All new freshmen who have been admitted to MSU for the fall of 2003 are required to attend one of four Orientation/Registration programs. This year’s dates are June 23-25, July 14-16, July 28-30 and August 27-29. Incoming students are strongly urged to consider attending one of the June or July orientations. The benefits of an early orientation program are many. Freshmen who have attended June or July sessions in the past have found themselves better prepared, better adjusted and more academically successful during their first semester than those who wait until just prior to fall semester to attend orientation. During orientation, students register for classes with the assistance of student and faculty advisors, become familiar with the campus and residence halls, meet with assistant deans to discuss curriculums, learn about student activities and discuss financial aid. It’s a great opportunity for new freshmen to meet people and make friends.

A separate program, designed to help parents and family members adjust to and understand their student’s college plans, is held concurrently with freshmen sessions. Parents and family members also visit with assistant deans and attend seminars on career placement, financial aid, student services and the college transition.

New transfer students have two Orientation/Registration options available to them. One way for new transfers to complete the Orientation/Registration process is to visit campus and complete the “Transfer Student Orientation Checklist.” This option requires that students spend one weekday on campus between Monday, April 28, and Friday, August 22. If the first option is not convenient, transfer students need to be on campus on Wednesday, August 27, for Orientation/Registration.

Complete Orientation/Registration details will be sent to all students admitted for fall of 2003. It is important that students respond immediately upon receipt of orientation materials in order to get their first choice of session dates. It is also very helpful if high schools and transfer schools forward final transcripts to the MSU Office of Enrollment Services as soon as possible. This information is necessary and of great value in the advising process.

Students who are unable to join us in the summer will attend orientation programs offered prior to the beginning of classes in the fall. Freshmen fall orientation is scheduled for Wednesday, August 27, through Friday, August 29. Transfer fall orientation will be on Wednesday, August 27. For any questions about orientation, contact Orientation, P.O. Box 172190, Bozeman, MT 59717-2190, (406) 994-2827, toll free 1-888-MSU-CATS, orientation@montana.edu.
MSU offers a non-teaching minor in Museum Studies. This minor offers students in many disciplines the opportunity to learn about the role of museums in advancing public education and academic research. For further information, please contact Robert Rydell at 406-994-4395 or e-mail rrydell@montana.edu.

Terrorists will have a harder time smuggling materials into the U.S. after a joint project between MSU and a national laboratory is completed. The project, which utilizes computer software from MSU, will speed up computer modeling for a new method of detecting nuclear materials inside shipping containers.

MSU students converted an old gasoline-driven MSU Facilities Services truck to a new electric version that is quiet, has no exhaust and can serve as a functional all-around campus vehicle. Testing is taking place on campus this spring.

Four MSU English department students are traveling to Cincinnati to present papers at the Sigma Tau Delta conference this year. Sigma Tau Delta is the international English honors society.

The MSU Child Development Center (CDC) is a preschool lab program in Herrick Hall operated by the Department of Health & Human Development and accredited by the National Association for the Education of Young Children. It serves children ages 3 through kindergarten from the university and surrounding community. CDC is staffed by head teachers, graduate assistants, teacher aides, early childhood education majors and student workers. The multicultural classroom offers developmentally appropriate activities and experiences and teaches life skills such as problem-solving, decision-making, independence and socialization.

Did You Know...

Did You Know...
OUR STUDENTS SAY...

Potomac, Mont. - Chemical Engineering

“All of our Engineering disciplines are designed to prepare students for the “real world.” Through the use of internships, co-ops, and labs with real life experiments, our graduating students have a leg up on the competition. In fact, our pass rate on the Fundaments of Engineering exam is over 90 percent while the national average is 70 percent. As an MSU student, I know that my engineering experiences will come in very handy when I am competing for a job after graduation.”

Livingston, Mont. - Business - Management

“MSU is awesome! The campus is open and friendly; you can hardly walk to class without stopping to visit with a passing friend. They say getting involved is the key to college success…at MSU you can’t help but to get involved.”

Pocatello, Idaho - Political Science

“You are placed directly in the middle of an area with world-renowned skiing, legendary rivers and scenery that compares to none. Amazingly, that is just the beginning. Nowhere else will you find a more friendly campus, faculty that goes out of their way to help, and school-wide organizations which give all students a chance to become involved. It was an easy decision for me to come to MSU.”

