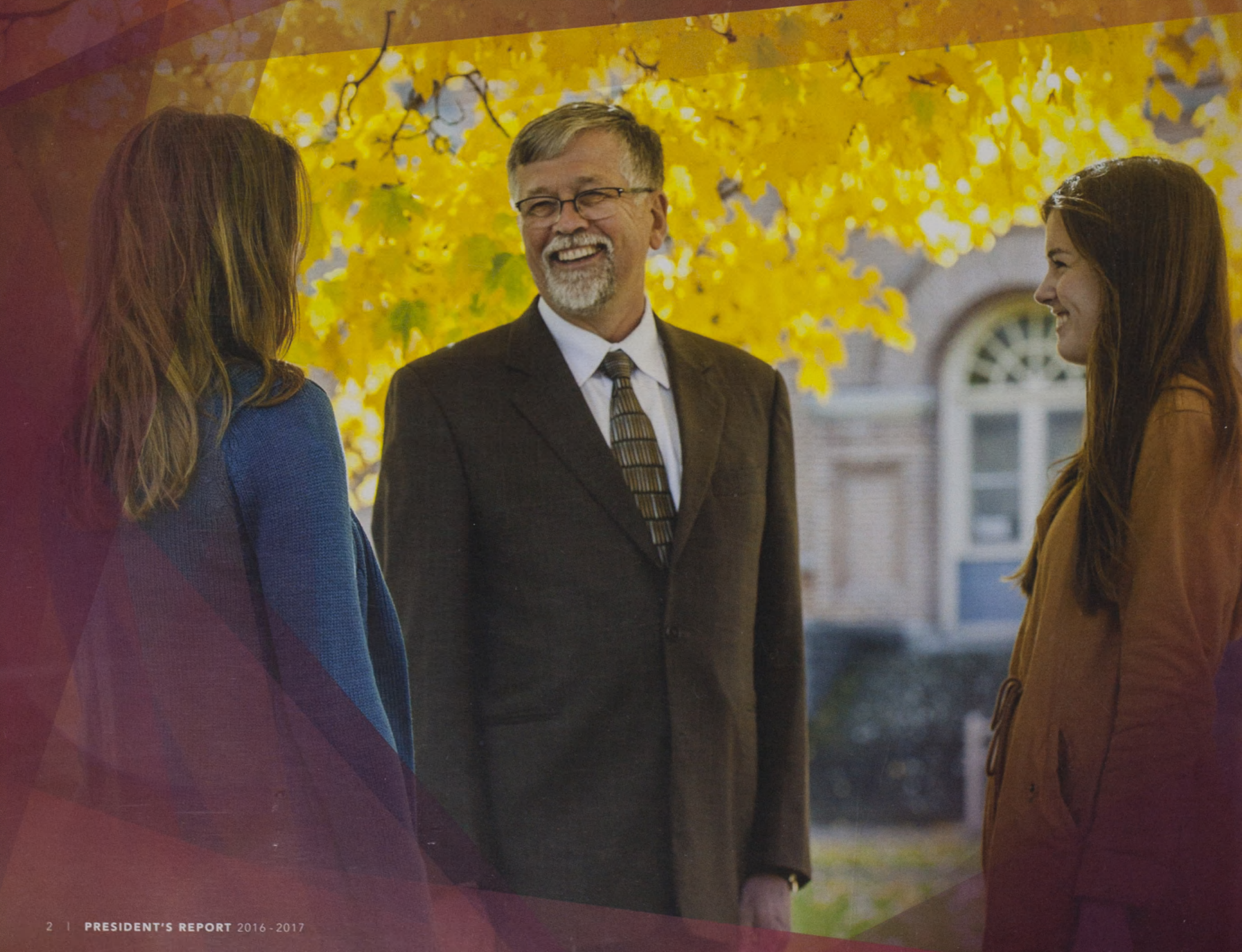


2016-2017 PRESIDENT'S REPORT

LIGHTING THE WAY



Welcome to the 2016-17 edition of the UM President's Report. The title, "Lighting the Way," describes how this great institution pushes forward the frontiers of knowledge – whether in the dance studio, on the Greenland ice sheet or the far reaches of space. It also represents all the dedicated employees, alumni and private citizens who have held this institution in their hearts and given of themselves to make UM a better place. Truly, they light the way for all of us.

