

# **State of Alaska FY2021 Governor's Operating Budget**

## **University of Alaska University of Alaska Fairbanks Results Delivery Unit Budget Summary**

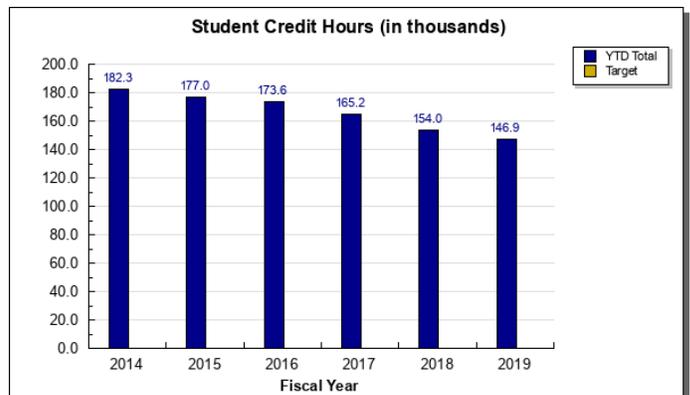
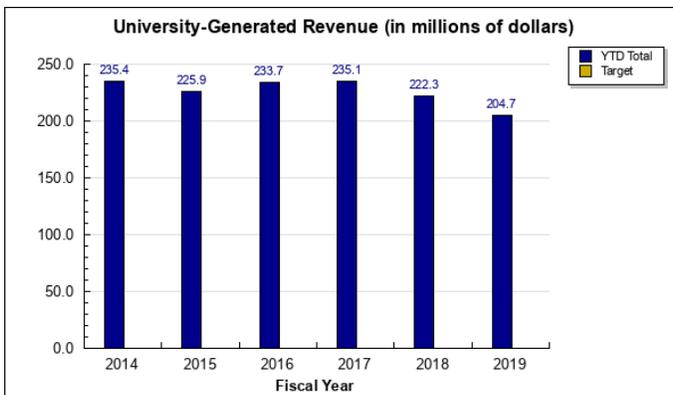
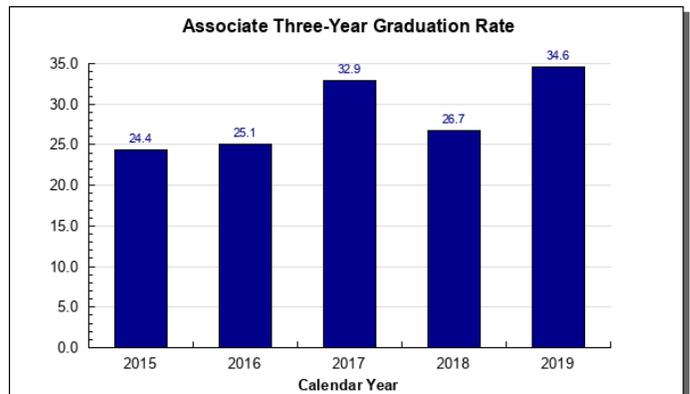
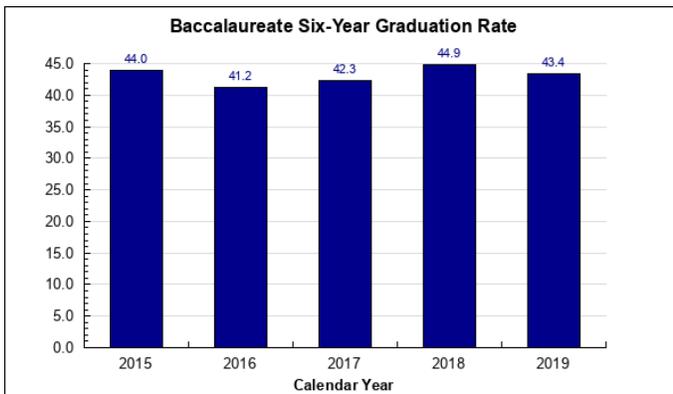
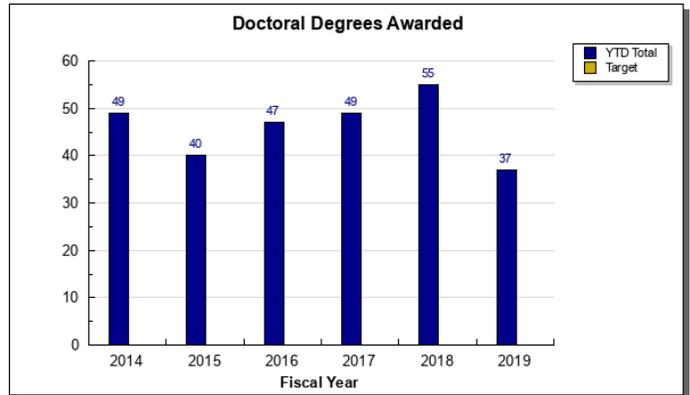
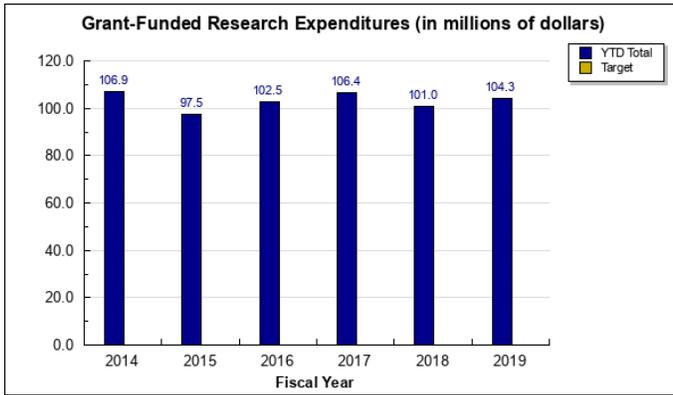
University of Alaska Fairbanks Results Delivery Unit

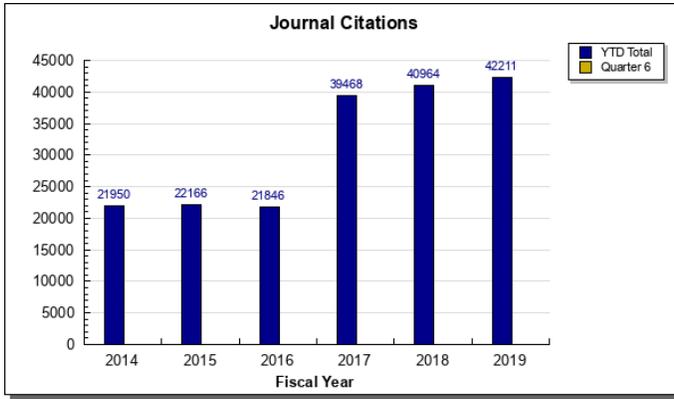
Contribution to Department's Mission

The University of Alaska Fairbanks (UAF) is a Land, Sea, and Space Grant university and an international center for research, education, and the arts, emphasizing the circumpolar North and its diverse peoples. UAF integrates teaching, research, and public service as it educates students for active citizenship and prepares them for lifelong learning and careers.

Results

(Additional performance information is available on the web at <https://omb.alaska.gov/results>.)