Chicago, Ill. - Media/Theatre Arts

“I came to MSU because when I visited the campus four years ago I felt comfortable. I felt at home. Choosing to come all the way from city life in Chicago to town life in Bozeman at first seemed unnatural. But right away I fit in. There is such a sense of community among students; everybody tries to reach out. I love living at and attending a school where my professors know my first name, where I see friends all over campus, where I can be involved.”

Helena, Ore. - Business - Accounting

“MSU is located in one of the greatest places on earth, Bozeman, Montana. The people are some of the friendliest you will ever meet, and the scenery couldn’t be described as anything less than amazing.”

Spokane, Wash. - Elementary Education

“I could not have asked for a better education located in a more beautiful setting that what I’ve found here at MSU. In addition to this, the most friendly, outgoing people surround me both on the campus and in the town. This attitude really helped me adapt to Bozeman and truly makes it feel like a second home.”

Anchorage, Alaska - Microbiology

“As an out-of-state student, I immediately felt comfortable at Montana State University. There were many other students from out-of-state as well, and my first year I lived in the International Residence Hall with students from all over the world. Plus, the academic opportunities are outstanding at MSU. This summer I plan on working in an environmental health research lab on campus with top-notch professors. In addition to being able to put research experience on my resume, I get to spend the summer hiking, biking, running and exploring all that Montana has to offer.”

Jackson, Wyo. - Secondary Education

“The transition from out-of-state to MSU couldn’t have been any better, as the campus staff works hard to cater to everyone’s needs. Plus, with numerous opportunities to get involved with intramurals and students clubs and activities, it was easy to make friends with students from all over the U.S. and other countries.”

Great Falls, Mont. - Mathematics Education

“Top-notch professors, world-class facilities and spectacular surroundings; that’s what MSU means to me. What sealed the deal was the extensive honors program. Smaller discussion-based seminars allow students to critically examine academics in a friendly and tight-knit community.”

Montana State University is the BEST...

• MSU is home to one of two bio-containment facilities in the country.
• The engineering/physical sciences building houses the Center for Biofilm Engineering, one of a handful of National Engineering research facilities in the country.
• Our film school is one of the top film schools in the nation.
• MSU offered the first accredited five-year master’s of architecture program in the nation.
• Small group freshman seminars help new students get off to a great start at MSU.
• Our College of Business is one of 300 in the country (10 percent) that is nationally accredited. Our CPA (certified public accountant) exam pass rate is among the top in the country.
• Cutting edge research opportunities are available to students at all levels through our Undergraduate Scholars Program.
• Students who want to “experience something different” can choose to study at 165 study abroad locations in 40 countries or at hundreds of institutions across the United States.
• MSU is one of five universities across the country recognized as an “education partner” in the Mars Exploration program. Currently researchers are studying the thermal hot pots in Yellowstone with possible implications for life on Mars.
• MSU offers a one-of-a-kind master’s program in the United States in Natural History Filmmaking. This program will be funded through a large grant from the Discovery Channel.
• The MSU College of Nursing is the 7th largest nursing program in the United States and the only public institution in Montana which offers a bachelor’s degree in nursing. MSU’s Graphic Design program is the only graphic design program in the state.
• Engineering students, under the supervision of Jack Horner, recently rebuilt the sinus cavity of a dinosaur as a means to create a model for how dinosaurs made sounds.
• Architecture students have been working with the National Park Service in a wide variety of design projects.
• Students are studying ecosystems in Yellowstone Park as a means to measure the impact of human induced changes on species and plant varieties.
• Civil engineering students have the opportunity to work on avalanche studies in the Bridger Mountains.

Come and see us... we are PROUD of MSU and we’d love to tell you even more. MSU might just be the right school for you!

To set up a visit, contact us at 888-MSU-CATS!
Freshman Seminars are multidisciplinary courses presented in seminar format to new students. The classes fill the verbal core graduation requirement but have so much more to offer new students. The courses use active modes of teaching and learning to maximize student involvement. Seminars challenge students to become critical thinkers, to view the world from multiple perspectives and to explore contemporary issues. The classes are very small, so students will quickly get to know their instructor and fellow students. With the small class size and active modes of teaching, these courses successfully integrate entering students into the academic and intellectual MSU community. Freshman Seminars are some of the most innovative and well-liked courses on campus.