This report brims with outstanding students who fill us with purpose and optimism. We just need more of them! To that end, we have adopted a new phrase, "Let's Go There," which means pursuing the amazing opportunities in front of us through our competitiveness in academics and athletics, our civic engagement and our proud diversity of thought and experience. It also means quite literally to "go there" – as in enroll at UM – and launch lives of impact, leadership and contribution. We all have a part to play in boosting enrollment, and I am delighted by the campus response to this challenge and appreciate everyone's hard work.

There was much to celebrate at UM during the past year. The University set new records for research and fundraising. Academic Analytics ranked our Wildlife Biology Program the best in the U.S. and Canada. Our students excelled in competitions involving the sciences and humanities. Our faculty members earned numerous accolades, including biology Professor Doug Emlen, who became the first Montanan elected to the American Academy of Arts and Sciences.

This report reflects "UM 2020: Building a University for the Global Century" – the strategic plan that has guided University decision-making for the past five years. That plan's strategic issues and core values have served us well, but the educational landscape has changed, and it's time to energize our goals and strategies. I have appointed a council to create a new strategic plan this year, and next year's report will unveil its work.

Today's world presents exciting and complex opportunities and challenges. Our vision is to prepare leaders, citizens and professionals who contribute to a vibrant and prosperous democracy. That's our vision, now let's go there.

Royce C Engstrom

UM Strategic Issues

1. Partnering for Student Success
2. Education for the Global Century
3. Discovery and Creativity to Serve Montana and the World
4. Dynamic Learning Environment
5. Planning-Assessment Continuum

Core Values

1. Leadership
2. Diversity
3. Engagement
4. Sustainability

For more information about the strategic plan and online academic assessment report, visit umt.edu/data.

For updated University news, visit umt.edu.

Produced by

University Relations, the President's Office, the Provost's Office, the Office of Integrated Communications and Printing & Graphic Services.

Printed on recycled paper with eco-friendly inks.

Call 406-243-5914 or email cary.shimek@umontana.edu

for more information.

PARTNERING FOR
**STUDENT
SUCCESS**

'It feels like everything
came together the
right way'

Harold and Priscilla Gil

EDUCATION
FOR THE
**GLOBAL
CENTURY**

'A Place for Exploring
the World'



To say Sachi Sinhara has thrived as a student in UM's School of Journalism is an understatement. Sachi came to Missoula about five years ago from her home in Sri Lanka. She also spent time studying English as a third language at the Queen's University in Belfast, Northern Ireland. The daughter of photojournalists who have documented Sri Lanka's history for the past 40 years, Sachi landed on campus with a worldly mindset not typical of most UM undergrads.

By taking advantage of numerous opportunities UM students have to travel abroad, however, Sachi's already-impressive view continues to grow. And grow. And grow.

She traveled to Nicaragua one summer and Kenya the next. This past summer was spent in Germany as part of the J-school's Missoula to Berlin Project, which sent 18 students to Berlin to report on one of the biggest news stories of the past few years: the European refugee crisis.

"The moment I heard about the project, I was in," Sachi says. "That's the best way I learn, by going into a field where it's something I want to do and am passionate about."

UM Associate Professor Henriette Löwisch, one of the project leaders, says Sachi was key in donor relations and fundraising.

"If she chooses not to be a journalist, she will be a natural in the development world," Löwisch says.

Once the project was complete, yet another opportunity presented itself to Sachi and two other UM students: They landed three-week internships with ZDF, a major television station in Berlin. There she helped plan, shoot and produce pieces that aired nationally.

Remarkably, she was in the newsroom when the Brexit story broke in late June. So in a matter of six weeks, Sachi – a UM student – worked on the front lines of two major international stories: the refugee crisis and Brexit.

"UM is a place for exploring the world," she says, "and it prepares you to do something more."

Graduate/Advanced Degrees Awarded
2016 STATUS: 830; 2020 TARGET: 850



UM Lands Its Largest Single Gift Ever

In October, the UM Foundation announced that it received a pledge from Bill Franke and his family in the amount of \$24 million that will benefit the College of Forestry and Conservation and the Global Leadership Initiative. This will become the largest single gift ever received by UM, pending Montana University System Board of Regents approval.