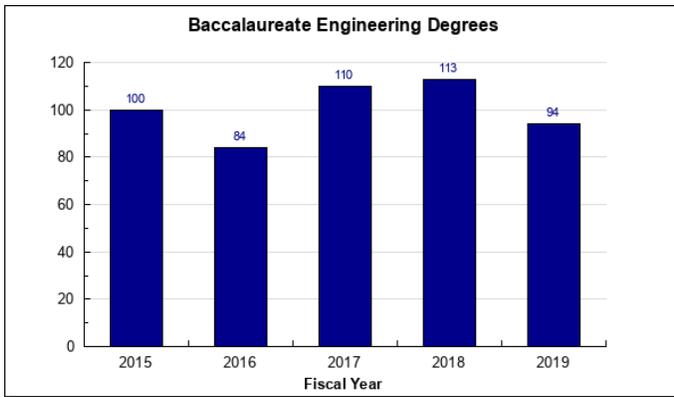
**Core Services**

- Serve Alaska's employers by enrolling and graduating students in high-demand job area degree and certificate programs, including those in engineering and health fields.
- Conduct research focused on Alaska and the circumpolar Arctic, leveraging university resources with external grants and contracts.
- Increase enrollment in doctoral degree programs.
- More credits enrolled per degree-seeking student per semester.
- Generate tuition and fee revenue consistent with maintaining access for low-income students and generate other revenue to the maximum extent possible and consistent with mission.
- Increase revenue generation from private gifts.
- Increase new student enrollment of first-time freshmen and transfer students.
- Increase student credit hour production facilitated by UAF eCampus.
- Increase efficiency in instructional expenditures per credit hour delivered.
- Publish research and scholarship, making the results widely available nationally and internationally.

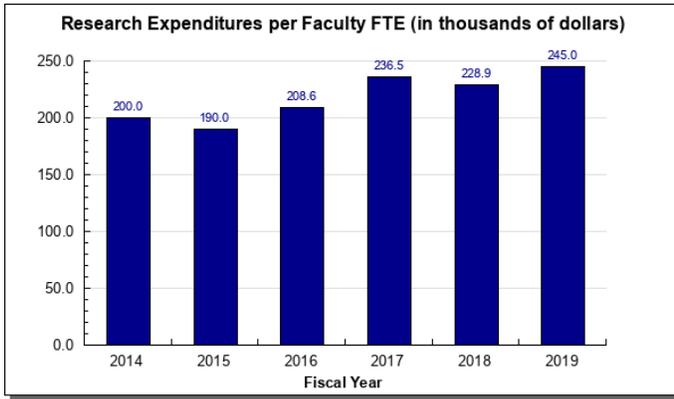
**Measures by Core Service**

(Additional performance information is available on the web at <https://omb.alaska.gov/results>.)

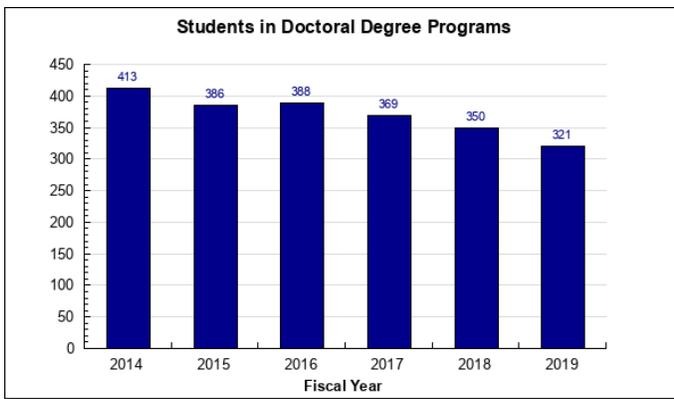
**1. Serve Alaska's employers by enrolling and graduating students in high-demand job area degree and certificate programs, including those in engineering and health fields.**



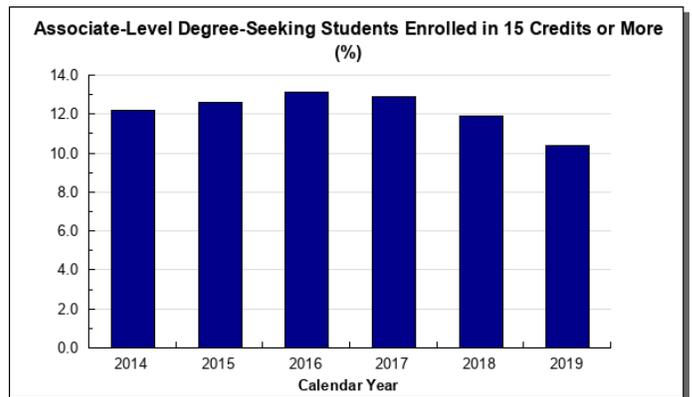
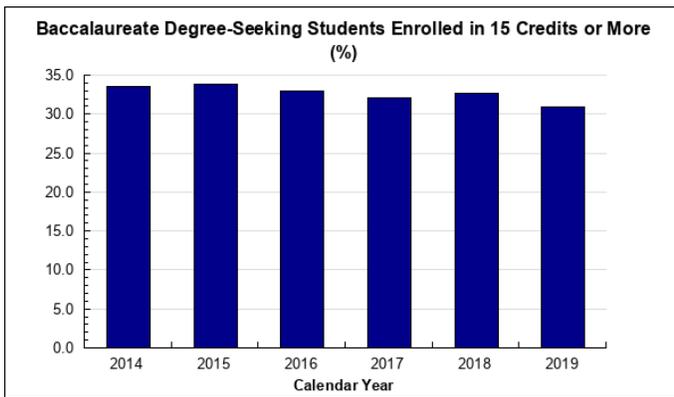
**2. Conduct research focused on Alaska and the circumpolar Arctic, leveraging university resources with external grants and contracts.**



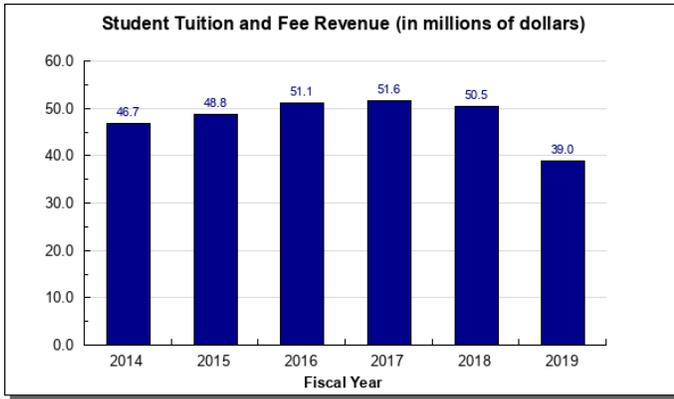
**3. Increase enrollment in doctoral degree programs.**



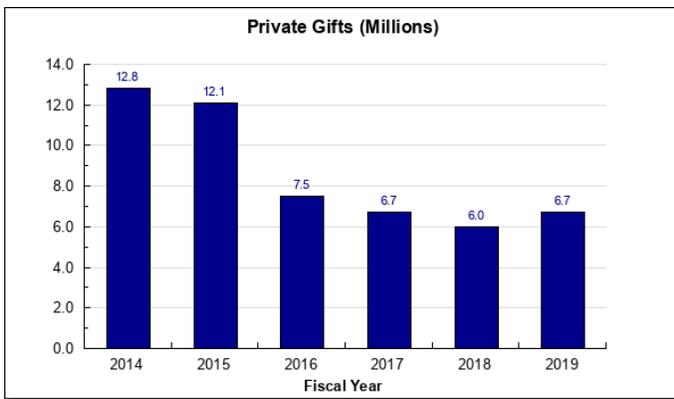
**4. More credits enrolled per degree-seeking student per semester.**