“From my basic journey through the semester, to my offered materials and experiences that contributed to classes are very small, so students will quickly take this class. Of all the classes I’ve ever taken, this one will definitely be remembered as one of the best.”

“My freshman seminar class was very good for me. The small class size made it feel like family more than a class. I really enjoyed the whole atmosphere.”

“The small class size and active modes of teaching, these courses successfully integrate entering students into the academic and intellectual MSU community. Freshman Seminars are some of the most innovative and well-liked courses on campus.”

Students who have taken freshman seminars are saying...

FRESHMAN SEMINARS

Prospective Students Benefit from Host Program

Prospective students coming to MSU for a campus visit are eligible to stay with one of the designated Residence Life Hosts in a Residence Hall room. Hosts help visitors get a brief introduction to Residence Hall living and answer questions about campus living and resources, and student experiences.

To participate in this program, the visitor should contact the Residence Life Office to make a reservation. The visitor will then be directed to the Host Program coordinator who will ask for pertinent information, including dates of stay, preferred hall (if any), payment method, etc. A Host Program participant stays in the room of a current resident for up to three nights, is provided with meal passes for dinner on the night of arrival and breakfast and lunch the next day, and has the opportunity to interact with his/her host as well as other residents in the Residence Halls. A $45 per night fee covers lodging and the three meals.

Parent Family Fall Weekend Slated for October 24-26

Mark your calendars for the weekend of October 24-26 and plan to attend the Annual Parent/Family Fall Weekend at Montana State University. The event offers an opportunity to familiarize yourself with campus, meet other parents and students, and spend some quality time with your family. There are panel discussions designed to meet your needs, faculty lectures that will inspire and interest you and social events that the entire family can enjoy. We urge you to attend all the events that you can.

The MSU Parent Family Association, an organization dedicated to supporting students, sponsors the MSU Fall Weekend, now in its 13th year. The PFA strives to develop a close relationship between families and Montana State University and ensure that families have an opportunity to share ideas with university administration. The PFA also will host a series of Urban Expeditions. It’s a great way to meet other parents and familiarize yourself with the community.

Please plan to visit campus this fall, and watch for your invitation and registration form in August for the Parent Family Fall Weekend.

Important Numbers

- Letters and Science, College of...
- Library...
- Nursing, College of...
- Operations, Campus...
- President’s Office...
- Residence Life...
- University Food Services
- Center...
- Counseling...
- Dean of Students Office...
- Education, Health and Human Development, College of...
- Engineering, College of...
- Family Housing...
- Family Studies...
- General Studies...
- Graduate Studies...
- Health Service...
- Intramurals...

PARENT FAMILY ASSOCIATION MONTANA STATE UNIVERSITY

Admissions & New Student Services

Parent & Family Association

Letter & Science, College of...
Library...
Nursing, College of...
Operations, Campus...
President’s Office...
Residence Life...
University Food Services
Center...
Counseling...
Dean of Students Office...
Education, Health and Human Development, College of...
Engineering, College of...
Family Housing...
Family Studies...
General Studies...
Graduate Studies...
Health Service...
Intramurals...

CALL US! 1-888-MSU-CATS
CHECK US OUT! montana.edu

1-406-994-6471, fax: 1-406-994-1918

E-mail: housing@montana.edu

*If dialing from an off-campus telephone, numbers listed here should be preceded by "994."
*If dialing from outside Montana, numbers should be preceded by "1-406-994."

MOUNTAINS & MINDS
MONTANA STATE UNIVERSITY
Cheever Hall, home of the architecture department, which is located directly across the street from North Hedges. The Freshman Year Experience floor, which will be located on the fourth floor, is a co-ed living environment open to students enrolled in the General Studies Program (those students who have entered MSU without declaring a specific major). Students living on this floor must be enrolled in GENS 101V, thus enabling Resident Advisors to integrate course curriculum into floor activities and programs. The floor represents a great opportunity for students interested in exploring the topics of critical thinking, the value of education, major and career planning, 21st century issues, interpersonal communication and college success tips.

