

# Gathering Together:

An overview of Native American outreach and education projects at MSU

#### **Table of Contents**

| Advisors support MSU vision 4                              |
|--|
| Career Services helps students 5                           |
| Rockin' the Rez tour visits reservations                   |
| Native American Studies at MSU 6                           |
| MSU senior hopes to continue science career                |
| Engineering wants to increase American Indian enrollment10 |
| Traditional Crow relationships help teach about health12   |
| Blackfeet curriculum honored by Smithsonian14              |
| Water study unites MSU, Little Big Horn College16          |
| Professor, student awarded for Chippewa-Cree plan18        |
| Programs help aspiring researchers, administrators20       |
| Reservation agent combines kicks with caring22             |
| Manufacturing experts help tribal businesses               |
| MSU arts groups portray Native American culture26          |
| Agriculture projects support tribal producers              |
| Tech projects preserve culture, history, health            |

Directory of MSU Programs...... 32-38

Native American Student Center: A lasting educational legacy...38

#### Dear Friends,

Thank you for taking time to browse through this booklet. We have included a variety of programs and partnerships that highlight the cooperative efforts of Montana State University and Montana's Native American community. From encouraging young Native American students to pursue careers in science and engineering and supporting them in their educational efforts, to partnering in economic development on reservations, you will see that MSU embraces Native American traditions and is committed to improving and expanding opportunities for American Indians.

I wish to acknowledge my gratitude to Henrietta Mann, my special assistant on Native American Affairs, for helping me to more deeply understand Native traditions and the unique needs of our Native American students. I am honored, as well, to have the services of some of the region's most respected tribal leaders on my Council of Elders. Because of their commitment, I am able to regularly listen, learn and share ideas regarding opportunities for MSU to partner in support of Native American students, communities and reservations.

While I'm very proud of all the programs shown on these pages, it is my genuine hope that this information provides inspiration, and opens the door for more partnerships, and creative initiatives. Please enjoy this publication and use the contact information to see how you can get involved.

Sincerely, Geoff Gamble, MSU President

**On the Cover:** MSU Nursing CO-OP student Billie Jo Brown. Photo by Loneman Photography.

The Caring for Our Own Program (CO-OP) in the MSU College of Nursing is designed to address the shortage of professional nurses in American Indian communities. Goals of the CO-OP program are to 1) Increase enrollment of American Indian nursing students in the College of Nursing at MSU 2) Develop a supportive network that will continue to nurture and support more American Indian nursing students through graduation, and 3) Rebuild the shrinking pool of American Indian nurses who are prepared through education for practice, management, leadership and graduate programs.

The College of Nursing Caring for Our Own Program involves educators, tribal leaders, and native health professionals in a reservation/university partnership. The project is funded through the Health Resources and Services Administration and the Indian Health Service to recruit, retain and graduate increased numbers of Native Americans from the College of Nursing with Bachelor of Science degrees in nursing.

# Advisors support MSU vision

In support of his goal to advance Native American education at MSU, university president Geoff Gamble appointed a special assistant to the president on Native American Affairs, and also established the MSU Council of Elders.

The MSU Council of Elders, which consists of respected, renowned tribal leaders from around the state and the region, advises and supports the president in his goal to advance Native American education at MSU. The group includes representatives from the Blackfeet, Crow, Northern Cheyenne, and Salish tribes, among others. The council meets on campus each fall and spring to learn about and comment on current programs and initiatives that affect Indian students.

Dr. Henrietta Mann was named as special assistant to the president and advises Pres.



Louis Adams of Arlee, of the Confederated Salish-Kootenai Tribes, is one of the Montana tribal leaders participating in the meeting of the MSU Council of Elders. In its two years of existence, the group initiated by President Geoff Gamble has seen the numbers of Indian students rise as well as progress in campus initiatives involving Native American students.

Gamble on university issues related to Native American students. Mann, an enrolled member of the Cheyenne-Arapaho Tribes of Oklahoma, was the first Endowed Chair in Native American Studies at MSU. Throughout her career, she has sought to make Native American studies a respected academic field, to educate non-Indians and make Indian students feel welcome in the world of the university.

Raised in rural Oklahoma, with Cheyenne as her first language, Mann earned a bachelor's degree in English at Southwestern Oklahoma State, a master's degree in English at Oklahoma State, and a doctorate in American Studies from the University of New Mexico. She has taught at several institutions ranging from Ninnekah High School in Oklahoma to Haskell Indian Nations University in Lawrence, Kan., and universities ranging from the University of California-Berkeley to Harvard.

Mann was named to the *Rolling Stone* Magazine's Honor Roll of Ten Top Professors in 1991. The National Women's History Project featured her as one of five 20th Century Women Educators. She was selected as the Cheyenne Indian of the Year and was honored as the National American Indian Woman of the Year in 1988. Mann served nine years on the board of trustees of the Smithsonian Institution's National Museum of the American Indian.

#### MSU Career Services supports Native American students

In support of MSU's vision of increased enrollment of and support for Native American students, the office of Career Services hosts an annual diversity coffee, hosts selected presentations for EMPower (the Engineering Minority Program), TRIO and other minority-support programs, and offers free one-on-one career counseling and advising; résumé critiques, mock interviewing, and job searching assistance; and instruction for a variety of software programs designed to assist with career planning.

The office also provides online job and internship postings, job recruiting fairs, career counseling and many educational presentations.

-Contact (406) 994-4353, www.montana.edu/careers

#### Rockin' the Rez tours the state

Each fall members of the Montana State University campus take a tour of Montana's Native American reservations. The tour is entitled "Rockin the Rez" and includes faculty and staff from various programs on campus. The "Rockin the Rez" tour is a concentrated effort to get people out to talk about opportunities on campus for Native American students. The tour visits public schools and/or tribal colleges at each reservation in the state. MSU's Office of Admissions and New Student Services houses a minority representative, who helps Native American and other students learn more about attending MSU.

-Contact Genevieve Burmeister, (406) 994-3881, gburmeister@montana.edu

#### NAS Department offers many courses and services

MSU's Department of Native American Studies, in the College of Letters and Science, offers one of the most comprehensive academic and student support programs in the northwest United States. The department offers a non-teaching minor in Native American Studies, as well as the only Master of Arts degree in Native American Studies in the region. Courses focus on art, history, culture, literature, religion, gender, law and policy, and contemporary issues.

In addition, the department is home to the Native American student advisor's office and the Native American Student Center. The department provides academic and personal counseling, tutoring services, scholarships, emergency loans, and other support services for Native students.

#### -Contact (406) 994-3881, www.montana.edu/wwwnas/

#### Tribes work with MSU on student internship program

Dr. Robin Bighorn of the **Fort Peck Tribes** (Assiniboine and Sioux) is spearheading an effort, at the direction of the Fort Peck Tribes Council, to establish internships for MSU students with the Tribes in the areas of natural resources, business and engineering. The goal is cross-exposure: the tribe to MSU students and vice versa. They want their own students to know that there is a place for them at home after completing higher education. One potential internship is for an MSU student to work on the Fort Peck Tribes' municipal water project.

Current MSU partners include the College of Business, the College of Agriculture and the College of Engineering.

-Contact Heather McCartney, (406) 994-3372, hmccartney@montana.edu

#### William Yellowtail, Henrietta Mann serve as first two Katz Endowed Chairs for Native American Studies

The Katz Endowed Chair is just one of a handful of endowed chairs in Native American Studies in the nation. Created to address critical problems facing many Native Americans such as poverty, inadequate health care, housing shortages, lack of infrastructure and access to quality education, the premise of the Chair is that Native Americans will find solutions by strengthening their identity, vision, leadership, and access to adequate resources.

