSA office (weekly at a minimum and daily in the weeks at the beginning of a semester and around an URSA application deadline). URSA has not tracked or followed up with these ad hoc advisees because they do not all apply for funding and, as a result, are not entered into the database.

4. Student Tracking and Project Cataloging

- a. The URSA database currently has 2,351 UAF undergraduates that have been involved in research since the URSA database was created in 2012.
- b. The 2013-2014 UAF accreditation report stated that 41% of UAF undergraduate students have participated in an academic research experience over the course of their baccalaureate studies. Further, the 1,352 students in the URSA database support that quantification of undergraduate student participation in research. Not included in the accreditation documents and not yet included in the URSA database are undergraduate students who are employed as research assistants. URSA has been working with UAF Human Resources and the UAF Office of Planning, Analysis, and Institutional Research (PAIR) to identify a means to include such students in the database.
- c. An online version of Research Day has been created within the Institutional Repository, which is a joint effort of URSA and Library Sciences Staff. <https://scholarworks.alaska.edu/>.
- d. Gary Hagestead in the Office of PAIR continues to work on streamlining the process of populating the URSA database to allow for more detailed and comprehensive tracking and reporting of undergraduate student research and creative scholarly activities.

5. Curriculum Development

- a. URSA (Undergraduate Research and Scholarly Activity) courses offered in AY2014-15
 - i. URSA 192 Introduction to Research and Scholarly Activity at UAF (Instructor: Barbara Taylor; Enrollment: 7 students)
 - ii. URSA 195 RAHI Research (Instructor: Lawrence Duffy; Enrollment: 8 students)
 - iii. URSA 388 Undergraduate Research and Creative Scholarship I (Instructor: Barbara Taylor; Enrollment: 1 student)
 - iv. URSA 488 Undergraduate Research and Creative Scholarship II (Instructor: Barbara Taylor; Enrollment: 3 students)
 - v. URSA 492 Undergraduate Research and Scholarly Activity Seminar (Instructor: Barbara Taylor; Enrollment: 2 students)
- b. MRAP (Museum Research Apprentice Program) courses offered in AY2014-15
 - i. MRAP 288 Museum Research Apprenticeship I (Instructors: Kevin Winker, Andres Lopez, Patrick Druckenmiller, and Derek Sikes; Enrollment: 11 students)
 - ii. MRAP 488 Museum Research Apprenticeship II (Instructor: Andres Lopez; Enrollment: 3 students)
- c. FYE (First-Year Experience) courses offered in AY2014-15
 - i. Banned! Challenges to Intellectual Freedom (Instructor: Karen Jensen; Enrollment: 15 students)
 - ii. Whodunit: Detectives on Stage (Instructor: Brian Cook; Enrollment: 11 students)
 - iii. Introduction to Undergraduate Research and Scholarly Activity (Instructor: Barbara Taylor; Enrollment: 23 students)

8. UAF Research Events

a. UAF Research Showcase

- i. During the Fall 2014 and Spring 2015 semesters, URSA sponsored the UAF Research Showcase with weekly seminars from UAF researchers at Schaible Hall. This seminar series was available not only to UAF students, staff, and faculty, but to the greater Fairbanks community as well. Presentations are also available on the URSA website.
- ii. Fall 2014 Semester Presenters and Presentations

Date	Presenter	Presentation Title
10 September	Kris Hundertmark	Caribou, Moose & Climate Change: Who Wins? Who Loses
17 September	R. Eric Collins	Life on Ice: Microbial Evolution in the Cryosphere
24 September	Pat Pitney	Olympic Torch to the North Pole
01 October	Amy Vinlove	Building a Better Teacher for Alaska
09 October	Joshua Reuther	Prehistoric Landscapes and Humans in Alaska
15 October	Hajo Eicken	Alaska Sea Ice: Hazards and Uses
22 October	Jim Brashear	Wood Ash to Glass: The History, The Science and The Aesthetic
29 October	Mike Harris, Andrea Ferrante, & Andrej Podlutsky	Biology of Vampires
05 November	Billy Connor	Reducing Fugitive Dust from Roadways in Alaska
12 November	Alice Rogoff	The Importance of the Arctic and the Med Role in Communicating its Value
03 December	Lara Horstmann-Dehn	Tooth Walkers & Swimming Cows: Marine Mammal Research in Alaska

iii. Spring 2015 Semester Presenters and Presentations

Date	Presenter	Presentation Title
21 January	Mike Castellini	To the Ends of the Earth: Three Decades of Antarctic Expeditions
28 January	Eyal Sait	Using Unmanned Aerial Systems to Study Alaska's Environment
04 February		