The Architecture floor is open to both students who have declared architecture as their major as well as non-architecture students who are interested in exploring arts and architecture. Available to freshmen, sophomores, juniors and seniors, the male floor represents a great opportunity for students interested in exploring the topics of critical thinking, the value of education, major and career planning, and college success tips.

The Architecture floor is located on the seventh floor of North Hedges, which is located directly across the street from Cheever Hall, home of the architecture department. Residence Life has worked closely with the Office for Experiential Education and other campus and community resources in creating both the living option and philosophy behind it. The philosophy of the Outdoor Pursuits floors is that by incorporating a purposeful outdoor experience into a college career, residents will be able to meet and associate with other students who are also facing the challenges of academic and social development at MSU. The unique atmosphere will encourage students to pursue their passion for the outdoors without compromising the goal of academic success.

Benefits of living on an Outdoor Pursuits floor include:

- Resident Advisors coordinate weekly activities focused on outdoor activities in the Bozeman area.
- Residents are invited to monthly dinner presentations hosted by local outdoor recreation professionals.
- Residents are invited to participate in the ropes course training in conjunction with MSU’s Experiential Education program.

Two other living options return in 2003 after enormously successful debuts last year. Four Freshmen Interest Group (FIG) floors will call North Hedges home, while Roskie Hall welcomes back three Outdoor Pursuits floors. A FIG is a group of 30 students sharing similar interests who take three of the same courses and live together on the same floor of the residence hall. Two co-ed floors in North Hedges (sixth and eleventh) have been committed to FIGs. Rather than finding their way through study sessions, research papers and exams alone, students become part of a close community of students who are experiencing similar educational challenges and transitional issues. When you live on a FIG floor you:

- Live with 30 other FIG participants who are taking the same courses.
- Have great opportunities to make friends and develop study partners.
- Have access to peer academic assistance within the confines of your residence hall.

The Outdoor Pursuits floors in Roskie Hall were designed for outdoor enthusiasts who are interested in exploring the Montana outdoors or to simply explore new outdoor activities. Residence Life has

DEAR PROSPECTIVE STUDENTS

by Brian Rohlen

B.S. in Psychology, 2002
Former General Studies Student

I was extremely anxious to begin college, and one of the only comforts I had while I was driving to Bozeman from the Midwest was knowing that I was part of a program that was going to help me choose a future path. I was able to relax because I felt I had time to make sure the right decision was made. The Freshman Seminar was a great chance to explore careers and learn some incredible things about myself. During my time in Freshman Seminar I met so many friends that I still hang out with today, and one I lived with directly out of the dorms. MSU has a wonderful size campus, and I was able to see my facilitator all across campus throughout my days at MSU. When I declared psychology as my major, I felt confident that I would not be disappointed.

Before I knew it, I was approaching my last semester at MSU. I was spending time planning my classes and I realized there was an opportunity for me to be a peer leader for the same class that guided me through the transition into college years. The thought of helping freshmen become aware of all the great resources at MSU and trying to answer all the questions any freshman has was motivation enough. I was accepted as a peer leader my last semester at MSU.

It was great to be able to start off my wonderful experience at MSU with General Studies, and it was even better to be able to finish off at the other end of a great program. Throughout my years at MSU I would run into the General Studies staff and they always remembered my name and asked how classes were going. I am still friends with students from my Freshman Seminar and with the peer leaders from my last semester.

Soon after I completed my last class and was onto my next adventure, I received a letter from the General Studies department congratulating me on my psychology degree. It was so moved by this gesture, but not surprised. These are the caliber people they have helping students in the General Studies department at Montana State University.
Kathryn J. “Katie” Conner of Great Falls, Mont., a junior majoring in English literature at Montana State University, has been selected to receive a coveted Truman Scholarship, one of the country’s most highly esteemed undergraduate scholarships. She is the ninth MSU student to receive the $30,000 merit-based grant awarded to students who evidence potential and dedication to public service, and the first to win since 1999.

The daughter of Dr. Chris and Sue Conner of Great Falls, she had been interviewing for the award for many weeks but recently learned of her selection when MSU President Geoff Gamble brought her the news with a bouquet of calla lilies.

"What a remarkable achievement," Gamble said in his presentation to Conner. "This is arguably the most prestigious undergraduate scholarship in the nation.