The Chair in Native American Studies provides leadership in the academic and American Indian communities in the areas of research, instruction and enhancement of American Indian education. The Chair focuses on researching needs and solutions, communicating the results to appropriate audiences via teaching and writing, helping to strengthen MSU's academic programs, and supporting and improving tribal education programs across the state.

Henrietta Mann, an enrolled member of the Cheyenne-Arapaho Tribes of Oklahoma, served as the first Katz Endowed Chair in Native American Studies and currently serves as special advisor to the MSU president on Native American Affairs. William Yellowtail, a **Crow** Indian who was once was the regional director of the Environmental Protection Agency, became the second holder of the Chair in Fall 2006.



Bill Yellowtail, former regional director of the Environmental Protection Agency, is the second holder of MSU's endowed chair in Native American Studies.



Henrietta Mann was the first Katz Endowed Chair in Native American Studies. She currently serves as a special advisor to MSU President Geoffrey Gamble.

MSU Senior Tami Jo Old Coyote has enjoyed science ever since a man nicknamed "Mario" visited her **Lodge Grass Elementary School** class. Teacher Paul Tackes at **Hardin High School** and mentor Kathi Trujillo at MSU along with a supportive family, an inquisitive nature and hard work, have encouraged Old Coyote to aim at some aspect of science as a future occupation.

She has worked in John Sherwood's MSU plant sciences lab with Trujillo, a doctoral student, for the past year looking for a yeast that produces an antifungal protein.

"Tami Jo saved me months of work to find this one genetically engineered yeast line that expressed the protein we were interested in," Trujillo said. "She got us from phase one to phase two."

Old Coyote's work included making the medium in which the yeast cells would grow, counting cells, transferring and regrowing them in another



MSU Doctoral Student Kathi Trujillo and Tami Jo Old Coyote, an MSU senior, look over a vial of yeast in John Sherwood's plant sciences lab at MSU.

media, then conducting molecular tests to identify the proteins involved. (Her presentation of that work won her an award at the Society for the Advancement of Chicanos and Native Americans in Science conference late in 2006.)

"I've always liked science and math. They were a language that I could understand. History and English I could understand but didn't retain. The science and math came naturally to me," Old Coyote said.

She added that she has liked science since at least fourth grade, when "Mario" spoke to her class on various science topics. Then in high school, the interest leaped ahead when she acquired better study habits.

Tackes, her high school biology teacher, "had a way of explaining things. At first I wasn't doing well," Old Coyote said. "One day after class, he mentioned how bright Native students are but that many needed to learn better study habits. After that, I worked really hard in his class. He motivated me to be a better student."

From high school, Old Coyote went to Haskell Indian Nation University in Lawrence, Kan., where she obtained her associate degree.

At MSU, Old Coyote has been close to Trujillo, both to learn what lab work was needed and to learn the ropes on campus. Old Coyote added that MSU's American Indian Research Opportunities program has also given her "great resources" for both her education and interests.

Eventually, Old Coyote says she hopes to work in ethnobotany or natural product chemistry. She loves gardening, has worked as a garden assistant at the C**row Community Garden Project** and fondly remembers her Grandma's garden. The cultural role of plants is a special interest of hers.

"A lot of that knowledge you have to seek out now. I'd like to help retain that knowledge for my family, my community and anyone who needs it."

## **Montana State University**

Floyd Azure grew up on the **Fort Peck Indian Reservation** in the northeastern corner of Montana. Now, he's studying mechanical engineering at Montana State University, a rarity considering the scant number of American Indians in the field.

According to the American Society for Engineering Education, less than one percent of engineering degrees awarded in the United States in 2004 went to American Indians, and nationwide, of more than 22,000 engineering faculty members, fewer than 50 are American Indian. A host of cultural, geographic, educational and economic issues might explain why America's first residents don't pursue engineering. But a number of programs are popping up in an attempt to attract these students, including one at MSU.

In 2003, MSU's College of Engineering launched Designing Our Community, a program aimed at recruiting and retaining American Indian students. It's one of nine new programs at public colleges and universities in western states that were funded by grants from the William and Flora Hewlett Foundation with the goal of improving undergraduate engineering education.

MSU program directors say they're pleased with the results they've already seen. Enrollment of American Indian students in the freshman class doubled from 10 to 20 that first year. Heidi Sherick, assistant dean for undergraduate programs and diversity in the College of Engineering, says the program works because of the nurturing environment it provides.

The Hewlett grant helped the college fund a new minority student center where the students can go for tutoring, meetings, computers and just to "hang out." The grant also provides students like Azure and his peers with a monthly stipend to ease the financial burden of school.

With the closest reservation 200 miles away, outreach to high school students is both crucial and enormously challenging. "It is a heavy-duty job to be everywhere," Sherick says. The grant allows the college not only to visit high schools on Montana's seven reservations but also to run workshops educating science and math teachers about engineering. In addition, the college hosts groups of prospective American Indian students on its campus to give them an inside look at studying engineering.

Before starting classes, freshman DOC students take part in a summer bridge orientation program, which then continues with weekly seminars



DOC engineering students help local Girl Scouts earn a badge as part of their community outreach work. Left to right: Clinton Nomee, Crow; John Wagner, Blackfeet; Jade Watts, Cherokee.

throughout the school year. The topics range from how to build a strong résumé to visits from successful American Indian engineers, which Sherick says are very powerful for the students. "They basically say, 'I can do it, so can you.'"

Lack of role models is one of the biggest barriers keeping American Indian students from engineering. That's especially troubling considering the need for engineers on the reservations to help with issues like water quality and transportation, Sherick says.

Many American Indian students arrive on campus lacking some of the skills needed to make it through the tough curriculum. When Azure arrived at MSU, algebra was a struggle. But with the support of the DOC program, Azure has completed all his math requirements and is considering a double major in engineering and math. Azure says he hopes to eventually take his skills back to his reservation in Montana. "I go back home nowadays, and I see endless opportunities for business and success for my people."

-By Lynne Shallcross, senior editor for Prism, the magazine of the American Society for Engineering Education. Reprinted with permission.

Alma Knows His Gun McCormick slips in and out of speaking the **Crow** language as easily as she navigates the isolated roads that weave through the Crow Reservation. Both are important qualities for her role as project coordinator for the MSU-based project Messengers for Health on the **Apsáalooke (Crow) Reservation**.

Messengers for Health is a program that educates Crow women about cervical cancer in a manner that is both comforting and traditional. McCormick leads 22 Crow women trained in cancer outreach. They call on friends and relatives to dispense the most contemporary information and encouragement in the same way Crow women have learned about health and life for centuries—through tribeswomen that they trust and respect.



Success of the Messengers for Health program is keyed to its membership. Respected women of the Crow tribe dispense modern-day advice through the most ancient of systems — word of mouth.

The Messengers are trained by Suzanne Christopher, professor in MSU's Department of Health and Human Development and principal investigator for the Messengers for Health program, which is funded through a grant from the American Cancer Society.

While a few years ago the words "cancer" and "cervical" were verboten, discussions on the importance of screening are now commonplace. That's important considering that Northern Plains Indians have a statistically higher mortality rate from cervical cancer than their white neighbors, according to the Indian Health Service.

"Women here are beginning to feel empowered, comfortable enough even to schedule their own (cancer) screening appointments," McCormick says. "Women are opening up, even admitting that they haven't had a screening, or even asking a question about their husband's health or about domestic abuse."

"This program gives women information on many health topics and sends the message that it's important for women to take care of ourselves so that we can be there for our families," said Christopher.

In recent years, Messengers have taken their testimonial of health to hundreds of their neighbors' doors, to churches, grocery stores and the sweat lodge. Each are paid \$60 a month and meet with Christopher and McCormick the first Wednesday of each month to share strategies for outreach, discuss problems they've encountered, and receive further education and information.