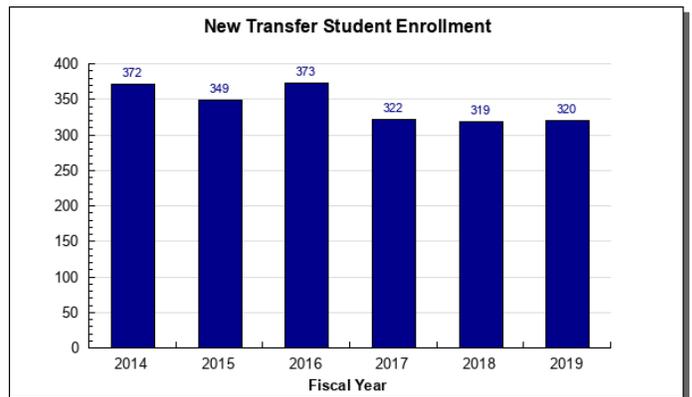
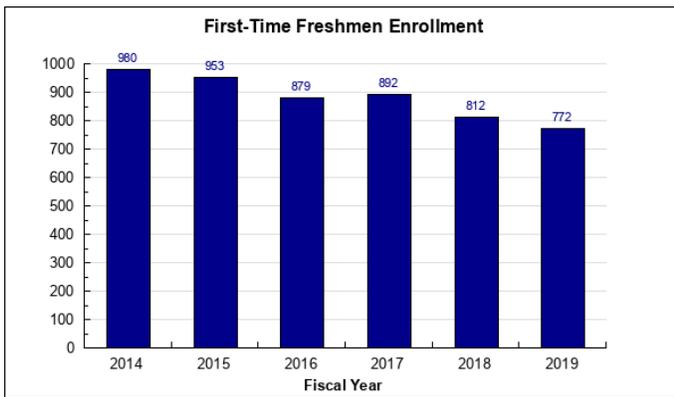
**5. Generate tuition and fee revenue consistent with maintaining access for low-income students and generate other revenue to the maximum extent possible and consistent with mission.**



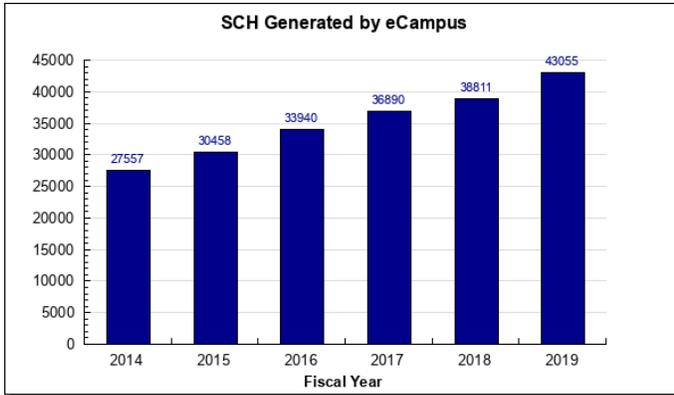
**6. Increase revenue generation from private gifts.**



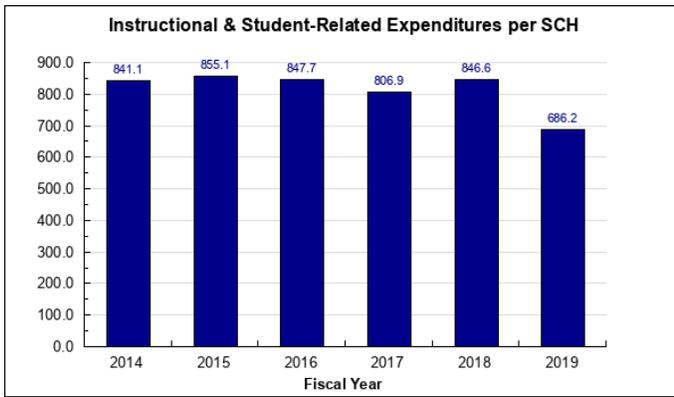
**7. Increase new student enrollment of first-time freshmen and transfer students.**



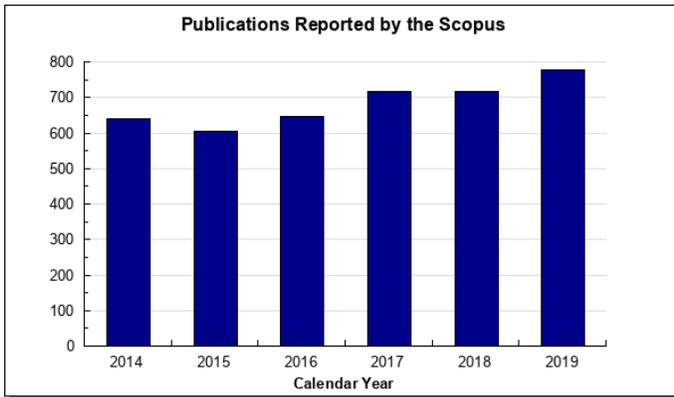
**8. Increase student credit hour production facilitated by UAF eCampus.**



**9. Increase efficiency in instructional expenditures per credit hour delivered.**



**10. Publish research and scholarship, making the results widely available nationally and internationally.**



**Major RDU Accomplishments in 2019**

UAF recently adopted a strategic plan that includes six goals: To (i) modernize the student experience; (ii) solidify our global leadership in Alaska Native and Indigenous programs; (iii) achieve Tier 1 research status; (iv) transform UAF’s intellectual property development and commercialization enterprise; (v) embrace and grow a culture of respect, diversity, inclusion and caring; and (vi) revitalize key academic programs.

**Awards, Recognition, and Achievements**

Paul McCarthy, professor of geology and the chair of the Geosciences Department, was nominated as a fellow of the Geological Society of America. GSA members are nominated in recognition of a sustained record of distinguished contributions to the geosciences.

Professor F. Stuart (Terry) Chapin was selected to receive the Volvo Environment Prize for his work to enhance sustainability of Alaska's rural communities. Since the first award in 1990 the Volvo Environment Prize has become one of the scientific world's most respected environmental prizes and includes a cash award of about \$150,000. See <http://www.environment-prize.com/>

In 2018, Bethel Extension agent Leif Albertson was a 1st Place National Winner in Environmental Education for his work on lead exposure in harvested game meat, awarded by the National Extension Association of Family and Consumer Sciences (NEAFCS). This is one of several community health issues Albertson has helped address.

Resource economist Josh Greenberg was part of a team that received the USDA National Institute of Food and Agriculture (NIFA) 2019 Partnership Award for Mission Integration of Research, Education and Extension. Greenberg and his team partner with communities to elevate Alaska's capacity to build and sustain a healthy food and physical environment to prevent obesity among young children.

UAF eCampus earned significant recognition from Quality Matters (QM), an international nonprofit organization that is recognized as a global leader in quality assurance for online education. In 2018, UAF was awarded the Online Learner Support Certification, verifying that all of the university's online programs provide critical services needed for learner success. UAF's online special education and teaching program also became the first (of any program) in the country to earn Exemplary Program status from QM.

Alaska's Biomedical Learning and Student Training program – which enhances capacity for undergraduate biomedical research training and efficacy for engaging students from diverse, especially rural Alaska, backgrounds in education and training for biomedical research careers – was renewed at more than \$16 million over five years.

The College of Fisheries and Ocean Sciences envisioned and created the interdisciplinary Alaska Blue Economy Center (ABEC), which aims to boost Alaska's blue economy by serving as a resource and support center for research, instruction and outreach related to Alaska's vast aquatic resources and ecosystems.

On Nov. 15, 2018, the Alaska and Polar Regions Collections and Archives (APRCA) Digital Repository ([archives.library.uaf.edu](http://archives.library.uaf.edu)) went live to the public. This repository was funded by a \$200,000 National Endowment for the Humanities (NEH) grant and took two years to develop.