Health and Medicine Initiative Born

The University launched a new UM Health & Medicine initiative in February to foster new advances in health education and research. Montana will need 40 percent more health care workers in the next decade. The new initiative will recruit students into health professions and create new degree programs to meet employment demands, boost collaboration of UM's instructional, research and clinical expertise in health care, and facilitate robust research.



Report: Griz Athletics Boosts Economy

A report titled "The Economic Contribution of Grizzly Intercollegiate Athletics" prepared by UM's Bureau of Business and Economic Research found that the operation of Grizzly Athletics provides a significant economic boost to Missoula, resulting in a more prosperous local economy. Using data from 2013 to 2015, study authors reveal that UM athletics recently earned \$22.9 million in annual revenue, with 79 paid employees and hundreds of student-athletes.

DISCOVERY AND CREATIVITY

TO SERVE MONTANA
AND THE WORLD

'We couldn't
be more excited
about our current
trajectory'

For a process as seemingly complicated as building a molecule, the initial stages are surprisingly simple.

"It really just starts with a bit of an intuitive flash, followed by writing those ideas down on paper." That's how Casey Massena, a UM doctoral student in chemistry, describes the beginning moments of what led to the development of an entirely new type of molecule in a UM laboratory.

Using halogen bonding, Massena and his co-workers became the first to wrap three separate molecular strands around iodide, which is the mineral added to table salt. This triple helix could eventually be developed for medical applications, such as treating cystic fibrosis, a genetic disease that causes mucus to build up in the airways of the lungs.

"It's exciting and humbling to work on something that could possibly lead to developing synthetic channels to replace the affected airways in cystic fibrosis patients," Massena says.

Massena's breakthrough is just one example of UM's growing research portfolio. In the 2016 fiscal year, UM brought in \$87 million in funding to support Montana research, entrepreneurship and statewide outreach – exceeding the previous year's record total of \$83 million.

In addition to designing new molecules, UM researchers and scholars are using these funds to create professional trainings to improve mental health among children living in rural communities. They also are tracking elk to better understand their migratory patterns and pursuing an array of other newly funded research efforts that promise to create local economic opportunity while addressing questions and challenges of global significance.

"We have a growing reputation as a research university, with nationally and internationally renowned scientists," says Scott Whittenburg, UM vice president of research and creative scholarship. "Our students get to work in amazing labs and learn from great researchers. At the same time, this activity spurs entrepreneurship and attracts new companies to power our economy. We couldn't be more excited about our current trajectory in funded research."

Volume of Grant and Contract Expenditures
2016 STATUS: \$78.6M; 2020 TARGET: \$100M



Research Sets Funding Record

UM brought in \$87 million in funding during the past fiscal year to support homegrown Montana research, entrepreneurship and statewide outreach, exceeding the last year's record total of \$83 million. University faculty members and staff also reached the new record through 684 submitted research proposals, which was almost 10 percent more than the previous year.



Broader Impacts Group Expands UM's Reach

UM recently created the Broader Impacts Group. BIG harnesses the University's research and creative scholarship to educate and inspire the state – especially its next generation – through nationally award-winning efforts like the spectrUM Discovery Area, We Are Montana in the Classroom, the Space Program Outreach Team, BOREALIS and innovateUM. In its inaugural year, BIG served more than 70,000 Montanans and received just over \$2.4 million in new funds.



Emlen Earns a Montana First

Doug Emlen, a UM biology professor, researcher and evolutionary biologist, became the first Montanan elected to the American Academy of Arts and Sciences this past spring. Emlen is one of 213 new members who constitute the Academy's 236th class, a group that includes some of the world's most accomplished scholars, scientists, writers and artists. He studies the evolution of animal weaponry such as horns and antlers, among other topics.

DYNAMIC LEARNING ENVIRONMENT

'It's definitely
the best in the
country'

UM's Jeremy Sunderraj
and a sedated wolf

Denver native Jeremy Sunderraj, 20, came to Montana for the wolves. And once he decided to study them, he found UM's Wildlife Biology Program.

"There's a ton of wildlife out here and a ton of outdoor opportunities, and they go hand-in-hand with the program," he says. "It's definitely the best in the country. I have no doubt in my mind."

In fact, Academic Analytics ranks UM's Wildlife Biology Program as the No. 1 place in the U.S. and Canada to study wildlife.

"It will get you where you want to be for sure," Sunderraj says.