"They have covered everything from men's health to nutrition and domestic violence," Christopher said. "I'm getting as much as I'm giving."

McCormick says that her work has grown steadily, and she sees evidence daily that the work of the Messengers is making inroads. There is now a trusted female health care provider that will take scheduled screenings. And women increasingly are asking Messengers questions about a wide-range of health issues.

-Contact Suzanne Christopher, (406) 994-6321

Health

When children in Head Start classes on the **Blackfeet Indian Reservation** chime, "There were two red birds, Sitting on a hill / One named Jack, The other named Jill," the youngsters giggle and clap to the nonsensical nursery rhyme. Their version is unique: The children recite in Blackfeet:

## Naa-tok-kaam Moah-ksi-pik-s'iks Ii'ta-toh'kit'toh'pii'yoi, Nit'a toom moi-yii

The lesson, part of a creative curriculum by Blackfeet Head Start administrators and teachers Carol Bird, Ethyl Grant and Julia Schildt – all graduates of MSU's College of Health and Human Development –, is now displayed in Washington, D.C. at the Smithsonian Institution's National Museum of the American Indian.

Creation of the program began three years ago, when the Blackfeet women recognized a need for a structured curriculum for their Head Start. They integrated Blackfeet language and culture into what they knew prekindergarteners needed before entering public schools on the Blackfeet Indian Reservation.

"As we focused on a color, Otah-koin-nat-tsi, the Blackfeet word for yellow, for example, we found autumn-yellow leaves, collected them and learned something about color, science, counting," Bird said.

Head Start teachers on other Montana Indian reservations hope to create similar curriculum substituting Chippewa-Cree language and culture for Blackfeet on the **Rocky Boy's Reservation**, said Health and Human Development professor Laura Massey, who along with fellow professor Janis Bullock, helped fine-tune the document. "We now have in place distance learning programs on three reservations, Blackfeet, Rocky Boy's and Ft. **Belknap**," said Massey. "Through WebCT, we are teaching online courses to Head Start teachers and others, some of whom have never even touched a typewriter. And we now have the Blackfeet curriculum available on CD." WebCT is MSU's official course management software, supported through Extended University's Burns Technology Center.

The teachers spent a year creating a program that now directs early education for 290 children in Blackfeet Head Start programs in **Babb**, **Browning, East Glacier, Heart Butte, Star School** and **Seville**.



The Smithsonian honors Blackfeet Head Start educators (L to R) Julia Schildt, Carol Bird and Ethyl Grant by displaying their Blackfeet language and cultural curriculum material in the Smithsonian Institution's National Museum of the American Indian in Washington D.C. (Photo courtesy Laura Massey.)

"They created a gem," Massey said. "Their storytelling is particularly good. They used traditional stories, not just translated nursery rhythms, and combined them with Blackfeet language with assistance from elders. They developed themes with basic concepts translated throughout the curriculum. And they are finding success with the children."

-Contact Laura Massey at Imassey@montana.edu or (406) 994-3300

Once a month, MSU students Crystal Richards and Emily Colgate head to the **Crow Indian Reservation** where they spend the day swabbing faucets and collecting water from taps and streams. One afternoon a week, students at **Little Big Horn College** leave the classroom for similar reasons.

Together, the MSU and Little Big Horn College students are monitoring drinking water on the reservation, learning more about research and enjoying each other's company. The project is funded by INBRE (Idea Network of Biomedical Research Excellence), which is a statewide network of Montana universities, colleges and research institutes that want to expand biomedical research and improve opportunities for students seeking careers in the medical professions.

"It's really the first opportunity we have had to offer our science majors research experience here at home on issues relevant to the local community as opposed to going away for a summer, working on issues in somebody else's community. They seem to be really loving it," Mari Eggers said of the project that sends her students around the reservation every Thursday afternoon. Eggers teaches biology and environmental science at Little Big Horn College.

Little Big Horn College students have been monitoring water quality for several years during the summer, Eggers said. But through INBRE students can participate during the school year, learn new research techniques, have more opportunities for inquiry-based research and explore environmental health issues beyond drinking water. Mercury, for example, is a concern, since it has been found both upstream and downstream from the reservation.

Students from both schools are looking at pathogens and chemical pollution in the reservation's water, Eggers said. Little Big Horn College students are testing for coliform bacteria and other water quality parameters like pH, nitrates, dissolved oxygen and conductivity. The MSU students take the water samples back to MSU, where they test for *Helicobacter pylori*, which is associated with stomach ulcers and other gastric problems. Students from both schools will eventually look for two additional bacteria, *Mycobacterium* and *Legionella*. The students are also collecting sediment cores, which will be tested at MSU for mercury and other contaminants.



# Richard Monroy collects a water sample from the Little Big Horn River on the Crow Indian Reservation. (Photo courtesy of Mari Eggers).

The MSU students said *H. pylori* appears to be more prevalent in Native Americans than the general population, but they don't know if that's true of the Crow Reservation. They hope their project will help discover the answer. In the meantime, they are trying to find the best technique for monitoring *H. pylori*.

The project addresses environmental health on a reservation-wide scale and may expand to reservations across the state, Richards and Eggers said.

----Contact Ann Bertagnolli at INBRE at (406) 994-5214

# Professor, student awarded for Chippewa-Cree plan



BOX ELDER Abandon unsightly existing entry to reservation, which routes traffic through school parking area Addition training ing teams a term if in the instantial indication to instructions in contrained to borning they Create heavily londicoped boolievand can mixed, see village cantler as new entry. If non highway Estend(connect existing street grid to new street grid, heavily modified by notural features Create community greenway dong createback, connected to continuous networks of green spaces infill and rehabilitate to create urbane "village" fabric linked to the greater landscape beyond

Ferd Johns, left, MSU professor of architecture, and MSU architecture student Allison Orr were among the eight winners of the American Institute of Architects' 2006 Institute Honor Award for Regional and Urban Design. The two worked with tribal leaders from the Chippewa-Cree Reservation southwest of Havre to create a master plan that will help with future zoning needs on the reservation.

The American Institute of Architects named MSU Professor Ferdinand Johns one of eight national winners of its 2006 Institute Honor Award for Regional and Urban Design. MSU architecture student Allison Orr hand-drew the renderings of the 50-year master plan for the Rocky Boy's Chippewa-Cree Reservation.

The project is among winners submitted by architects from top firms in the country. Johns prepared the winning plan for the 130,000-acre Rocky Boy's Reservation as an extension of a project he directed for the Community Design Center in MSU's School of Architecture. The center helps cities, towns and non-profit organizations throughout the region, offering professional architectural planning with the assistance of MSU students. The tribe's planning committee voted to use Johns and Orr's master plan as a basis for a zoning plan for the reservation.

Chippewa-Cree tribal officials sought the center's guidance because they project that the reservation's population, now ranging from 2,700-4,500 people, could grow to 19,000 by the year 2050.

Johns obtained a \$7,500 grant from the Walking Shield Foundation, as well as a \$2,500 grant from MSU's College of Arts and Architecture to complete the plan, which calls for centering growth at the **Box Elder**, Rocky Boy's Agency and Stone Child College area as well as greenways, parks and recreation areas and rerouting the entry point of the reservation.

The Community Design Center also worked on a project in Ronan-a cooperative effort between the Confederated Salish and Kootenai Tribe, the City of Ronan and Lake County. The parties own 69 contiguous acres of land and have agreed to develop the property in a mutually beneficial way. The project (Mission Range Event Complex) includes recreational facilities including soccer fields, baseball fields, outdoor play fields, pow wow grounds, and a recreation center with basketball, swimming, exercise and teen activity spaces.

> - Contact the MSU School of Architecture, (406) 994-4255, http://www.arch.montana.edu/program/cdc/cdc.htm

# K-12 Education

# Programs help aspiring researchers, administrators

Cinnamon Spear may be the first teenager from a Montana Indian reservation who ever tried to sneak into a summer science program at a university.