**UAF academic rankings:**

18th: World's Best Small Universities, Times Higher Education Survey

10th: Return on Investment: Engineering Majors Instate Students, Payscale.com

16th: Best Online Associate's in Early Childhood Education Degree Programs, The Best Schools

**UAF research rankings:**

1<sup>st</sup> Worldwide Rank in Number of Publications and Citations of Peer-reviewed Arctic Research

5th: Earth Sciences, NSF Higher Education Research and Development Survey

*Examples of ranked schools that UAF outranks: UW, OSU, Caltech, Penn State, UCLA, USC, Berkeley, Johns Hopkins, Harvard, Yale, Boston U., Princeton.*

9th: Oceanography, NSF Higher Education Research and Development Survey

*Examples of ranked schools that UAF outranks: OSU, Rutgers, UT Austin, MIT, Duke, Johns Hopkins, Stanford, UC Davis*

13th: Astronomy, NSF Higher Education Research and Development Survey

*Examples of ranked schools that UAF outranks: UW, OSU, Cornell, Princeton, Columbia, Texas A&M, Yale, Boston U.*

### **Academic Programs, Enrollment and Graduation**

UAF conferred 1,432 degrees, including 282 undergraduate certificates or licensures, 253 associate degrees, 602 bachelor's degrees, 210 master's degrees and 37 doctorates.

As of September 2018, fall enrollment at UAF echoed a dip seen throughout the University of Alaska system, with both student numbers and total credit hours on the decline. Student headcount fell 4.4 percent compared to a year earlier, while overall credit hours slipped 5.7 percent. While enrollments have dipped, UAF has invested in several enrollment initiatives, including an extensive Strategic Enrollment Planning process. These initiatives are already starting to show effects in the fall 2019 enrollment numbers.

UAF's eCampus enrollment continued to grow, with an increase of 7 percent in student headcount and 11 percent in student credit hours. Through collaboration with the academic units, eCampus now offers six graduate degrees, 10 bachelor's degrees, six associate's degrees, six undergraduate certificates, seven occupational endorsements and 20 minors as fully online programs.

UAF's six-year baccalaureate student graduation rate was almost 44 percent, the same as 2018 and a 15-percentage point improvement since FY2008. UAF's three-year, first-time, full-time associate-level student graduation rate was nearly 35 percent. This is slightly higher than the 2017 rate of 27 percent.

UAF has continued to prioritize retention initiatives to increase the graduation rate of first-time full-time freshmen. Fall to fall retention for first-time full-time was 78 percent, 4 percent higher than a year earlier. Retention rates for associate degree students was 63 percent.

As part of the priority on retention, UAF has implemented several initiatives, including increased use of Nanook Navigator Education Advisory Board (EAB) Student Success Collaborative software) to strengthen consistency and communication in advising. UAF has also expanded services to returning students by adding an additional degree-completion advisor to assist students who have earned a high number of credits but have not been able to complete a degree.

UAF is expanding its dual enrollment opportunities with the eCampus Advantage Program and conversations with the Fairbanks North Star Borough School District to improve access to local high school students and students throughout the state.

UAF's School of Education facilitated the transfer of approximately 150 students from UAA. In order to better serve these students, UAF added one full time advisor and program coordinator, two and a half full-time faculty, and five adjunct faculty in Anchorage. Eighteen of these transfer students were able to graduate from initial licensure programs in spring 2019. An additional 50 students in their final semesters of preparation have been set up with internships for 2019/20.

UAF launched the Strategic Enrollment Planning process in September 2018. Over the course of the academic year, 71 action plans were developed, and 23 initiatives have been implemented.

One example of an initiative that has been put in place following Strategic Enrollment recommendations is the transition of the Honors Program to the Honors College. The first-year class — a talented and diverse group from all over Alaska, the country and the world — is composed of over 60 students from 20 majors. This represents significant growth in the number of incoming high-achieving students to Honors.

The first class in the University of Alaska Fairbanks/Colorado State University 2 + 2 veterinary program graduated on Friday, May 17, 2019. This is a milestone achievement that gives Alaska students access to a top-ranked veterinary medicine education partially in Fairbanks. Six of the 10 graduates already have jobs arranged in Fairbanks and Juneau.

## **Community Campuses**

### **College of Rural and Community Development (CRCD)**

CRCD staff brought greater visibility to the contributions of Alaska's Indigenous people through nationally recognized media coverage that adds to the efforts to increase philanthropic giving. CRCD also hosted events such as the Indigenous Peoples Day, the Festival of Native Arts, and the Alaska Native Language Revitalization Institute to promote indigenous culture and Yup'ik, Iñupiaq, Tlingit, Haida, Gwich'in, Dena'ina, Ahtna, Sugpiaq, Alutiiq, Deg Xiang and Denaakke' languages.

The Rural Human Services program celebrated its 25-year anniversary with 509 graduates to date. This accomplishment could not have been possible without the continued support from the State of Alaska and its commitment to behavioral health in rural communities.

Many CRCD rural campuses have increased dual enrollment course offerings across rural school districts and regions. With a shared vision of supporting more K-12 students in their pursuit of higher education and employment, the rural campuses have been integral in boosting the state's dual enrollment and tech prep offerings and student success.

CRCD and the individual rural campuses were successful in securing federal funding (DOE, USDA, NIH etc.) to provide support and engagement of students across the state. Two new federal awards to the college included collaboration grants, which have expanded the partnership capacity of the college and the campuses.

### **Community and Technical College (CTC)**

UAF CTC fall 2019 enrollments are up with a ~7 percent increase in headcount and ~5 percent increase in credit hour production.

A "High School to College and Career" college application promotion was initiated. The college paid the CTC application fee for all Alaska high school students graduating in the spring or summer of 2019.

A \$1 million legacy gift was received from an anonymous donor to support vocational-technical students' education. UAF CTC programs received national recognition. The Early Childhood Education degree program was rated 16th in the nation and featured as one of the top online associate degrees by BestSchools.org in 2019. The Paralegal Studies program was selected as one of the best online programs by BestColleges.com.

In parallel with the heightened federal focus on apprenticeships and work experience, UAF CTC enrolls approximately 300 students in industry work-study experiences annually as the capstone to their education.

The Aviation program hosted the annual Fairbanks Aviation Day with ~3,000 attendees and supported our military partners by participating in the air show at Eielson Air Force Base.

Industry investment in and support of UAF CTC programs this past year included donations of a Beechcraft 200 King Air from Bering Air and a 2012 Freightliner semitruck from Alaska West Express, a division of Lynden Inc. In December, UAF CTC celebrated its community and industry partners at a December event themed Building Alaska's Workforce Together. Alaska state Senator Click Bishop addressed the gathering of several hundred community, industry, legislative and university partners.

In partnership with organizations such as the Literacy Council of Alaska, the Golden Heart Homeschool Support Network and Partners for Progress in Delta, CTC hosted public workshops on college and career preparedness. Three annual registration events were hosted in August, December and April. In one evening, students and prospective students are able to talk with faculty advisors from each program, financial aid advisors and general academic advisors. Students can apply for admission and get help registering for classes, and UAF CTC pays their application fees during these events.

## **Public Engagement**

A UAF Cooperative Extension Service tribes educator based in Dillingham delivers 4-H programming to Yu'pik, Alutiiq and Athabascan tribes in the region, with the goal of connecting youth to their culture and providing healthy activities. She worked with 109 adult volunteers who supported activities for 500 youth, such as Yup'ik language and dance, culture camps, and clubs focused on robotics, skin sewing, trapping and drones.

After a 7.1 earthquake rocked Anchorage last November, Extension provided resources on an emergency water supply, assessing hazards, dealing with trauma, choosing contractors and testing for radon. These were made available at many sites in Anchorage and Mat-Su and were viewed by more than 60,000 Alaskans.