For him, that place is in the field studying *Canis lupus*. He's been captivated by the carnivores ever since he first spotted wolves during a family vacation to Yellowstone National Park. So he returned to the park to work every summer since turning 16. In his spare time, he sought out wolves and the biologists who study them.

His first year at UM, Sunderraj connected with wildlife biology Professor Mark Hebblewhite, who is renowned for his own wildlife research. Together with Yellowstone National Park they developed an internship for Sunderraj to track wolf sightings in Yellowstone.

"Jeremy learned about analysis and then presented it to park management," Hebblewhite says. "I had this big conference call with Yellowstone but also Denali National Park, and I pulled Jeremy in because the work he did was extremely relevant for park management. They liked the information so much, and this was a really amazing way for Jeremy to go above and beyond classroom learning."

Sunderraj's Yellowstone experience gave him the chops to also work for Montana Fish, Wildlife and Parks over the summer, radio-collaring wolves in western Montana.

"He'll finish here having worked with state agencies, federal agencies and done his own independent studies – from the field to reporting," Hebblewhite says. "He'll have a really strong foundation working in wolf conservation and management. It's a competitive field, yet he'll be an extremely competitive graduate."

Student:Faculty Ratio

2016 STATUS: 17.2:1; 2020 TARGET: 18.0:1



Generously funded through private donations, the 31,411-square-foot building is home to new executive education offerings, the Global Leadership Initiative and the UM Foundation. UM alumni Harold and Priscilla Gilkey made a generous lead gift in support of the project. They were among the 129 donors who provided funds to underwrite construction.



Medicine Residency Graduates First Class

UM celebrated the graduation of its inaugural class of family physicians, ushering in a new phase for the Family Medicine Residency of Western Montana. In July 2013, the program welcomed its inaugural class of 10 residents, and in July 2016, the program graduated its first class. Five of the 10 graduates accepted employment in Montana and will work in rural and underserved areas.



Innovative GLI Sends Students Worldwide

Dozens of students participating in UM's Global Leadership Initiative took their academic journey on the road this past year, traveling to locations like Argentina, Denmark, Vietnam, Zambia and beyond. GLI is a program that engages students in interdisciplinary coursework, out-of-the-classroom experiences and support that enables them to address the challenges faced by a global society.



PLANNING- ASSESSMENT CONTINUUM

'Data can empower us
to change for the better'

Dustin Monroe is a human dynamo. Only 35 years old, the Browning native and father of three has seen combat with the U.S. Army in Iraq, earned two UM degrees, worked with tribal governments and led nonprofits from the local to national levels. He also created his own organization, Native Generational Change, which works to improve intergenerational mobility for Native American communities.

Monroe, a member of Montana's Assiniboine and Blackfoot Tribes, already has a master's in public administration, but he was lured back to campus to earn UM's new master's degree in business analytics. Demand for data analytics has skyrocketed, and the degree immerses students in big data analysis, business statistics, data mining and more. Starting salaries hover around \$80,000.

"It lets you tell a story with numbers and create value with data," he says. "I've seen people basically prey on tribal communities by charging

outrageous fees for these skills. With this degree, I can go back and help my entire community. It's about empowerment."

Monroe says the field has exploded because of new storage technologies and the cloud, which make data more accessible than ever before. He's especially interested in predictive analytics, which uses data to predict future trends. There are 15 students in the first business analytics cohort, and Monroe describes them as "the best of the best in the business school."

UM measures progress through its Planning-Assessment Continuum, and Monroe could use his degree to track the nearly 140 metrics involved in this process. But he envisions working with nonprofits, small businesses or tribal governments.

"Our communities will only be changed by us, not others," he says. "Data can empower us to change for the better."

STRATEGIC ACHIEVEMENT REPORT CARD

MEASURE

2016 STATUS*

2020 TARGET

PARTNERING FOR STUDENT SUCCESS

| | | |
|--|--------------|-------|
| Average High School GPA of Entering Freshmen | 3.33 (↑.02) | 3.50 |
| Annual Retention Rate | 73% (↔0%) | 83% |
| Six-year Graduation Rate | 46% (↓4%) | 60% |
| Fall to Spring Main Campus Retention Rate | 87.4% (↓.3%) | 93% |
| Undergraduate Degrees Awarded | 2,109 (↑224) | 2,100 |
| Missoula College Degrees Awarded | 488 (↓18) | 500 |