She first applied to the Montana Apprenticeship Program (MAP) after her freshman year in



Northern Cheyenne Tribal member Cinnamon Spear in the MSU research labs. Photo courtesy of AIRO.

high school, even though the MSU program, supported by a Howard Hughes Medical Institute undergraduate science education grant, accepted only rising juniors and seniors. "I figured the worst that could happen was that they'd say no," she recalls.

But they said yes. Spear was the first freshman accepted in the history of the program, and her grounding in research that summer enabled her to return for two more summers of research and to co-author a paper recently published in the journal *Microbial Ecology*.

MAP focuses on Native American students—Spear is **Northern Cheyenne** and recruits students primarily from Montana's reservations. Three students participated when the program began in 1980, but by 2005, there were 21 enrolled. A new HHMI grant will enable MAP to reach even more students, including those at tribal colleges, encouraging them to pursue bachelor's degrees and graduate studies.

Program participants spend six weeks at MSU taking classes and participating in research. They also go on field trips, receive pre-college counseling, and learn about financial aid and study skills. MAP students receive an hourly wage for the research they do.

Spear has loved science as long as she can remember, but her high school's offerings were limited. "By the end of my junior year, I'd already taken all the science classes, so I took an introduction to organic biochemistry course at the local tribal college," she says. "That was great."

Spear spent her first year in MAP in a chemistry lab and learned to purify proteins. During her second MAP summer, Spear helped develop a novel

method for analyzing the microbial diversity in environmental samples, including surface water and soils, research that resulted in her April 2006 paper in *Microbial Ecology*.

Mark Burr, a research scientist at MSU's Center for Biofilm Engineering (CBE) and Spear's mentor for the microbial ecology work, admits that he was initially hesitant about having a high school student in the lab. "I was a bit nervous at first, but she quickly showed us she had a strong work ethic," he said. "She learned more quickly than some undergraduates or graduate students."

In 2005, after Spear graduated from high school, she returned to the CBE to help build a fluorescent protein library. In 2006, having finished her freshman year at Dartmouth College, she headed to the Center for Biofilm Engineering at MSU for another round of research before returning to Dartmouth.

"I definitely think the MAP program can make a difference in Native American kids' lives," Burr said. "Cinnamon might have succeeded even without the program, but for other students it could be critical."

-Reprinted with permission of Howard Hughes Medical Institute News

#### Montana wins \$1.2 million to improve Native American schools

The U.S. Department of Education awarded \$1.2 million to help aspiring school administrators on Montana's Indian reservations. The Indian Leadership Education and Development (I LEAD) Program is a joint project of MSU, **Fort Peck Community College** and the **Poplar** Public Schools.

Bill Ruff and Joanne Erickson, MSU professors of education, designed the program, which will help develop Native American



MSU professors Joanne Erickson and Bill Ruff designed a course to train aspiring school administrators working on and near Montana Indian reservations.

teachers and teachers wanting to work in Native American communities into high-quality principals and school leaders. They'll learn to deal with everything from budgeting to hiring, student discipline, motivating staff, and designing curricula.

-Contact Bill Ruff (406) 994-4182 or wruff@montana.edu.

Near her hometown of Nashua, where the Milk and Missouri rivers meet, Mary Lou Remington's love for kids, sports and Montana are all flowing together.

As a fairly new MSU Extension agent, Remington is already immersed in plans to reach out to **Fort Peck Reservation** kids. Her scheme draws partly on her past experiences working with low income families and inner city youth, and partly on the lure of Tae Kwon Do.

A graduate of Valparaiso University in Indiana and former member of the MSU Lady Bobcats basketball team, Remington ran a youth group in Chicago for 10 years. To connect with gang-involved high school dropouts that the group served, she organized a basketball team. If they wanted to play, the kids agreed to enter a GED or High School program and get involved in other activities that got them off the streets.

Now, after returning to her home state, Remington is pouring her energy into a high-kicking plan to get reservation youth involved in MSU Extension's 4-H youth development program through Tae Kwon Do clubs in **Poplar, Wolf Point, Brockton** and **Frazer.** The Boys and Girls Club staff have helped with the clubs, and Remington encourages parents to get involved.

"I feel like I've walked into my dream job," she said, "There are so many kids here who are full of life and hope and are eager for positive things to do."

Remington knew the discipline and self defense aspects of the martial arts would appeal to kids. And with crimes related to meth and alcohol abuse on the increase, kids need to feel safe, she said. Remington also believes that kids who are introduced to 4-H through the Tae Kwon Do clubs may become interested in other 4-H youth development experiences.

An out-of-school program that challenges kids to explore and master skills based on their own interests, 4-H gives kids a chance to discover and develop their own strengths. Depending on what the kids want to take on, clubs can focus on photography, animals, sewing, cooking or more unusual projects like cowboy poetry, skateboarding or traditional Native American activities, said Remington. As she gets to know the kids in the area, she'll develop clubs to meet their interests.

-Contact Remington at (406) 768-6330 or the Montana State 4-H Office at (406) 994-3451



The Montana Manufacturing Extension Center (MMEC) is a statewide manufacturing outreach and assistance center housed in the College of Engineering at MSU. The group provides small and mid-sized manufacturers with tools and resources that help companies embrace new techniques and technologies to help them grow. MMEC has assisted a number of tribally owned manufacturing firms over the past decade.

For several years, MMEC has worked with S&K Electronics, a manufacturer of cable assemblies, wiring harnesses, electronic and electro-mechanical products for both industry and government. The **Ronan** company is owned by the **Confederated Salish and Kootenai Tribes**. S&K's Web site says: "For centuries, detailed handiwork and craftsmanship have been a way of life for Native American people. Today S&K Electronics is guided by this same pride in workmanship and it shows in every product we make. Though our values are rooted in the past, we look to the future with excitement."

In 2004, MMEC provided a gap assessment, training and implementation assistance to enable a successful registration to the ISO 9001/2000 standards in a remarkable four months (typically a company needs more than a year to achieve this goal). The project helped S&K Electronics land a \$500,000 contract and attract competitive contracts into the future.

On the **Fort Peck Reservation**, MMEC worked with A&S Tribal Industries (ASTI in **Poplar**) to help the company understand costs and take proactive steps to manage those costs. ASTI, which was started in 1975 on the Fort Peck Reservation once employed more than 500 people working on defense contracts for medical chests, camouflage netting and other materials. But a stagnant agricultural climate, declining gas and oil exploration, and downsizing in the Department of Defense affected ASTI profoundly.

As a tribal industry with profits shared with the Assiniboine and Sioux tribes, and deeply committed to its economic role on the Reservation, the company was worried. The company was restructured in 1999, and Billings-based MMEC field engineer Keith Novakovich helped with extensive research and analysis of ASTI's production history. He helped the company better manage costs on an ongoing basis and to bid using solid, defendable numbers for future production requirements.

"We reduced operating and overhead costs and increased our profit margins as a result of an activity-based costing model we developed with help from MMEC and applying other good management tools," said Leonard Smith, ASTI CEO.



S&K Electronics in Ronan received help from the Montana Manufacturing Extension Center to operate more efficiently and register to ISO 9001/2000 standards.

ASTI has since used the new costing model to bid on and win several defense contracts which are now profitable, Smith said. Applying it to just one contract avoided an estimated \$90,000 in hidden costs. The company added 20 employees in early 2000 and increased revenues after a number of years of economic hardship.

"We are now developing new product lines and becoming a supplier to list tier contractors for things like metal sheeting and aluminum," Smith said. "We intend to continue being competitive and setting the stage for a future in commercially related products, as well."