Fairbanks 4-H agents with Extension worked with 50 teens at the Fairbanks Youth Facility and in an independent living program with a goal of reducing homelessness. They taught workforce development skills and how to write resumes, apply for jobs, undergo job interviews, budget, handle paperwork and take a driver's license test.

Three conferences coordinated by Extension brought together more than 300 agents, researchers, agency representatives, farmers and others to share the latest information about agriculture — and invasive species.

The public accessed online Extension publications 481,811 times.

Alaska Sea Grant supports Alaska's \$6 billion commercial fishing and seafood processing industry, as well as promoting science and marine literacy. In 2019, 49 graduate students worked on Alaska grant-funded research and produced and distributed 75,000 publications.

The New York Times published a column by Vera Trainer, Rick Thoman and Gay Sheffield about the dramatic extent of sea ice loss in Alaska and how it is affecting everything from plankton to whales and the residents who rely on marine resources for their well-being. Thoman is a climate expert at UAF, Sheffield is an Alaska Sea Grant agent in Nome and Trainer is with the federal Northwest Fisheries Science Center in Seattle.

Alaska Sea Grant produced a new video on ocean acidification in Alaska to communicate this complex issue to the public and share research findings.

Alaska Sea Grant and the Aleutians East Borough will partner on a project to launch a pilot seaweed farm near Sand Point, off the Alaska Peninsula, with a new grant from the national Sea Grant's aquaculture program.

University of Alaska Press published "Fighter in Velvet Gloves: Alaska Civil Rights Hero Elizabeth Peratrovich," by Annie Boochever and Roy Peratrovich. It was selected for the [Alaska 2019-20 Battle of the Books](#) and to represent Alaska at the 19th annual Library of Congress National Book Festival in September 2019.

Poet Linda Schandelmeier and her UA Press book, "Coming Out of Nowhere," were awarded the 2019 WILLA Literary Prize for Poetry by the organization Women Writing the West. This nationally recognized award, named for Willa Cather, honors the best in literature featuring women's or girls' stories set in the West each year.

Summer Sessions and Lifelong Learning (SSLL) ran 49 weeklong camps for children this summer. Realizing that not all local families may be able to afford the full tuition of the camps, SSLL received donations to fund a scholarship program for students who qualify for free or reduced lunch during the school year.

SSLL provided 40 free, public events on campus this summer, including 11 Music in the Garden concerts, 10 Discover Alaska lectures, 10 Healthy Living lectures and eight Down Memory Lane events, as well as the 2019 Legacy Lecture. These programs were well received, especially the beloved Music in the Garden series.

The world premiere of *Molly of Denali* was held on the UAF campus on June 22, 2019. Alaska 529 hosted the event at the Charles W. Davis Concert Hall. *Molly of Denali* is a new PBS KIDS series that premiered nationwide on July 15. It is the first nationally distributed children's series to feature a Native American lead character, Molly Mabray. The series highlights literacy skills with Alaska Native values and showcases aspects of rural life.

### **Student Affairs & Athletics**

Athletics serves as the first major contact that some stakeholders and constituents have with UAF and it is also a community engagement opportunity and vehicle for many members of the Fairbanks and surrounding communities.

The UAF Athletics program generates brand identity, awareness and marketing for the University. The highly visible program increases the number of prospective student applications, bolsters alumni participation and encourages and facilitates giving to the University through various philanthropic initiatives.

All Athletics departments at all National Collegiate Athletic Association (NCAA) divisions rest on and adhere to three pillars:

1. Scholarships
2. Capital athletics improvements
3. Endowments

UAF Athletics is planning to successfully achieve all of these pillars by creating a highly functioning UAF 501(c)(3) Athletics Association which will allow Athletics to set and achieve major fundraising goals and initiatives.

In an effort to change the landscape of Athletics at UAF and the community, Athletics was fully-integrated into the Division of Student Affairs under the vice chancellor of student affairs and athletics. In June 2019, Dr. Keith Champagne was announced as the Director of Athletics. Champagne's new title is the vice chancellor for student affairs and athletics.

Under Vice Chancellor Champagne's leadership, Athletics announced a five-year strategic plan. The plan includes increased community outreach and engagement, expanded efforts in fundraising practices, student-athletic development in graduation, academic achievement, wellness, and post-graduation success. This transformation aspires to find efficiencies and create a highly functioning athletic department by developing coordinated collaborative, cooperative ventures and partnerships with other parts of the university.

In November 2018, Usibelli Coal Mine announced a \$75,000 gift to support Nanook athletics. The donation funded the renovation of a racquetball court into a functioning weight room for student-athletes. Athletics hosted an open house in September 2019 for the public to meet the Athletics staff and tour the facilities.

In June 2019, plans were announced to transition the Alaska Nanooks hockey team from the Carlson Center to the Patty Ice Arena located on campus. Open meetings were held to promote community engagement in discussing the transition.

UAF Center for Student Engagement received the NCAA Choice Grant, a \$30,000 three-year grant that creates programs to educate student-athletes and all students about making healthy, responsible decisions around alcohol. The NCAA CHOICES Alcohol Education Grant Program provides funding for NCAA member institutions and conferences to integrate athletics departments into campus-wide efforts to reduce alcohol abuse.

In FY2019, UAF Center for Student Engagement received a \$30,000 grant from the Fairbanks Wellness Coalition and the Statewide Coalition on Suicide Prevention to provide the campus and community with a robust Question, Persuade, and Refer (QPR): Suicide prevention training program. In FY2020, CSE will receive an additional \$10,000 to continue the training on campus.

In alignment with the institutional goal to "modernize the student experience", UAF's student radio (KSUA) and newspaper (Sun Star), moved into the student union into a brand new suite. The suite contains a new state of the art broadcasting and engineering space and features a large collaborative working environment for students. This new space and unit configuration is now known as ASUAF Student Media.

Nanook Recreation is a self-support program, receiving student fees and auxiliary revenues earned through memberships, rentals and program fees. Nanook Recreation invested over \$700,000 into facility and equipment upgrades in the past 18 months.

Partnering with the UAF School of Management, Outdoor Adventures created the Backcountry Leadership Training program for summer 2020 which will serve as a launching pad for the new Bachelor's Sports and Recreation Business degree.

Outdoor Adventures completed the second year of coordinating field safety classes for UAF Researchers. Nearly 150 faculty, staff and student registrants participated in trainings ranging from snow machine safety and crevasse rescue to swiftwater rescue and wilderness first-aid.

Intramurals, group fitness, and court reservations all show continued growth as Nanook Recreation continues to develop relationships with community clubs like Fairbanks Tennis Associations, Hockey Club Fairbanks, Pickleball, Alaska Seniors Games and Fairbanks North Star Borough schools.

Updates were made to all residence halls to prepare for the 2019-2020 academic year and include removing credit and GPA requirements, expanding gender-inclusive room options, revamping a gender-diversity living-learning community (LLC) and launching several new LLCs in Bartlett, Moore, and Skarland Halls.

### **eCampus**

UAF continues to focus on serving the online education needs of Alaska and is committed to developing more online courses and programs to serve our students. To this end, eCampus achieved 10.9 percent growth in student credit hours over the previous academic year, generating 39,083 student credit hours for FY2019. In fall 2019, more than 33 percent of UAF's student credit hours were delivered through eCampus for a total of 20,396, an increase of 15 percent from the fall 2018 semester.

Proposals to fund the development of online STEM courses and programs were approved in 2017 and 2018; the first of those courses are being offered this fall. In addition, eCampus has added the following to its list of fully online programs: Bachelor of Applied Management, B.A. in Communications, B.A. in History, B.A. in Sport and Recreation Business, M.A. in Arctic and Northern studies, "Blue" MBA in Fisheries, Marine Biology and Oceanography. UAF offers more than 42 fully online asynchronous programs.