"This says much first about Katie, but also about the university and the quality of our faculty and staff, who deserve an enormous amount of credit, and also to the quality of the students who come here.”

Conner carried an ambitious semester load of 22 credits in the spring on her way to earning a degree in 2004 in English literature and University Honors and a minor in women’s studies. Her plans for her grant include law school at Georgetown, or another university, that also offers a master’s degree in public policy along with a law degree. She eventually hopes to work at the National Organization of Women or the Justice Department working in victims’ rights.

Conner began her college career at the University of Texas, where she said the large school of 55,000 students didn’t fill her expectations, primarily because her classes were taught by teaching assistants. She transferred to Montana State University the second semester of her freshman year.

"I like Bozeman, a lot,” Conner said. She said she has never been disappointed with her choice. “The education here has been so personal, challenging and evolving. The professors at MSU are phenomenal.”

Conner said an example of the quality of her education was a multidisciplinary class called “Origins” that she took last fall. Team-taught by world-class paleontologist Jack Horner, noted cosmologist Neil Cornish and Michael Miles, associate director of the University Honors Program, the class explored the origins of man and the universe from the perspective of several disciplines.

“My friends, some of them in prestigious universities across the country, were envious of that class and couldn’t believe the experience of taking a class from someone like Jack Horner.”

The “Origins” class actually played a large role in her nomination for the Truman. Miles said he thought Conner would be an excellent candidate for the Truman when she, an English major, was the only one in the “Origins” class to correctly answer a physics problem.

That, he said, displayed a breadth of knowledge necessary for a successful candidate.

Congress established the Truman Scholarship Foundation in 1975 as the federal memorial to the 33rd U.S. President.

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### MSU student wins Goldwater Scholarship

Bonnie Kirkpatrick, a Montana State University computer whiz from Dillon, is the most recent MSU student to receive the prestigious Goldwater Scholarship for undergraduate excellence in science and math.

As one of 300 national winners, and one of just 12 computer science students who received Goldwater scholarships from 1,093 applications in the disciplines of mathematics, science and engineering, Kirkpatrick’s scholarship will cover the cost of tuition, fees, books, and room and board up to a maximum of $7,500 per year for two years of undergraduate schooling. Kirkpatrick said she plans to use the prestige of the award to help her in applying to graduate school with the eventual goal of becoming a university professor.

Kirkpatrick’s work in bioinformatics, using computer models to predict proteins and predict protein structures, caught the eye of Goldwater Scholarship judges. Kirkpatrick’s work, under the mentorship of Brendan Mumey of MSU’s Department of Computer Science and Nancy Amato of Texas A&M University, has applications for pharmaceutical companies and other health care professionals seeking to understand the tiny messenger systems that are essential to all biological processes.

Kirkpatrick is helping to map how the folding mechanisms of proteins which fold and unfold, somewhat like a ribbon.

"Bonnie is an exceptional student and a pleasure to work with," Mumey said. "She possesses a rare combination of talent, drive and intellectual curiosity. She made significant contributions in our protein epitope mapping project."

Curiosity is a key in Kirkpatrick’s intellectual success, and it manifested itself early. As an eighth grader in Dillon, Kirkpatrick developed an interest in computers. Her teachers and her parents helped find her a computer mentor to enhance her interest.

Victoria O’Donnell, director of the MSU Honors Program, complimented Kirkpatrick’s intellect, curiosity and motivation, which have been nurtured by her family and faculty.

MSU is among the top 10 institutions in the country for the number of students who have received the scholarship, according to Goldwater Foundation officials. Joining MSU in the top tier of institutions in number of students receiving Goldwater Scholarships are Harvard/Radcliffe, Princeton, Duke, Kansas State, California Institute of Technology, University of Chicago, Penn State, University of Illinois at Champaign/Urbana, Johns Hopkins and Washington University in St. Louis.

Congress established the Barry M. Goldwater Scholarship program in 1986 to support outstanding students in mathematics, the natural sciences and engineering.

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### Estimated Yearly Expenses 2002-2003

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* Tuition and fees represent average charges for basic instruction and mandatory fees for full-time students. Actual fees paid may vary based on the number of credits carried each semester. At the time this publication was printed, the university had not established final 2003-2004 tuition and fee expenses.
** Room and boarding costs will vary depending on a student’s living arrangements and lifestyle.
*** Personal/Transportation costs average $2,350 per year.