For other Montana companies, MMEC performed a feasibility study and recommended training for operators at a post and pole lumber yard in western Montana; completed a breakeven analysis for a bottled water project for a northcentral Montana firm; taught lean manufacturing techniques to workers of several tribal firms; coordinated welding certification training for a northeastern Montana firm; assisted a start-up woman-owned firm in western Montana with design for manufacture and identification of materials for prototypes; and conducted a preliminary layout and equipment search for a salsa-making facility.

-Contact (406) 994-3812, www.mtmanufacturingcenter.com

## MSU arts groups portray Native American culture

# Theatre group reaches out across the state

The MSU-based Shakespeare in the Parks troupe is known as one of the most well-traveled in the USA—regularly scheduling 70+ performances around the state and region in just a few months each summer.

One of the group's goals is to reach Montana's Indian reservations, many of which have few opportunities to host traveling cultural events.

In Summer 2006, Montana Shakespeare in the Parks played at six of Montana's Indian reservations, and the Fort Hall Reservation near Pocatello, Idaho. Montana Shakespeare in the Schools visited eight schools on or



Montana Shakespeare in the Schools actor/company manager Kevin Asselin signs autographs for an appreciative audience at St. Ignatius School in St. Ignatius, Montana.

near Montana's reservations with performances and educational presentations.

Last year's production—one of Shakespeare's most controversial, the Merchant of Venice—seemed to be particularly appropriate for youth in Montana's reservation towns, because its themes of racism and revenge have prompted some in-depth conversations among students from all backgrounds, said Joel Jahnke, artistic director.

Summer 2006 performances and workshops included: Crow Agency, Hardin; Northern Cheyenne, Lame Deer and Birney; Flathead, Charlo and St. Ignatius; Fort Peck, Wolf Point; Rocky Boy's, Fort Benton; Blackfeet, Cut Bank Montana Shakespeare in the Schools put on performances and workshops in Crow Agency, Hardin; Northern Cheyenne, Broadus; Flathead, Polson and St. Ignatius; Fort Peck, Wolf Point; Rocky Boy's, Box Elder and Fort Benton; and Blackfeet, Sunburst.

#### MontanaPBS offers Native American programming

Programmers at KUSM/MontanaPBS, the state's public television station that is housed at MSU, work hard to acquire and broadcast programs on Native American subjects, particularly in the month of November, Native American Heritage Month.

Recent programs include "Looking Toward Home," about the increasing number of Native Americans leaving reservations for cities; "Aboriginal Architecture," and "Homeland: Four Portraits of Native Action," about Native American activists fighting to protect Indian lands against environmental hazards and ensuring the cultural survival of their peoples.

Others are "Gallery: The National Museum of the American Indian," "Sacred Buffalo People," "True Whispers: The Story of the Navajo Code Talkers of World War II," and "Warriors: Native American Vietnam Veterans."

-For more information about these and other programs, visit www.montanapbs.org

#### Film portrays Native American perspective of Lewis & Clark

Ronald Tobias, a filmmaker and director of MSU's acclaimed graduate program in Science and Natural History Filmmaking, had just finished a film for the Discovery Channel called "The Search for Lewis and Clark." A lot of Tobias's material was cut from the final production, however.

"The editors asked me to withdraw much of the material in the film about the expedition from the Native American point of view," said Tobias. "So I wanted to make a documentary that gave the Native American perspective on the Corps of Discovery."

The result was "View from the Shore," a film funded by MSU and the Montana Committee for the Humanities. "View" was directed by Darren Kipp, a **Blackfeet**, and features interviews with Montana Native Americans from several tribes.

The film was (and is) broadcast on Montana Public Television and has now been distributed free-of-charge to all Montana high schools, tribal and community colleges, and universities through Montana's Office of Public Instruction.

#### MSU-tribal college partnership helps ag producers

MSU faculty in Agricultural Education and Agricultural Economics are working with Little Big Horn College to deliver seminars to Crow farmers and ranchers on topics such as risk management, crop insurance strategies, valued-added agriculture, strategic planning and cooperative business development. The outreach initiative was conceived after the success of a USDA-funded grant, "Transitioning to Excellence," a multi-year collaborative project between the MSU College of Agriculture, Chief Dull Knife College and Little Big Horn College.

The project's primary goal was to develop and deliver model curricula that created improved opportunities for American Indian students from Montana's seven tribal colleges to achieve success in the undergraduate agricultural curricula offered by Montana State University.

A project also sought to help faculty at MSU recruit and advise students from under-represented American Indian populations. Eight MSU faculty and administrators worked with faculty and administrators from Chief Dull Knife and Little Big Horn Colleges to develop five culturally appropriate introductory, multidisciplinary courses on agricultural and natural resource science and management. The project has already realized benefits as Native American students who participated in the program enroll as undergraduates of MSU's College of Agriculture.

#### Education and testing combats fast-spreading bovine disease

Trichomoniasis is a venereal disease that causes infertility and early term abortion in cattle. Nonpregnant ("open") cows represent three-fold loss: wasted winter feed, lost calf income and breeding stock replacement cost.

In 2002, a handful of **Northern Cheyenne Reservation** cattle producers who tested for the disease discovered it in their bulls. Subsequent tests showed herds were widely infected. Open cow rates averaged 18%, with rates in some herds as high as 38%. Since the disease can take years to reach full impact, herds were at high risk for reintroduction, even after removing the infected bulls.

Northern Cheyenne Reservation's MSU Extension office teamed with **Chief Dull Knife College** to acquire funds for an intensive two-year trichomoniasis eradication program. Through educational workshops,



At Little Big Horn College at Crow Agency, local farmers and ranchers attended a day-long presentation on crop issues given by MSU faculty members Vincent Smith and Gary Brester from the College of Agriculture's Department of Agricultural Economics and Economics.

mailings and hands-on help with disease and pregnancy testing, the collaboration urged pregnancy testing of all cows, selling non-pregnant females and testing bulls retained for breeding

Producers worked with Extension and veterinarians to pregnancy test 7,500 cows in 2004. Twelve hundred (16%) were non-pregnant, which indicated infection. In 2005, 12% were non-pregnant, down 5% from 2003. Some producers saw pregnancy rates increase by as much as 26%. Of 184 bulls tested for trichomoniasis in 2004 and 2005, none tested positive.

Selling the open cows removed the risk of their harboring the disease and saved an estimated \$170 per cow in winter feed, totaling \$204,000. The 5% decrease in open cows allowed 375 females to be retained in the breeding herd, saving producers an additional \$187,500, based on a \$500 estimated replacement cost.

#### TeCH Centers capture songs, languages and more

MSU's Extended University helped reservation residents capture and preserve the history, stories and other cultural resources of tribal cultures through the TeCH project. Community Technology and Heritage Learning Centers provide Montana Indian reservation residents with the training and equipment needed to use new technologies to share defining elements of their tribes with their community and others. Currently residents of four reservations are involved in the TeCH project: **Northern Cheyenne, Crow, Fort Belknap** and **Rocky Boy's**.

Community members of all ages participate. Youth teach elders technology skills in TeCH centers located in reservation senior citizen complexes. For example, on the Northern Cheyenne reservation, **Lame Deer** high school "TeCH Buddies" work with elders at the Senior Living Center twice a week.

The resulting materials are formatted as "cultural modules" and shared with the community and tourists in kiosks in the reservation Cultural Centers. Sacred songs, oral histories, and Indian languages are just a few of the modules that have been created.

#### Videos support Native American health and nutrition

Several MSU Extension video/DVDs feature Native American health and nutrition. "Celebrating Safe Foods at Pow Wows," uses real-world interviews and the expertise of Tribal sanitarians, Indian Health Services and MSU Extension agents to address food safety and sanitation strategies. The goal is to help temporary food booths become safer and more profitable.