The new eCampus Advantage dual enrollment program began offering competitive package pricing and support services to high-achieving high school students, providing the opportunity to take online courses for both high school and college credit. Twelve school districts signed on for fall 2019, and 111 high school students are currently enrolled in 54 courses.

### **Research**

UAF continues to excel as a research powerhouse in high-latitude science and engineering. In FY2019, grant-funded research expenditures increased to \$104.3 million from \$101.0 million for FY2018. The major source was federal (70 percent). UAF institutional funds accounted for 26 percent, the State of Alaska accounted for 1.5 percent, and private and other sources were 2.5 percent. The majority of research expenditures occurred in the state, making UAF research an economic driver for Alaska. In addition, in FY2019, UAF researchers secured almost \$218 million in grants and awards, which will be utilized over several years in the near future. These funds will be applied to address major problems and challenges that limit growth and development in Alaska and also assure a productive future for research at UAF.

Christopher Maio was awarded an NSF CAREER grant titled "Building research and decision making capacity in the Arctic through deciphering storm-induced sediment dynamics and synergistic Alaska Native coastal science education" with the full budget request of \$800,000. The project includes extensive field work at four sites in western Alaska, a new coastal hazard online course, advanced sediment dating instrumentation in the Arctic Coastal Geoscience Lab (<https://acgl.community.uaf.edu/>), an undergrad intern program and multiple graduate students.

UAF was a leading recipient of funds under Navigating the New Arctic (NNA), one of the U.S. National Science Foundation's 10 Big Ideas, which embodies the foundation's forward-looking response to the profound challenges in Arctic regions.

- NNA Track 1: Collaborative Research: "ARC-NAV: Arctic Robust Communities — Navigating Adaptation to Variability," Principal investigator Andrew Mahoney. Award amount: over \$579,000.
- NNA Track 1: Collaborative Research: "The Permafrost Discovery Gateway: Navigating the new Arctic tundra through Big Data, artificial intelligence, and cyberinfrastructure," PI Anna Liljedahl. Award amount: over \$881,000.

- NNA Track 1: Collaborative Research: “Landscape evolution and adapting to change in ice-rich permafrost systems,” PI Donald Walker, and co-investigators Gary Kofinas, Vladimir Romanovsky, Yuri Shur, Anna Liljedahl. Award amount: \$3 million.
- NNA Track 1: Collaborative Research: “Resilience and adaptation to the effects of permafrost degradation induced coastal erosion,” PI Vladimir Romanovsky, and Co-Is Dmitry Nicolsky and Louise Farquharson. Award amount: over \$1.2 million.
- NNA Track 1: Collaborative Research: “Arctic Urban Risks and Adaptations (AURA): A co-production framework for addressing multiple changing environmental hazards,” PI Dmitry Nicolsky, and Co-Is Peter Bieniek and Louise Farquharson. Award amount: over \$571,000.
- NNA Track 1: Collaborative Research: “Sustainably Navigating Arctic Pollution Through Engaging Communities (SNAP-TEC),” PI William Simpson, and Co-Is Laura Conner, Nathan Kettle and Jingqiu Mao. Award amount: over \$964,000.
- NNA Track 2: “Atautchikkun Ilitchisukluta (Coming together to learn): Co-producing knowledge across the Northwest Passage,” PI Courtney Carothers, and Co-Is Matthew Wooller, Seth Danielson, Peter Westley and Jessica Black. Award amount: over \$249,000.

The Geophysical Institute and Wilson Alaska Technical Center at UAF were designated as a University Affiliated Research Center (UARC) for the Department of Defense to conduct research and development in the geophysical detection of nuclear proliferation. The UARC was awarded a sole-source, five-year \$46.7 million contract and counts among its government customers the U.S. Air Force Technical Applications Center, the U.S. Defense Threat Reduction Agency, the U.S. National Geospatial Intelligence Agency, and the Office of the Assistant Secretary of Defense for Threat Reduction and Arms Control. The Wilson Alaska Technical Center also operates seismic and acoustic stations in support of the national technical means of verification with more than 20 stations spanning the globe from Alaska to Antarctica.

The Alaska Volcano Observatory (AVO) had a successful field season and completed major upgrades to its geophysical monitoring network. AVO, a joint program of the U.S. Geological Survey, University of Alaska Fairbanks Geophysical Institute, and Alaska Division of Geological and Geophysical Surveys, recently received \$12 million from Congress to upgrade its aging monitoring equipment. Volcanology researchers at UAF were also awarded a \$2.5 million grant from the National Science Foundation to help better forecast volcanic eruptions in Alaska.

The Alaska Earthquake Center continues to focus on the Anchorage earthquake, its impacts and its aftershocks. The center has secured \$5 million in federal and corporate funding for FY2020. These resources are being used to lead research and develop tools that benefit Alaskans. Funds also support the operations of Alaska's seismic monitoring network. Recent highlights include the rollout of the [tsunami.alaska.edu](https://tsunami.alaska.edu) web tool to enhance tsunami planning in coastal communities and the sponsorship of a three-day 150-person symposium to assess the lessons learned from the Anchorage earthquake (<https://earthquake.alaska.edu/eqsymposium>).

Alaska Center for Unmanned Aircraft Systems Integration (ACUASI) and its partners conducted the nation's first unmanned aircraft flight under the Federal Aviation Administration's small unmanned aircraft regulations that did not require human eyes to see the aircraft during its flight over the trans-Alaska pipeline north of Fox at the end of July. This beyond-visual-line-of-sight flight is one of the first steps towards proving the ability of technology to prevent unmanned aircraft from colliding with manned aircraft and opening Alaska's airspace to routine unmanned aircraft operations.

ACUASI received FAA permission for the UAF/University of Hawaii/AeroVironment/Softbank team to fly the Hawk30, a 234-foot wingspan unmanned aircraft designed to deliver 5G communications to remote regions, up to 80,000 feet off the island of Lanai. This effort is under the umbrella of the FAA's University of Alaska UAS Test Site, a.k.a. the Pan-Pacific UAS Test Range Complex.

Uma Bhatt, atmospheric sciences professor for the College of Natural Science and Mathematics, developed a new method of forecasting the likelihood of Alaska wildfires. The ability to predict higher or lower fire activity will aid fire managers in the allocation of shared staff and resources with the Lower 48. While predictive tools exist in the Lower 48, this is one of the first seasonal forecasting products of its kind in Alaska.

The UA Museum of the North (UAMN) holds world-class collections totaling more than 2.2 million objects. Based on current holdings, and compared to other similar collections worldwide, UAMN has the largest marine mammal collection, the largest polar dinosaur collection and one of the largest frozen tissue collections. Over 400 peer-reviewed articles have used UAMN collections in the last five years alone.

The College of Fisheries and Marine Science (CFOS) recently acquired the new state-of-the-art, 40-foot near-coastal research vessel *Nanuq*. Commissioned in 2019, the vessel boasts a 1,000-pound hydraulic A-frame, a dive platform and a cruising speed of 20+ knots. On board, researchers will find a basic galley, a multi-use bench space and four bunks for berthing. With her 13-foot aft deck, *Nanuq* is designed to accommodate the deployment of a wide variety of equipment to support oceanographic and marine biology research, including conductivity-temperature-depth rosettes, plankton nets, moorings and tow sleds. The vessel can be reserved and utilized by academic and research-oriented organizations seeking to further the Seward Marine Center mission of research and education.

Five UAF researchers are taking part in the Multidisciplinary drifting Observatory for the Study of Arctic Climate (MOSAIC), the world's largest and most comprehensive expedition to the central Arctic Ocean. On Sept. 20, 2019, Rob Rember and Marc Oggier embarked for the first leg of the yearlong expedition, which will anchor an icebreaker in the sea ice to capture the closest-ever look at the Arctic in an attempt to understand why it is warming faster than any other region on the planet.