### 2003-2004 ACADEMIC CALENDAR

#### 2003 FALL SEMESTER
- August 27-29 –Orientation/Registration for new Freshmen and Transfers
- September 1 – Labor Day Holiday
- September 2 - Classes begin
- November 11 – Veterans’ Day Holiday
- November 27-28 – Thanksgiving Holiday
- December 15-19 – Final Exams

#### 2004 SPRING SEMESTER
- January 13-14 – Orientation/Registration for new Freshmen and Transfers
- January 14 – Classes Begin
- January 19– Martin Luther King Holiday
- February 16 – Presidents’ Day Holiday
- March 15-19 – Spring Break
- April 9 – University Day (no classes—offices open)
- May 3-7 – Finals Week
- May 8 – Commencement
Domes and tones: MSU students experience Russia

Waking to see the golden domes of the Kremlin and hearing opera at the Bolshoi Theater are not standard fare for undergraduates, but it is the setting three Montana State University agriculture education students became familiar with when they studied in Moscow for a semester.

Tyler Wiltgen of Wilsall, Mont., Becky Kossler of Clyde Park, Mont., and Heather McCartney of Choteau, Mont., spent the spring semester in Moscow studying the Russian language and culture at as least as much as they studied agriculture at Moscow State Agriculture Engineering University.

“We had a month of intensive language and now are pretty much on our own out in the city,” wrote Kossler in an e-mail. “The MSU senior added that “after taking Russian language every day for almost four weeks, one hour of ag econ will be cake.”

Russian language classes had been reduced to twice a week, but there were plenty of other classes to fill in the time, some in Russian and some taught in English by visiting American teachers.

“We take ag classes alongside Russian students,” wrote Wiltgen, an MSU sophomore. “I’ve learned so much about the Russian culture that I think I will be more accepting of new ideas and challenges,” he added.

McCartney, a junior, wrote that typically the group would have classes during the day and then attend a cultural event one night a week with longer trips to major historical sites on the weekends. She said she especially enjoyed visiting the Medieval city of Suzdal, a town about 130 miles east of Moscow. Its monasteries shape the skyline while chickens, goats and cows graze nearby.

Wiltgen’s favorite trip so far was to the World War II museum. “It was amazing to see the war from Russia’s perspective,” wrote Wiltgen. “It was also amazing to see the Red Square more times than I can count. I love that place.”

This trip “helps me to understand Russia’s pride, heritage and dignity,” wrote McCartney, who said that history was one of the reasons she wanted to go to Russia. “I always found Russian history interesting and wanted to see if it was something different than the Cold War Russia that my parents are familiar with.”

She said she had been to see the ballet “Giselle” at the Kremlin Theater, the opera “The Tsar’s Bride” at the Bolshoi Theater, the Kremlin, Lenin’s tomb, and “Red Square more times than I can count. I love that place.”

The three have weathered Russia’s cold, finding it similar to Montana, and seen a bit of its vast spaces.

“The MSU students are there because of a partnership of land grant universities that extends to Pennsylvania State University, Texas A&M University, University of Florida, University of Nebraska and Montana State University. Each participating land grant collaborates by sending both teachers and students to teach and learn at Moscow State Agricultural Engineering University (MSAU). Participating students form long-lasting partnerships to enhance and build upon their experience at MSAU,” said Marty Frick, MSU associate professor of agricultural education.

Undergraduate Scholars Program Providing Unique Opportunities For Students

MSU offers many opportunities for undergraduate students to enhance their learning by direct involvement in research projects. The Undergraduate Scholars Program makes it possible for students to participate in research and creative activity under the direction of an MSU faculty member. Students are either paid for their time, or are provided with funds to offset supplies or other research costs. Through their projects and other related activities (e.g., presenting their research at national professional conferences), students acquire the tools necessary to be successful in their chosen career.