"Fitness Quest: A low-impact exercise video for Native American seniors," was made to demonstrate basic exercise movements and to increase flexibility and range of motion for seniors. In it, Native Americans demonstrate the exercises to traditional drumming.

"Traditional Foods: A Native Way of Life," demonstrates how the best examples of good health and nutrition for Native Americans come from our ancestors. Registered dietitian Kibbe Conti uses the four winds model and the medicine wheel to show how we can eat healthy meals based on the traditional eating pattern of Indians. Alma Hogan Snell, native herbalist, describes what she learned about gathering and preparing food from her grandmother Pretty Shield.



Tribal members can view cultural objects and hear stories, songs and languages preserved through Web-based learning modules.

#### Tech experts help bring broadband to Rocky Boy's

Until last year, the **Rocky Boy's Reservation** in north central Montana did not have access to broadband Internet service, with most of the community—including students at **Stone Child College**—using dial-up service limited to 28.8 bps access across analog telephone lines. With a gift of donated equipment, technical experts from the Burns Technology Center of MSU's Extended University brought broadband access to this remote part of the state. The primary access point was installed on a hilltop facility above the agency's headquarters with an initial deployment of 30 clients around the reservation. Now, sites within a 15-mile radius can receive high-speed wireless access.

Dallas Sun Child of the Rocky Boy's tribal offices and Ted Whitford, the Technology Coordinator for **Stone Child College**, worked with Bob Friedrich, Network and Computing Systems Administrator for MSU's Extended University, to put on the finishing touches.

Motorola donated the Wireless Broadband Canopy system, which now sits atop a hill overlooking the Rocky Boy Reservation near **Box Elder.** 

| Admissions,<br>Advising   | MSU's Admissions and New Student Services Office houses a minority<br>representative who can assist Native American students interested<br>in attending MSU. Contact 1-888-MSU-CATS. Rita Sand serves as<br>advisor for MSU's University Studies program. (406) 994-3532.   |
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| Affirmative<br>Action   | This MSU office is responsible for compliance with state and federal civil rights laws and assists with many human resources tasks for faculty and professional employees. The office develops and monitor MSU's non-discrimination and affirmative action policies working closely with academic and University administrators to develop and implement effective equal opportunity policies and practices. (406) 994-2042.  |
| American<br>Indian Business<br>Leaders                          | AIBL is for students in the MSU College of Business and/or MSU students interested in careers in business. Contact Tim Alzheimer, (406) 994-2263.   |
| American<br>Indian Council                                      | MSU student group. Contact the Department of Native American<br>Studies, (406) 994-3881.  |
| American<br>Indian Heritage<br>Day (Pow Wow)                    | Since 1975, MSU's American Indian Council has hosted one of the<br>state's largest pow wows, with free admission for all. Over the years,<br>various events connected to the Pow Wow have included a crafts fair,<br>buffalo chili feed, basketball tournament, educational presentations<br>and Native American alumni brunch. The event is held in mid-April.<br>Contact Jim Burns, (406) 994-4880.   |
| American<br>Indian Probate<br>Reform<br>Act—free fact<br>sheets | Access 14 fact sheets that highlight the American Indian Probate<br>Reform Act of 2004 (AIPRA). Developed by MSU faculty Marsha<br>Goetting, Extension Family Economics Specialist, and Kristin Ruppel,<br>Department of Native American Studies, the fact sheets highlight issues<br>such as the fractionation problem on reservations; the typical ways<br>individuals own reservation land; the meaning of some of the numbers<br>and terms on Individual Trust Interest (ITI) reports; the AIPRA<br>definition of eligible heirs and Indian; how trust property is distributed<br>to heirs; and the rules for the division of Individual Indian Money<br>accounts to heirs. Visit http://www.montana.edu/indianland/factsheets.<br>html or contact goetting@montana.edu. Power Point slides are at<br>http://www.montana.edu/indianland/aiprapowerpoint.ppt |
| American<br>Indian<br>Research<br>Opportunities<br>(AIRO)       | This consortium of Montana's seven Tribal Colleges and MSU provides<br>opportunities for American Indian students in career fields where they<br>are significantly underrepresented. The AIRO advisory board consists<br>of representatives from each tribal college and MSU. (See also IMSD,<br>Explorations in Biomedicine, IMSD and Leadership Alliance.) Contact<br>John Watts, (406) 994-5567, www.montana.edu/wwwai   |
| Phyllis Berger<br>Memorial<br>Lecture                           | Annual free public lecture featuring American Indians who speak on<br>contemporary Native issues. Sponsored by the MSU Department of<br>Native American Studies. Contact (406) 994-3881.  |

| Bridging Tribal<br>Colleges<br>to MSU<br>(BRIDGES)                                      | This partnership between MSU and Chief Dull Knife College, Fort<br>Belknap College, Fort Peck Community College, Little Big Horn<br>College and Stone Child College strives to build a seamless educational<br>experience between reservation-based colleges and MSU and, in the<br>process, increase the number of underrepresented Native American<br>students successfully transferring from the two-year tribal colleges<br>to MSU and pursuing academic studies in the biomedical and other<br>health-related sciences. Contact (406) 994-6723.  |
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| Center for<br>Learning and<br>Teaching in the<br>West (CLTW)                            | This five-university consortium (MSU, UM, Colorado State, Northern<br>Colorado, Portland State) collaborates with tribal colleges and public<br>schools to improve student achievement in science and math from<br>middle school through college. The goal is to develop and support a<br>new generation of national educational leaders who will use knowledge<br>of math, science and pedagogy to better serve teachers and students<br>in high needs schools, especially those isolated by rural or inner city<br>locations. Work includes fundamental research and related activities<br>focused on serving high needs populations. The Center supports an<br>interdisciplinary research agenda, a doctoral graduate curriculum<br>and inservice professional development, much of it through distance<br>technology. Contact (406) 994-5952. |
| Connected to the Earth  | Self-guided and confidential home environmental risk assessment folder<br>and fact sheets for native families. Contains 11 fact sheet assessments<br>with topics including indoor air quality, water quality, management<br>of household chemicals and septic systems. Partnership with USDA-<br>CSREES. Contact Dr. Michael Vogel (406) 994-3451   |
| Council of<br>Elders  | This council, formed in 2004 by MSU President Geoffrey Gamble,<br>comprises leaders from Montana tribes who meet twice yearly to help<br>MSU form its vision for Indian education. Contact Shari McCoy, (406)<br>994-2341.  |
| Cultural<br>Preservation<br>and Pollution<br>Prevention<br>Tribal College<br>Curriculum | Tribal College curriculum to support natural resource courses.<br>Curriculum includes a teaching guide and PowerPoints, student study<br>guide, and evaluation materials dealing with these tribal related topics:<br>What is Pollution Prevention, Preventing Solid Waste, Preventing<br>Hazardous Waste, Preventing Air Pollution, Water Quality, Energy<br>Conservation, Pollution Prevention in Agriculture and Pollution<br>Prevention in Business. Contact Dr. Michael Vogel (406) 994-3451.  |