The International Arctic Research Center released Alaska's Changing Environment, which compiles observations of physical and biological change in and around Alaska. The new publication, intended for a general audience, uses visualizations and photos to demonstrate monumental shifts in temperature, sea ice, glaciers, permafrost, plants, animals, the ocean and other areas over the last five years.

Keith Cunningham, a researcher affiliated with the Scenarios Network for Alaska and Arctic Planning at UAF's International Arctic Research Center, patented a new technique that urban planners and tax assessors can use to track taxable infrastructure.

UAF researchers Claudine Hauri and Andrew McDonnell were awarded \$1.25 million to develop a new carbon sea glider capable of sampling carbon dioxide concentrations and other oceanographic parameters to monitor ocean acidification in Alaska's coastal waters.

The Center for One Health Research (COHR) at UAF will host an international conference March 11-14, 2020 entitled One Health, One Future. The conference will be co-hosted with the U.S. Department of State and feature keynote, abstract and poster presentations from stakeholders across the circumpolar North. COHR is also pleased to announce the formal approval of the One Health master's degree program, which will enroll students beginning in fall 2020. In partnership with PetSmart Charities and Colorado State University, COHR has begun the Hub Outreach Program (HOP) in the Yukon-Kuskokwim Delta this summer to provide free pet neuters, vaccines and parasite control. The area experiences seven times the national average of dog bites upon children, and its prevalence of rabies is among the highest in the country.

Stacy Rasmus, Arleigh Reynolds and Evon Peter, in a collaboration between the Center for Alaska Native Health Research, the Center for One Health Research, and the College of Rural and Community Development, have submitted a proposal to the MacArthur Foundation under the 100&Change program. The program awards the recipient \$100 million to address an urgent social issue. The UAF investigators have submitted a proposal to address suicide in indigenous communities across North America, northern Europe and the Pacific Islands using indigenous knowledge and culture to support community strengths that will build resilience and protection against suicide. This month, the team was notified they have made the top 500 applicant pool. Within the next few months, this pool will be cut to 100, from which 10 finalists will be selected. Each finalist will receive \$10 million, and the winning proposal will be awarded \$100 million.

Gabe Wolken testified on July 11, 2019, before the U.S. House of Representatives Committee on Science, Space and Technology. He offered his expertise on how evidence-based decision-making is needed to understand how glaciers are changing and impacting Alaskans. Wolken holds a joint appointment with UAF's Alaska Climate Adaptation Science Center and the Climate and Cryosphere Hazards Program at the Alaska Division of Geological and Geophysical Surveys.

The U.S. Patent and Trademark Office issued a patent in December for a scalable reactor to Agricultural and Forestry Experiment Station and School of Natural Resources doctoral student Jonathan Kamler. Kamler designed a method to process and gasify wet organic waste, turning it into usable heat. He is working with additive manufacturing experts to develop a prototype.

The Fairbanks Experiment Farm operates the longest continually running weather observation station in Alaska. The station was one of four long-term observation stations in the U.S. that the United Nation's World Meteorological Organization honored in 2018. Data, which have been collected since 1911, are valuable to scientists and engineers.

Jessie Young-Robertson, a forest ecologist with the Agricultural and Forestry Experiment Station, is identifying when the water content in trees is lowest, along with the environmental factors that influence it. Her research could help firewood users understand how harvesting at the right point will affect the time needed to season their wood.

Vegetable variety trials conducted at agricultural experiment farms in Fairbanks and Palmer help identify the best varieties to grow in those areas. Varieties will continue to be evaluated for at least two more seasons.

Agronomist and soil scientist Mingchu Zhang developed an interactive computer program for peony growers to guide fertilizer use and nutrient management.

Four new Centennial postdoctoral fellows were hired at UAF to conduct leading-edge research in collaboration with faculty mentors. They are: Andrew Balternsparger, UA Museum of the North; Donald Butler, Department of Anthropology; Charmain Hamilton, Institute of Arctic Biology; and Jennifer Questal, College of Fisheries and Ocean Science.

Reindeer managed by the Agricultural and Forestry Experiment Station were transferred to the Stevens Village tribe's reindeer farm near Delta Junction to help establish a reindeer meat industry in Interior Alaska. This program will stimulate diversity in Alaska's economy while enabling continued research in reindeer husbandry.

UAF has been consistently ranked as Tier 2 (high research activity) University and continues to aspire to move to a Tier 1 status in the Carnegie Classification of Institutions of Higher Education.

UAF, through its Center for Innovation, Commercialization, and Entrepreneurship (Center ICE), is working under a grant from the U.S. Economic Development Administration to build a new investment fund that will provide early stage capital to Alaska startup companies. One such startup may be Aquagga, which recently won "Best New Pitch" at the Accelerate Alaska Conference and next is heading to Iceland to participate in Harvard Kennedy School's Arctic Innovation Lab.

## **Facilities**

In March 2019, Julie Queen was appointed interim vice chancellor for administrative services with oversight over fire, police, environmental health, safety and risk management, IT, financial services, and facilities services. Queen previously served as director of the UAF Office of Management and Budget and associate vice chancellor for financial services.

UAF's 2019 Campus Master Plan, which provides a strategic approach to facilities improvements, received UA Board of Regents' support at its June 2019 meeting. The new plan is the result of a rigorous data-driven process beginning in April 2018 with a detailed analysis of current facility conditions, classroom utilization and enrollment trends. The analysis based its long-term campus needs on the Board of Regents' goals for enrollment and research expenditures in 2025.

UAF has made significant progress in reducing off-campus leases by moving units into space on the Fairbanks campus and downsizing the facility footprint through sales and selective demolition of some buildings. Reducing the footprint allows UAF to reduce its total cost of ownership from ongoing costs associated with building maintenance, insurance, custodial and utilities, while contributing to the increased utilization of on-campus space.

With a focus on modernizing the student experience, UAF revitalized many of its general-use classrooms on the Fairbanks campus and some public areas at the Community and Technical College. As safety is always a priority, UAF replaced worn and unsafe building entries and added electronic locks for improved security.

### **Gifts**

UAF raised \$6.7 million in private gifts in FY2019, an 11 percent increase from FY2018. Total donors decreased by 25 percent compared to FY2018 due to a change in how KUAC donors are counted.

UAF also was the recipient of planned and estate gifts from alumni and friends totaling nearly \$11 million. This included a \$2.8 million gift from the estate of alumnus James Pruitt '73, which created an endowed chair at the School of Management. Pruitt, a graduate of the school, died in 2018. He also left more than \$330,000 to the UAF Alumni Association. Other estate gifts realized in FY2019 included \$2.3 million from the late Grace Schaible '49 to benefit the Geophysical Institute and \$5.6 million from the late ornithology professor Brina Kessel-Roof to benefit northern ornithology.

Other major individual giving included Ted W. Tisdale, to create the Ted W. Tisdale Scholarship in support of students enrolled at the UAF Community and Technical College; Charles '74, '88 and Geraldine Collins '74, '87, who created the Charles Malcolm & Geraldine Vrbka Collins Geology Scholarship; and Alan R. Straub '57, who gave to the Alan Straub Student Ice Arch Project, the Alan Straub Student Competition Support Fund and the Alan Straub Civil Engineering Scholarship.

Corporate and foundation giving to UAF in FY2019 was strong, with gifts including a King Air 200 valued at \$600,000 from Bering Air of Nome; \$300,000 from Ocean Peace; and \$290,000 from Hilcorp Alaska. Other gifts came from ConocoPhillips Alaska, Usibelli Coal Mine, First National Bank, the Pollock Conservation Cooperative, Wells Fargo, Rasmuson Foundation and Alyeska Pipeline Service Co.