EDUCATION FOR THE GLOBAL CENTURY

| | | |
|---|---------------|-------|
| Graduate/Advanced Degrees Awarded | 830 (↑ 45) | 850 |
| Study Abroad Experiences | 339 (↓ 44) | 600 |
| Participation in Service Learning | 3,214 (↑ 144) | 2,000 |
| Underrepresented Student Body Ethnic Groups | 12.7% (↑.6%) | 10% |
| Ranking of Peace Corps Volunteers | 2nd (↑4) | 2nd |
| International Students | 648 (↓67) | 600 |

DISCOVERY AND CREATIVITY

| | | |
|---|------------------|--------|
| Volume of Grant and Contract Expenditures | \$78.6M (↑\$14M) | \$100M |
| Number of Publications (ISI Web of Knowledge) | 603 (↑3) | 750 |
| Patent Applications, Licenses, Inventions, Spin-Offs, Start-Ups | 66 (↑24) | 40 |

DYNAMIC LEARNING ENVIRONMENT

| | | |
|------------------------------------|---------------|-----------------------------------|
| Student:Faculty Ratio | 17.2:1 (↓.8) | 18:1 |
| Dual-Credit Enrollment | 456 (↓12) | |
| Montana Digital Academy Enrollment | 6,946 (↓165) | 15,000 |
| Online Student Credit Hours | 28,797 (↑681) | Top quartile of peer institutions |

PLANNING-ASSESSMENT CONTINUUM

| | | |
|----------------------------|--------------------|--------|
| Instructional Expenditures | 51.2% (↑.2%) | 50% |
| UM Foundation Endowment | \$167.3M (↑\$1.3M) | \$220M |

*Most recent fiscal/academic year data

↑ improved from last year, ↓ declined, ↔ no change

FACES OF STUDENT SUCCESS



Lillian Marie Alvernaz, a Dakota and Assiniboine student, grew up in Glasgow hearing the harsh stories of violence and abuse suffered by her ancestors and family members. These tales fueled her passion to prevent domestic violence and sexual assault against Native American women and children. Alvernaz graduated with honors from UM in 2013 with degrees in social work and Native American studies. Now in UM's law school, she wants to advocate for women in Indian Country with her legal education. She earned a Udall Native American Congressional Internship in Washington, D.C.; writes about Indian Law issues as staff for the Public Land and Resources Law Review; and is president of the Native American Law Student Association. She dreams of becoming a judge, running for office or teaching law.



Tess Brenneman has many adjectives thrown her way by her coach: good-natured, reliable, accountable, hard-working and competitive are just a few. In many ways the senior on the UM soccer team epitomizes the ideal student-athlete. A Kalispell native who carries a 3.9 GPA in psychology and health and human performance, she is a three time Academic All-Big Sky Conference selection. She also is an iron woman, starting every match since the beginning of her sophomore season and missing only 11 minutes as a junior and 40 as a senior. Off the field she volunteers with organizations such as Big Brothers Big Sisters of Missoula, the Flagship Program, Special Olympics of Montana, the Watson Children's Shelter and YMCA basketball. She plans to pursue a career that allows her to work with at-risk youth after graduation.



Caleb Chestnut has packed a lot of learning into his UM education. Maintaining a 3.99 GPA, the senior in finance and economics is part of the University's Davidson Honors College. Last year, he studied abroad in Korea, and he speaks Korean and French. This past summer, he was a Global Operations and Technology Finance intern with Nike Inc., where he helped track and analyze benefits and expenditures from \$1.5 billion in appropriations requests. Results of that project spurred high-level changes in Nike's appropriations process. Chestnut also is a member of the business school's CFA Research Challenge team, which competes in a global financial analysis competition for college students. In addition, he interned at Victory Capital Management in Denver in 2015, supporting sales initiatives and campaigns with database management support. He also is active in UM student government as an ASUM senator.



William Deacy had a spectacular career as a systems ecology graduate student at UM's Flathead Lake Biological Station. Advised by world-class researcher and former station director Jack Stanford, Deacy designed and executed a multiyear study of the foraging ecology of brown bears on Kodiak Island, Alaska. Using GPS collars, he studied where and when the bears foraged for salmon. He discovered the bears greatly extend their use of salmon by migrating from one fish run to another, a behavior dubbed "surfing the salmon red wave." In May, Deacy's research graced the cover of the high-profile journal Ecology. He also earned a 4.0 GPA at UM while working four years at the biological station as a graduate research assistant. Before that he worked as a biological technician for the National Park Service in Grand Teton National Park.