| Department<br>of Native<br>American<br>Studies                                   | This MSU department was established to provide and advance quality<br>education for and about American Indians of Montana, the region and<br>the nation. In fulfilling this mission, the Department is committed to<br>meet the changing needs of Montana's Indian tribes and all Montana<br>citizens through excellence in teaching, research, and service. In its<br>academic program, the Department provides concentrated study<br>through a minor and a Master of Arts degree in Native American<br>Studies. Students in any major can also gain a multicultural perspective<br>through NAS offerings in the University's core curriculum. The<br>Department, through its research and other creative efforts, actively<br>pursues interdisciplinary scholarship in the field of Native American<br>Studies. Contact (406) 994-3881, www.montana.edu/wwwnas/ |
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| Designing Our<br>Community<br>(DOC)  | This program in MSU's College of Engineering is designed to increase<br>the motivation and pre-entry academic preparation of Native American<br>students; help shape the engineering, engineering technology, and<br>computer science workforce by increasing the number of Native<br>American students graduating from the College of Engineering; and<br>improve access to quality engineering and technology to rural and<br>underserved populations by returning highly educated professionals<br>to these communities. Contact (406) 994-6723, www.coe.montana.<br>edu/doc   |
| Disability,<br>Re-Entry &<br>Veterans<br>Services                                | This MSU office assists students who have served in the military,<br>students who are disabled and students who entering or re-entering<br>college outside the traditional age range. Contact (406) 994-2824;<br>TTY: (406) 994-6701  |
| Diversity<br>Awareness<br>Office   | This office works to expose all MSU students to diversity issues in the form of cultural events and workshops, and encourages understanding between all members of this campus community. Contact (406) 994-5801; www.montana.edu/diversity   |
| Enhancing<br>Access<br>Scholarships<br>in Engineering<br>and Computer<br>Science | EASE is a full-ride scholarship for students who begin their engineering<br>or computer science degree at a tribal college and then transfer to the<br>MSU College of Engineering. The program's goal is to increase the<br>number of academically talented, financial-aid-eligible students who<br>transfer and then graduate with engineering and computer science<br>degrees. Contact (406) 994-6723.  |

| Engineering<br>Minority<br>Program<br>(EMPower)                                | EMPower encourages the involvement of women and minorities in the field of engineering. EMPower offers scholarships; tutoring; guidance in arranging summer internships; activities to ease transition to life at MSU for freshmen and transfer minority students; guidance and financial support for minority student organizations; retention awards, seminars and opportunities to interact with women and minority role models; and enrichment programs for elementary through high school students. Every year, EMPower exposes pre-college students to the campus environment. Contact www.montana.edu/empower, (406) 994-2272.   |
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| EPSCoR<br>(Experimental<br>Program to<br>Stimulate<br>Competitive<br>Research) | Through Montana EPSCoR, funded by the National Science<br>Foundation, and MSU INBRE (IDeA Network for Biomedical<br>Research Excellence), Montana's seven tribal colleges receive support to<br>hire an additional science faculty member to enhance science education.<br>The additional personnel can help alleviate teaching loads so tribal<br>college faculty have more opportunities to pursue research activities to<br>enhance student learning. Some tribal colleges chose to support their<br>science education efforts through the purchase of laboratory equipment<br>and support for student research internships. Contact Martha Peters,<br>(406) 994-7658.   |
| Explorations<br>in Biomedicine<br>program                                      | Administered through a partnership between The American<br>Physiological Society (APS), Bethesda, Md., and the American Indian<br>Research Opportunities (AIRO) consortium of Montana tribal colleges<br>and MSU, Explorations works intensively with science faculty at tribal<br>colleges and middle/high schools that serve Native American students.<br>The focus is on creating an atmosphere that encourages science studies;<br>promoting the exploration and pursuit of biomedical research careers;<br>and providing opportunities for students to interact with biomedical<br>researchers in their geographic area and across the nation. The program<br>hopes to increase interest and participation in biomedical research<br>careers among Native American students, typically underrepresented in<br>science careers. Contact (406) 994-5567. |
| MSU Extension  | MSU Extension outreach programs are available in all 56 counties<br>and all seven Montana reservations. Programs are based on local<br>needs, and include agriculture and natural resources; family and<br>human development; youth; and community development. Contact<br>msuextension.org   |
| 4-H  | The national 4-H youth development program, administered through<br>MSU Extension, is available in every Montana reservation and county.<br>Projects emphasize "learning by doing" and range from livestock to<br>leadership and fishing to photography. Contact (406) 994-3451 or visit<br>montana4H.org   |

| Grandparents<br>Raising<br>Grandchildren                           | Available to all Montanans, this MSU Extension program offers moral<br>support, training, parent education and reference materials for this fast-<br>growing demographic. Support groups are operating on the Blackfeet<br>and Rocky Boy's Reservations and in other Montana communities.<br>Contact Sandy Bailey, baileys@montana.edu, (406) 994-6745.  |
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| INBRE (IDeA<br>Network of<br>Biomedical<br>Research<br>Excellence) | This program focuses on increasing the biomedical research capacity<br>of Montana by building research infrastructure, supporting faculty<br>and student research, and fostering a statewide collaborative network.<br>INBRE supports Montana's tribal colleges in hiring science education<br>faculty. [See also EPSCoR]. Contact Ann Bertagnolli, (406) 994-5214.  |
| Initiative for<br>Maximizing<br>Student<br>Diversity (IMSD)        | This academic enhancement program is for undergraduate and graduate<br>students majoring in a biomedical/health science or environmental<br>science field. The program provides IMSD students with earnings<br>for participation in program activities including work in a research<br>laboratory and academic enhancement sessions. Support for travel to<br>one national scientific meeting each year is also provided. In addition,<br>the graduate student position receives funding for tuition and books.<br>Contact AIRO, (406) 994-5567.   |
| Leadership<br>Alliance<br>Tribal College<br>Initiative             | The Leadership Alliance Tribal College Initiative, a collaboration<br>between AIRO and the Leadership Alliance, allows students and<br>science faculty from Montana's tribal colleges to participate in summer<br>research opportunities at MSU, Brown University, Cornell University<br>or Dartmouth College. Leadership Alliance is based at Brown and also<br>funds students from tribal colleges and MSU who want to participate<br>in summer research internships. In Montana, the alliance has provided<br>money for the architectural design of visiting lecture facility/living<br>quarters at Little Big Horn College and Chief Dull Knife College.<br>Fundraising for building the lecture facility is one of the current<br>Leadership Alliance projects. Contact (406) 994-5567. |
| Learning<br>Engineering<br>by Application<br>(LEAP)                | LEAP offers hands-on activities in math and science, such as building<br>LEGO robots, designing Web pages and viewing how engineering<br>applies to everything from building an iPod to dealing with pollution.<br>LEAP is available to students attending a GEAR UP (Gaining Early<br>Awareness and Readiness for Undergraduate Programs) school.<br>Montana communities with GEAR UP program schools are: Arlee, Box<br>Elder, Browning, Charlo, Dixon, Dodson, Dutton/Brady, Kalispell,<br>Hardin, Harlem, Hays, Heart Butte, Lame Deer, Lincoln, Lodge<br>Grass, Marion, Nashua, Pryor, Rocky Boy, St. Ignatius, St. Regis, Trout<br>Creek, Vaughn and Winnett. Contact Sheree Watson, (406) 994-6723,<br>swatson@coe.montana.edu  |