Currently about 150 students participate in USP, with projects covering diverse areas of study including:

- Investigating potential vaccine candidates for bacterial infections affecting people with weakened immune systems or artificial implants;
- Understanding how tourism impacts a community such as Bozeman;
- Regenerating rat neurons in hopes of developing new therapies for diseases such as Alzheimer’s and Parkinson’s;
- Designing and building a telescope to be sent into space to investigate the sun;
- Enhancing the manner in which biochemistry is taught to non-science majors;
- Surveying the Montana nursing workforce.

In all the above projects, student initiative and creativity lead the process, with intellectual support from faculty members and financial support from the USP office. USP demonstrates how the resources of a major research university can be brought to bear on undergraduate education.

For more information, e-mail the program director at usp@montana.edu or visit the USP Web site at www.montana.edu/usp.

Pre-Medical Professions at Montana State University

If you want to be a doctor, dentist, optometrist, veterinarian, pharmacist, physical therapist or one of the hundreds of other health professions, you will need a balance of three components:

- Academic success means excellent grades in science classes as well as your core classes.
- Experience in your chosen health field is a way to discover if you would enjoy that particular profession. It also shows professional schools that you are serious about the field and want to be of service to others.
- Campus and community involvement allows one to develop and demonstrate leadership qualities, and it shows that you are interested in more than just receiving a college degree.

The health professions advising program at MSU is designed to help students achieve this balance. Chief health professions advisor Bill Dorgan holds a Ph.D. degree in anatomy from the University of Colorado School of Medicine and teaches in the WWAMI medical program. Dorgan advised pre-health students at MSU from 1968 to 1998, and subsequently served as assistant dean for pre-health professions at Auburn University for 11 years. In the fall of 1999, he returned to MSU to again serve as the chief health professions advisor.

The interdisciplinary Health Professions Advising Program is available to students from any major. The advising office is located in the General Studies Program Office, 418 Reid Hall. Students who are currently in high school and those who have already graduated from college are also welcome to meet with Bill Dorgan. He can help students:

1. select individually appropriate majors, goals and programs (depending on a student’s interests and background);
2. make curriculum choices based on the prerequisites of professional schools and on the student’s own interests (students may major in any curriculum as long as they fulfill the minimum science requirements of a given health professions school);
3. prepare for national admissions tests by providing information on review materials and exam preparation programs;
4. prepare applications and obtain letters of recommendation;
5. develop skills (through faculty interviews and the Office of Career Services);;
6. take advantage of opportunities for observation and interaction with practicing professionals in the student’s area of interest;
7. become involved with community and campus activities.

Dorgan offers a health careers orientation class (GENS 102) during spring semester for all MSU students who are considering a career in the health professions. This one-credit seminar is designed for freshmen, but is open to any student who may want to learn more about what it takes to become a health professional.

During the academic year, talks are presented by a variety of health professionals to give students exposure to the many opportunities available. Also, MSU has a highly structured advising program aimed at helping students maximize the chances of being accepted into the program of their choice.

This past fall, 36 MSU students were accepted to medical schools throughout the nation. Also, 8 of the 20 total students accepted into the WWAMI medical program came from Montana.

Job satisfaction in the health professions is very high, but the competition to get into these fields is intense and requires planning ahead. We feel we can provide the best possible opportunity for our students to plan ahead and to achieve their goals.

If you are interested in a career in the health professions, contact us at:

General Studies Program
418 Reid Hall
Montana State University-Bozeman
Bozeman, Montana 59717-3000
Phone: 406-994-3532
Fax: 406-994-6049
E-mail: wdorf@montana.edu
Web site: www.montana.edu/wwwgs/health.htm
Jeremy Mitchell used to think of research the way some people think of watching sewing tips on TV. But his opinion began to change after he volunteered at the Gallatin Community Clinic in Bozeman. There he met Jeff Leid, another volunteer, and Leid told him about the research he was doing at the Center for Biofilm Engineering (CBE) at Montana State University in Bozeman. He suggested Mitchell give it a try. “It sounded like it would be boring, but I got really excited about it once I started doing it,” Mitchell said. “Now I really enjoy it.”

The Whitefish, Mont., native is growing bacteria for a project that could lead to a remedy for people who’ve gotten a type of staph infection called Staphylococcus aureus. The infection can affect people with weakened immune systems or artificial implants. Mitchell, an MSU senior majoring in chemical engineering, is involved in the project as part of the university’s Undergraduate Scholars Program.