Zachary Falen has an entrepreneurial mind. A senior in marketing who maintains a 3.8 GPA, Falen won first place in UM's 27th annual John Ruffatto Business Startup Challenge. He earned \$15,000 to boost his startup idea, Bloom Content, which gives local businesses a convenient option for generating video, photo and graphic content. The company already has earned \$35,000 in revenue and is slated to beta launch in January. In 2015, Falen captured first place and \$7,000 in another business plan competition while a student at Westminster College in Utah. He also served as a lead developer at Missoula's PartnersCreative to create a recruitment tool for Deloitte, the world's largest professional services network. In addition, he recently attended the 2016 Forbes Under 30 Summit in Boston, described as the world's top gathering for young entrepreneurs and game changers.

FACES OF STUDENT SUCCESS



Chase Greenfield says UM offers one of the most autonomous student governments in the nation, and he has immersed himself in it. Greenfield, a 3.92-GPA double-major in English literature and philosophy, serves as business manager for the Associated Students of UM. This elected position manages a \$3.4 million budget, oversees funding for approximately 200 student groups and evaluates the budgets of a dozen student agencies. Greenfield chairs or serves on many ASUM and University committees and boards – everything from the Research and Creative Scholarship Fund to the Academic Standards and Curriculum Review Committee. He also meets with the UM President's Cabinet monthly and has been a strong voice for general education revitalization on campus. Being engaged and involved has never been an issue for him, as he also was an ASUM senator and works with the Montana Public Interest Research Group.



Joanna Kreitinger, a graduate student and native Montanan from Manhattan, was one of 48 people nationwide selected to receive a 2016 American Association of Immunologists Careers in Immunology Fellowship. The highly competitive fellowship provides Kreitinger with one year's salary to support her training in UM Professor David Shepherd's lab, which is housed in the College of Health Professions & Biomedical Sciences. Under Shepherd's leadership, Kreitinger will study immune cell development and contribute to a better understanding of the role the immune system plays in lung diseases. As a member of Shepherd's team, Kreitinger's research likely will contribute to the development of new drugs to treat diseases of the immune system.



Mariah McIntosh, a senior in organismal biology and ecology, scored major academic accolades during the past year. The Corvallis, Oregon, native, who also minors in climate change studies and wilderness studies, became UM's 39th Udall Scholar. That prestigious award goes to students committed to careers in the environment or Native students pursuing careers in tribal public policy or health care. She also earned an honorable mention in the Goldwater Scholarship competition – the top national award for undergraduate research in science, math and engineering. Working in the lab of UM researcher Lila Fishman, McIntosh studies the ecologically important interactions between the common yellow monkeyflower and a fungal symbiont. She believes that understanding the mechanisms and relationships governing functional ecosystems is critical to restoring the world's degraded ecosystems.



Madeline Mussman is one of 10 resident physicians selected from more than 800 applicants to be part of this year's Family Medicine Residency of Western Montana's intern class. She graduated in 2003 from UM with a bachelor's degree in sociology and then attended medical school at Pacific Northwest University of Health Sciences. She is completing her clinical training in towns all across Montana. Her aspirations to become a doctor were rooted in her desire to serve the people of Montana. "I was driving west on I-90, coming out of Butte with the Pintlers in the distance and dreaming about how I could best serve this great state. It seriously came to me in a flash: Become a doctor," she said. Returning to UM to complete her medical training has left her feeling like the "luckiest person."



Jackson Wagner, a junior in journalism, came to campus to become a better writer, and he's done just that. A proud Anaconda native with a love of sports, he has worked three years with the Grizzly Athletics Sports Information department. He's also been the voice of UM's soccer and volleyball teams for three years, and he's served as the beat writer for the tennis and softball teams. He also has tackled stories for UM's football and basketball teams, as well as articles for the Montanan, UM's institutional magazine. Now in his second full year at the Kaimin student newspaper, he serves as sports editor. He hopes his prodigious writing efforts on campus will pay off with a gig at a major newspaper after graduation, and he would love to work for an online site like The Ringer.

2016-2017 PRESIDENT'S REPORT

LIGHTING THE WAY