		Conservation and Management
08 April	Pat Holloway	UAF Peony Research: A New Horticultural Industry for Alaska
15 April	Cam Carlson	Arctic Security
22 April	John Smelter	The Art of Observation: Linking Science and Art

b. Research Day

- i. Research Day was held on 28 April 2015; a total of 81 posters were presented by UAF undergraduate students at the event.
- ii. Dean's Choice Awards (\$250 per school/college) were given for each college or school; the awardees and their poster title(s);

- d. Tiffany Green (CNSM Geosciences) presented her work at the 2014 West Antarctic Ice Sheet (WIS) Divide Core Meeting San Diego, California.
- e. Dakota Emery (INDS Department of General Studies) studied geographic variability in the drug Õspice.Õ He wrote an article about this topic for the Fairbanks Daily News that was published on 15 June 2015.
http://www.newsminer.com/science_and_technology/researchtakesforensiclook-at-spice/article_6cb0c5263fc-11e588df-13f6b401a1b7.html
- f. Julia Taylor (CLA- Journalism and Broadcasting) traveled to Nena

University of Alaska Fairbanks
Undergraduate Research and Scholarly Activity (URSA)
AY 2015-16 Challenges and Goals

1. Raise the profile of undergraduate research and scholarly activity at UAF. A fundamental aspect of URSA's mission is to ensure that UAF students, faculty, and staff are aware of the opportunities available for undergraduate research and creative scholarly activities. To accomplish this important goal, there will be increased efforts to promote URSA funding opportunities via email (e.g., directed emails to each college/school), sponsored communications such as The Cornerstones, strategically placed announcements on campus, presence and participation in UAF events (e.g., Inside Out, New Student Orientation, We Are CLA, UA Scholars night, etc.), periodic, directed communications with the Deans of the various colleges/schools, revision to the URSA website, attendance and participation in UA and UAF administrative meetings (e.g., Board of Regents, Provost Council, etc.), and completion of an annual report each year.

2. Improve student tracking and project cataloging of URSA-sponsored and non-URSA-sponsored research. URSA must obtain and make available accurate numbers of students and mentors engaged in undergraduate research and creative scholarship. Obtaining comprehensive data is a challenge, especially for those students who are doing research and creative scholarship by virtue of holding a position as a student research assistant. The URSA Coordinator is working with Ian Olson and Gary Hagestead with the Office of PAIR to develop a student research participation management tool to facilitate the collection of these data. It is also important to track those projects that are funded by URSA, funded by other units, or not funded at all, and to provide this information to the UAF Chancellor, administrators in the UAF Provost's Office, and the Deans of the various UAF colleges/schools for informational purposes. Further, student projects in research and creative scholarship are diverse in discipline, which

4. Continue to work with PAIR and HR to improve tracking of student participation in undergraduate research and scholarly activity.
5. Increase the national profile of undergraduate research at UAF. To accomplish this goal, send 12 students to represent UAF at Posters on the Hill in Washington, D.C. annually in April. Sam Herreid represented URSA in 2015.
6. Create a Handbook for Mentoring Undergraduate Research that is UAF-specific and a true resource for faculty mentors.
7. Enhance and streamline Research Day which will be held on 26 April 2016. Based on feedback from the 2015 event, Research Day should be shortened in duration and the awards ceremony speeded up to maintain engagement of all participants and attendees. The UAF administration, as well as local members of the UA Board of Regents, should be notified early during the fall 2015 semester to save the date for the 2016 Research Day so that they can attend the event.
8. Continue to

Table 1. The number of ORSA applications (student project, student travel, mentoring, and ITE combined), awards, and awarded dollar amount for each college/school for AY2014-15. The dollar amount awarded also includes awards to students for Research Day poster presentations.

College/School	Number of Applications	Number of Awards	Dollar Amount Awarded
CEM	33	12	\$33,942
CLA	99	21	\$44,881
CNSM	129	44	\$176,175
SFOS	13	8	\$31,218
CRCD	7	4	\$15,088
SOE	5	4	\$18,224
SNRE	7	1	\$250
Total	293	94	\$319,779

CRCD

Table 3. The number of URSA applications (AP), awards (Aw), and dollar amount awarded (DA) for each