“I enjoy the people that I work with, and I enjoy seeing the reason we are doing the research and where it’s going and how it might be beneficial to medicine seeing the reason we are doing the research and where it’s going and how it might be beneficial to medicine eventually,” Mitchell said.

Mark Shirtliff, assistant research professor in microbiology and the CBE, said, ‘Every year in the United States, thousands of people die and many more suffer from the debilitating effects of chronic bacterial infections. These infections cannot be resolved by the host immune system or antibiotic therapy. In our laboratory, we have had the genuine pleasure to have Jeremy Mitchell work towards understanding these infections and discover potential candidates for vaccines against these infections.”

“The vaccines against bacterial infections to date have concentrated on factors produced during an early, acute phase and have met with limited success,” Shirtliff continued. “Jeremy is growing bacteria in a system to mimic a chronic infection. He then uses a technique to identify bacterial factors specific to this growth condition. By using these factors as vaccines, we hope to spur the immune system on to attack these bacteria before they are able to develop into a chronic infection.”

Mitchell is applying now to medical schools. He’s interested in biomedical engineering, too. But his outlook on research has changed so much, that he could otherwise pursue a career in research.

If he does go into research, Mitchell said he might want to take on projects with a little broader focus than his current work.

That’s an approach that seems to fit the rest of his life, as well.

**Whitefish Student Finds Research Intriguing After All**

Kristi De Vries didn’t know what to major in during her first semester at Montana State University in Bozeman. But the answer became obvious after she thought about her grandmother, Marge Roberts, and the huge yard and garden she used to have in Roundup, Mont.

“I really like to garden. It really makes me happy. How cool would it be to have a whole career in it?” De Vries asked herself. “I love it.”

De Vries, a graduate of Roundup High School and the daughter of Janet and Richard De Vries, is now a junior at MSU and majoring in horticulture. With her interest sharply in focus, she spent last summer working as an intern at the Frederik Meijer Gardens and Sculpture Park in Grand Rapids, Mich.

“I kind of fell into it. I just got lucky,” De Vries said about the opportunity that unintentionally took her to an area of the country where tulips and Dutch last names like hers are commonplace.

The internship rotated De Vries through a variety of Meijer gardens and greenhouses. She also “weeded and weeded and weeded” around “The American Horse,” a 24-foot-tall bronze horse that’s one of only two in the world built according to Leonardo da Vinci’s specifications.

Now back at MSU, De Vries is participating in the Undergraduate Scholars Program which promotes undergraduate research. De Vries’ research is aimed at developing plants that are bushier and shorter, thus more attractive to Montana customers.

“It’s a project about the light quality affecting plants,” De Vries explained. “Here in Montana, we have really horrible low-light conditions. Because of those horrible light conditions, the plants we grow in our greenhouses tend to stretch out. They can get stringy and yucky.”

Hoping to change that, De Vries is conducting experiments in MSU’s Plant Growth Center under the guidance of Tracy Dougher, assistant professor of plant sciences and plant pathology.

The experiments involve growing lettuce and pansies under a variety of filters that look like colored Saran Wrap.

“This is aimed at greenhouse growers. It also stems from work I did for NASA, growing plants under controlled situations,” Dougher said.

“Kristi’s project is going to be valuable to Montana growers because it deals with the low-light conditions they have to deal with frequently,” Dougher added.

De Vries – who finds something new to enjoy about horticulture every week – isn’t sure what aspect of horticulture she’ll pursue when she earns her degree. One dream would be to become an educator – maybe a professor or someone who guides little children through botanical gardens.

**Space to Breathe & Grow**

Bozeman is nestled between the Bridger and Gallatin Mountains. The prairie stretches out to the east, and in our backyard rise the magnificent Rocky Mountains. Yellowstone Park is 90 miles south. Glacier Park is 210 miles north.

Several of the nation’s best trout streams are minutes from Bozeman. Our location, between mountains and prairie, provides hunters the best of both big game and birds.

Our skiing is excellent. At Bridger Bowl, 20 minutes from Bozeman, and Big Sky, 45 minutes south, powder snow is the rule rather than the exception. Lift lines, if any, are short, and the slopes uncrowded. Opportunities for cross-country skiing are almost unlimited. Follow groomed trails or break your own.