UAF hosted the Blue and Gold Celebration in February to honor recipients of the Emil Usibelli Distinguished Teaching, Research and Service Awards to professors Patty Martinez Meritt, Matthew Wooller and Charles N. Dexter, respectively; and to honor alumnus Neal Fried '78 as Distinguished Alumnus and present Denise Wartes '96, '01, '07 with the William R. Cashen Service Award. Proceeds of the celebration support the UAF Blue and Gold Scholarship Endowment.

More than 650 privately funded scholarships contribute \$1.3 million each year to UAF students. UAF celebrated donor generosity at the annual Scholarship Breakfast in April.

### **Key RDU Challenges**

- Managing the current and projected shortfall in state funding.
- Managing negative and often ill-informed media coverage.
- Meeting instructional needs for many programs across campus, made difficult by unfilled faculty vacancies, faculty non-retentions and a reduced number of adjuncts necessitated by funding reductions. As a result, fewer course sections of high enrollment courses are being offered, and required courses are being offered less frequently.
- Maintaining or increasing research accomplishments, when funding reductions are forcing elimination of tenure-track positions in favor of a smaller number of term instructional and adjunct positions, increased teaching loads, and reduction of funding available for research equipment and staff. These changes will reduce the ability of UAF to secure competitive grants and contracts and to maintain leadership in Arctic research.
- Maintaining diverse funding sources as the federal grant landscape continues to tighten.
- Maintaining research journal and database subscriptions, due to cost increases that continue to occur at rates substantially exceeding general inflation. Lack of additional funding for online subscriptions will require ending access to reference materials needed by students, faculty and researchers.
- Carrying out necessary administrative support, student services, facilities operations and maintenance, and other work, given the decreased number of UAF employees.
- Maintaining enrollment and tuition revenue, given reduction in faculty numbers, scholarships and graduate teaching assistantships.

- Making sufficient investments in deferred maintenance without severe impacts to operating funds while state general funds are steadily declining and capital budgets are lean, limiting the ability to address large scale projects.
- Limited access to broadband internet continues to limit Alaska's learners' access to online education opportunities through much of Alaska (including in urban areas).

## **Significant Changes in Results to be Delivered in FY2021**

### **Access and Enrollment**

UAF is implementing Strategic Enrollment Planning, a data-informed process that aligns an institution's fiscal, academic, co-curricular and enrollment resources within a changing environment to accomplish its mission and ensure long-term enrollment success and fiscal health. UAF launched the process in September 2018 with over 150 participants, 16 action planning groups and 71 action plans presented. Twenty-three initiatives have been implemented. This iterative process will continue and become part of the strategic fabric of UAF.

Examples of enrollment efforts include:

- websites with search engine optimization (SEO) and benefits-driven content
- deployment of regional admissions counselors in the Lower 48
- creating additional eCampus programs
- improved student experience and efficacy of institutional scholarships
- increased direct outreach to non-enrolled students
- improved financial aid communication and financial aid leveraging
- comprehensive support and initiatives for military-affiliated students
- investment in Honors College
- investments in academic advising and increased use of Nanook Navigator

UAF is expanding its dual enrollment opportunities with the eCampus Advantage Program and conversations with the Fairbanks North Star Borough School District to improve access to local high school students and students throughout the state.

### **New, Suspended and Deleted Programs**

Two new programs were added in the School of Management: the Bachelor of Applied Management (BAM) and the Bachelor of Sport and Recreation Business (BSRB). The BAM degree is designed to help students improve job performance, pursue management-track career opportunities or launch their own businesses. The BSRB degree is designed to prepare students for managerial positions in professional sports, fitness clubs, athletics equipment merchandising, tourism, and intramural and recreational sports. By spring 2019 (their second semester being offered), the BAM degree had 24 declared majors and the BSRB had six.

The general science B.S. degree was suspended due to low enrollment following the recommendation of Special Program Review. The requirements of the general science program included the requirement that students complete all the requirements of a B.S. in biological sciences, chemistry, geosciences or physics. Thus, a teach-out is not necessary. Students wishing to achieve the educational goals of the general science major can achieve them instead by double-majoring or majoring and minoring in multiple science areas.

After being suspended in 2015, the B.A. in philosophy was reinstated. UAF faculty collaborated with the Philosophy Department at UAA to share their respective disciplinary expertise and resources, broaden the course offerings to both student populations and have two distinct programs that utilize and coordinate their complementary strengths in order to serve the student population at both campuses.

Since 2016, philosophy faculty at UAF and UAA worked across the campuses to enhance student educational experiences and program strengths. The collaboration so far has allowed students in both programs to take advantage of the complementary specialties of philosophy faculty at UAA and UAF and to provide healthier enrollment numbers, particularly in upper-division courses.

**Contact Information**

**Contact:** Michelle Rizk, Vice President, University Relations  
**Phone:** (907) 450-8187  
**E-mail:** marizk@alaska.edu

**University of Alaska Fairbanks  
RDU Financial Summary by Component**

*All dollars shown in thousands*

	FY2019 Actuals				FY2020 Management Plan				FY2021 Governor			
	UGF+DGF Funds	Other Funds	Federal Funds	Total Funds	UGF+DGF Funds	Other Funds	Federal Funds	Total Funds	UGF+DGF Funds	Other Funds	Federal Funds	Total Funds
<b>Formula Expenditures</b> None.												
<b>Non-Formula Expenditures</b>												
Fairbanks Campus	209,099.0	31,880.6	20,238.0	261,217.6	197,199.5	33,016.5	20,003.3	250,219.3	183,449.5	33,016.5	20,003.3	236,469.3
Fairbanks Organized Research	57,735.2	18,113.5	64,698.6	140,547.3	55,900.7	12,082.2	72,806.7	140,789.6	55,900.7	12,082.2	72,806.7	140,789.6
Bristol Bay Campus	1,521.4	205.9	1,331.7	3,059.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chukchi Campus	909.6	11.5	35.8	956.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
College of Rural and Comm Dev	6,958.1	151.8	304.9	7,414.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interior Alaska Campus	2,416.6	396.6	938.7	3,751.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kuskokwim Campus	4,169.0	255.0	147.1	4,571.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Northwest Campus	1,772.7	0.0	353.8	2,126.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
UAF Community and Tech College	11,293.4	0.0	13.5	11,306.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Totals</b>	<b>295,875.0</b>	<b>51,014.9</b>	<b>88,062.1</b>	<b>434,952.0</b>	<b>253,100.2</b>	<b>45,098.7</b>	<b>92,810.0</b>	<b>391,008.9</b>	<b>239,350.2</b>	<b>45,098.7</b>	<b>92,810.0</b>	<b>377,258.9</b>

**University of Alaska Fairbanks**  
**Summary of RDU Budget Changes by Component**  
**From FY2020 Management Plan to FY2021 Governor**

*All dollars shown in thousands*

	<u>Unrestricted Gen (UGF)</u>	<u>Designated Gen (DGF)</u>	<u>Other Funds</u>	<u>Federal Funds</u>	<u>Total Funds</u>
<b>FY2020 Management Plan</b>	132,969.4	120,130.8	45,098.7	92,810.0	391,008.9
<b>Proposed budget decreases:</b>					
-Fairbanks Campus	-13,750.0	0.0	0.0	0.0	-13,750.0
<b>FY2021 Governor</b>	<b>119,219.4</b>	<b>120,130.8</b>	<b>45,098.7</b>	<b>92,810.0</b>	<b>377,258.9</b>



**Daniel M. White  
Chancellor**