| Meth in Tribal<br>Communities  | Comprehensive self-guided, self-contained, tribal-specific resource<br>toolkit to assist native communities implement methamphetamine<br>prevention, treatment and awareness campaign. www.stoptribalmeth.<br>org. Funding partnership with the National Congress of American<br>Indians. http://www.stoptribalmeth.org   |
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| Montana<br>Apprenticeship<br>Program (MAP)   | A six-week, hands on summer research experience for students and<br>teachers under the direction of active science research mentors. The<br>goal is to increase the number of Native American and disadvantaged<br>high school students who want to pursue careers in science, technology,<br>engineering and math career fields. (406) 994-5567.   |
| Montana Indian<br>Technology<br>and Cultural<br>Heritage (TeCH)<br>Learning<br>Centers | These learning centers use technology to capture and preserve the<br>history, stories and other cultural resources of Montana's tribes.<br>Community residents and visitors can access the kiosks, and youth<br>teach elders technology skills. TeCH Centers are located at Chief Dull<br>Knife College, Fort Belknap College and Stone Child College; at senior<br>centers on the Northern Cheyenne and Rocky Boy Reservations and<br>in Lodgepole, Fort Belknap Agency and Hays on the Fort Belknap<br>Reservation; and at Pretty Eagle Catholic School in St. Xavier on the<br>Crow Reservation. Contact (406) 994-6550. |
| MSU AISES<br>Chapter   | Student group chapter of the American Indian Science and Engineering Society. Contact Sheree Watson, (406) 994-6723.  |
| Montana<br>Space Grant<br>Consortium   | Administered at MSU, the consortium involves every tribal college<br>in the state as well as institutions in the Montana University System.<br>Faculty who work at consortium campuses can apply for research<br>grants. Undergraduates at those schools are eligible for scholarships.<br>MSGC contributes a major portion of the funding for the Montana<br>Apprenticeship Program (MAP). Contact (406) 994-4223, http://<br>spacegrant.montana.edu   |
| Native AIR<br>(Asthma<br>Intervention<br>and Reduction)<br>Program                     | Native asthma incidence is three times the national norm. The MSU<br>Extension Native AIR program provides native families with culturally<br>appropriate asthma assessment, reduction and mitigation educational<br>and assistance services. Funding partnership with U.S. Housing and<br>Urban Development and the U.S. Environmental Protection Agency.<br>www.nativeasthma.org.   |
| Native<br>American<br>Nurses: Caring<br>for Our Own<br>(CO-OP)                         | A program to develop a support network for Native American students<br>who want to earn a baccalaureate degree in nursing. Partners include<br>MSU, Native American nurses, tribal college administrators, Indian<br>Health Services officials and other tribal leaders. (406) 994-3783.  |

| Native<br>American<br>Housing<br>Technical<br>Assistance<br>Institute | Provides training and technical assistance to Montana and regional<br>tribal housing and environmental health programs to create and<br>maintain the energy, safety, structural and environmental integrity of<br>native homes. Contact Dr. Michael Vogel, (406) 994-3451.   |
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| Native<br>American Peer<br>Advisors                                   | An offshoot of the American Indian Club, this group was started by<br>students, continues to be run by students, and is based on students<br>helping other students. NAPA offers fun, affordable social activities that<br>are open both to families and single students and academic support<br>through a weekly study group. Contact (406) 994-3881.   |
| NTEN: The<br>National<br>Teachers<br>Enhancement<br>Network           | Created by MSU and funded by the National Science Foundation,<br>NTEN delivers quality teaching resources and professional<br>development opportunities through the Internet directly to K-12<br>science teachers. NTEN also enhances professional networking<br>nationwide among science teachers and active research scientists. One<br>focus of NTEN-Elementary is to bring the science behind elementary<br>science kits to teachers of Native American students. NTEN worked<br>with many Native tribes to add a cultural component to the elementary<br>courses. NTEN was created and is managed by Extended University,<br>Burns Technology Center at MSU. Contact (406) 994-6550, www.<br>scienceteacher.org |
| President's<br>Office   | President Geoffrey Gamble is dedicated to providing a quality learning<br>environment for all students, and to serving all the people of Montana<br>through education and outreach. He welcomes comments and ideas.<br>Contact (406) 994-2431, ggamble@montana.edu   |
| Providing<br>Resources for<br>Engineering<br>Preparedness<br>(PREP)   | PREP helps the MSU College of Engineering build partnerships with tribal colleges. These partnerships will expose students to engineering and provide pre-engineering curriculum. In spring of 2006, the College of Engineering held its first PREP workshop to bring together faculty, administrators, and transfer advisors from tribal colleges to learn more about preparing tribal college students to study engineering at MSU. Contact (406) 994-3372.  |
| Rockin' the Rez   | This recruiting event regularly visits all seven Montana reservations with<br>information for high school and tribal college students interested in<br>attending MSU. Contact Genevieve Burmeister, (406) 994-3881.  |

| Tribal College<br>Librarians<br>Professional<br>Development<br>Institute (TCLI) | TCLI was created to provide professional development to Montana's<br>Tribal College Library staff and now offers a yearly Institute to Tribal<br>Libraries internationally. Hosted by MSU Libraries, the event includes<br>educational and cultural programming relevant to indigenous peoples,<br>tribal colleges and tribal college libraries. In addition to learning library<br>issues and skills, participants share stories and support and educate each<br>other. Contact (406) 994-3162, http://www.lib.montana.edu/tcli     |
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| Tribal Pollution<br>Prevention Web<br>Site                                      | Web-based portal to connect tribes throughout the U.S. to waste<br>minimization and pollution prevention resources and access<br>to successful case studies. Funding partnership with the U.S.<br>Environmental Protection Agency. www.tribalp2.org  |
| TRIO  | This Department of Education-funded program helps low-income,<br>first-generation college students from all demographics. Contact (406)<br>994-4541, www.montana.edu/triosss   |
| WebCT<br>(online course<br>management<br>software)                              | Instructors at Blackfeet Community College and Fort Peck Community<br>College can use support from MSU's Burns Technology Center to<br>produce on-line courses using WebCT software. Contact (406) 994-<br>6550, eu.montana.edu/btc/tlt.   |
| Western<br>Transportation<br>Institute  | WTI, a research center within MSU's College of Engineering, hosts<br>a number of K-12 outreach opportunities for Native American<br>students. WTI provides hands-on workshops to second and third grade<br>classrooms to introduce youngsters to careers in engineering and the<br>annual Summer Transportation Institute allows high school students to<br>live on campus, experience college life, and learn about MSU academic<br>programs and careers in transportation. Contact: sgallagher@coe.<br>montana.edu, (406)994-6559. |

#### Native American Student Center: A lasting educational legacy

Currently, more than 300 Native American students from 19 U.S. states attend Montana State University. Here they find a strong academic environment, several thriving Native American student organizations, a counselor dedicated to their success, and a community that embraces diversity.

In order to continue offering superior educational opportunities for Native Americans, MSU has launched a fundraising campaign for a new Native American Student Center.

The new Native American Student Center at Montana State University will fulfill a long-

recognized need on campus for a physical and psychological space that will support the success of Native students. A place of community, it will reduce the cultural and educational barriers Native undergraduate and graduate students may encounter in transitioning from their high school or other university experience to the rigors of attending a premiere research institution.







Architect's concept drawing of the Native American Student Center.

The Native American Student Center will advance MSU on its path as a leading institution for Native American education. It will reinforce economic health and cultural vitality of Montana's Indian communities. Most importantly, it will change students' lives.

-For more information, or to support the new Native American Student Center, call (406) 994-2092.

#### Montana Wyoming Alaska Northern Arapaho Tlingit Crow Shoshone Yupik Northern Chevenne Aleut Sioux Arizona Assiniboine Diné White Clay "Gros San Carlos Apache Ventre" Zuni Hidatsa Salish Idaho Kootenai Bannock Pend d'Oreille Nez Perce Little Shell Coeur d'Alene Lakota Chippewa Dakota Oregon Cree Umatilla Blackfeet Kansas (Blackfoot, Blood,

Kikapoo

& Piegan)

# North Dakota Mandan Turtle Mountain Arikara South Dakota Nakoda **Oglala** Sioux

Mountain Maidu Tolowa Yurok Washington Yakama Colville Quinault Spokane Puyallup Tulalip New Mexico Ysleta del Sur Pascua Yaqui Rosebud Sioux Zuni Yankton Sioux Acoma

California

Utah Northwestern Shoshone Oklahoma Southern Chevenne Chickasaw Cherokee Maine Penobscot Pacific Islander Samoan

#### Tribal nations currently represented at MSU



This publication was produced in 2007 by the MSU President's Office, MSU Extended University and the Office of Communications and Public Affairs with support from the Department of Native American Studies, College of Letters & Science and the EMPower Center. Contact MSU President Geoffrey Gamble at (406) 994-2341.