

## NDSU physical plant report focuses on accountability, training, attention to details

In the final report on practices in North Dakota State University's physical plant department, Vice President for Business and Finance Dick Rayl is implementing greater training for employees and greater attention to the policies and practices used in the department's daily routines.

Rayl produced the plan at the direction of President Joseph A. Chapman following audit reports last spring and summer which criticized some departmental methods. The plan clarifies existing policies and creates stricter controls and administrative oversight. In addition to the internal control plan, Rayl produced a second report which responded on a point-by-point basis to allegations in a consultant's audit and a second audit from the State Auditor's Office.

"In the public sector, details are important," said Rayl. "In this fourth review of the physical plant, I went point by point through the audit reports to incorporate their recommendations in how we handle work orders, how we account for the use of state resources and how we dispose of scrap materials. Our actions reflect the strict accountability required in public service."

Policy changes will be shared with departmental employees through monthly meetings and other means. In addition, a vacant position, the associate director for maintenance and construction, will be filled and two additional trades workers will be hired to alleviate a backlog of work orders.

"The most troubling aspect of the audit reports were those allegations which claimed that individuals were personally benefiting in some way," said Rayl. "Our follow-up concluded, as did the State Auditor in their independent examination, that in most cases the sources of these allegations either did not have first hand information, that the charges were disproved or that records did not exist to prove or disprove the claim.

"But even though the state audit found no criminal wrongdoing, I believe new leadership in the physical plant is the best way to put the controversy behind us. To that end, I have negotiated the early retirement of physical plant director Dennis Gilbertson, who will retire January 1, 2000."

## North Dakota chosen as change agent for diversity

North Dakota, through the NDSU Extension Service, has been chosen by the U.S. Department of Agriculture's Cooperative State Research, Education and Extension Service to be involved with the "Change Agent States for Diversity" project. The eight participating states will work together as a consortium to address issues of diversity and pluralism within each state, act as change agents and model strategies to assist others.

The participating states—North Dakota, Arizona, Colorado, Georgia, Missouri, North Carolina, New York and Pennsylvania—will form local catalyst teams to develop and implement effective strategies for change. The groups will use the seven guiding characteristics of the "engaged university" as defined by the Kellogg Commission on the Future of State and Land-Grant Universities. The project's initiatives include profile assessment, valuing differences education and managing diversity skill development.

**Deadline approaches  
for Research Foundation proposals**  
Faculty are encouraged to submit applications by Oct. 1 for the Research Development Support Program sponsored by the NDSU Research Foundation. Detailed applications guidelines are available at [www.ndsu.nodak.edu/ndsu/sizer/RDSPgrant.html](http://www.ndsu.nodak.edu/ndsu/sizer/RDSPgrant.html).

### Next Issue

Publication date: Wednesday, Oct. 6  
Submissions due: noon Sept. 30  
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Sandra Holbrook, equal opportunity director, and Karen Zotz, NDSU Extension Service assistant director for human development, attended the project's organizational meeting Sept. 15-16 in Milwaukee. According to Zotz, the local effort will see NDSU partnering with the state's tribal colleges, which were classified as land-grant institutions in 1994.

## Annual notice to all employees and students

The following is the annual notice of equal opportunity and sexual harassment policies to NDSU employees and students.

### Equal opportunity policy

NDSU is fully committed to equal opportunity in employment decisions and educational programs and activities, in compliance with all applicable federal and state laws and including appropriate affirmative action efforts, for all individuals without regard to race, color, national origin, religion, sex, disability\*, age, Vietnam Era Veterans status, sexual orientation, status with regard to marriage or public assistance, or participation in lawful activity off the employer's premises during non-working hours which is not in direct conflict with the essential business-related interests of the employer.

This policy has been approved by the university president. Any inquiries concerning the application of such laws or this policy to the university's practices may be referred to the appropriate federal compliance agency or to Sandra Holbrook, NDSU's director of equal opportunity, Old Main 202, ext. 1-7703, or [sholbroo@gwmail.nodak.edu](mailto:sholbroo@gwmail.nodak.edu).

\* Otherwise qualified individuals with disabilities (as defined in the Americans with Disabilities Act and Section 504 of the Rehabilitation Act), requiring reasonable accommodation, are invited to identify themselves to their supervisor or course instructor.

### Sexual harassment policy

As part of its commitment to equal opportunity, NDSU prohibits sexual harassment of its employees and students, including student-to-student and other peer sexual harassment.

This policy is in compliance with federal regulations implementing Title VII of the Civil Rights Act of 1964 and Title IX of the Education Amendments of 1972. Sexual harassment is defined as: "Unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature constitute sexual harassment when

- (1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or academic achievement,
- (2) submission to or rejection of such conduct by an individual is used as the basis for employment decisions or academic decisions affecting such individual, or
- (3) such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive environment."

Individuals concerned about violations of this policy should request assistance from the university's director of equal opportunity, university's general counsel, Counseling and Disability Services Office, the associate director for student

rights and responsibilities or an appropriate administrator. When administrators or supervisors become aware of occurrences of sexual harassment in their areas, they are responsible for stopping the behavior or reporting it to the director of equal opportunity. In addition, the university's equal opportunity grievance procedure shall be available for any person who wishes to file a complaint alleging a violation of this policy.

Employees and students also should be aware the university's policy on consensual relationship, which can be found at [www.ndsu.nodak.edu/policy/1621.htm](http://www.ndsu.nodak.edu/policy/1621.htm).

## Open enrollment time for ReliaStar dental insurance

The annual enrollment for ReliaStar Voluntary Dental Group dental insurance will be held in October. Completed applications cannot be accepted with signatures prior to Oct. 1, or after Oct. 29. All application forms must be submitted to Human Resources, 205 Old Main, by Oct. 29. Forms arriving after that date will not be accepted by ReliaStar.

The insurance will be effective Jan. 1, with the first premium withheld Dec. 30.

NDPERS has mailed information packets to all employees for enrollment, and premium rate increases have been made to the program. Anyone with questions concerning the changes may call NDPERS directly at 1-800-803-7377.

Rates will automatically change for all employees Dec. 30. New premiums are as follows:

Employee only	\$22.16
Employee and spouse	\$42.70
Employee and child(ren)	\$49.71
Family (employee, spouse and children)	\$70.27

Questions or additional forms may be requested from Lyn Pletta at 1-8965 or [pletta@badlands.nodak.edu](mailto:pletta@badlands.nodak.edu).

## Friendship Family Program seeks participants

This year NDSU has 305 international students from more than 50 countries. Of these students, very few ever have the opportunity to experience American home life first hand. NDSU's Friendship Family Program is an opportunity to share American culture with our international students and learn about their cultures at the same time.

Friendship Families can invite a student for dinner or meet with the student on a regular basis. There is no financial obligation to host families.

Anyone interested in participating in the Friendship Family Program should contact the Office of International Programs at 1-7895 for more information and an application.

## NDSU scientists receive chemistry patents

NDSU scientists recently received three patents based on their chemistry research, and another is expected shortly. The new patents, which may eventually be used in such things as developing new products for North Dakota agriculture and making pharmaceutical drugs, range from a process to link silicon atoms to a method of producing amino acids.

The patents come at a time when NDSU President Joseph Chapman is urging the university to work toward Carnegie Research II status, which is defined as 50 or more doctoral graduates and the generation of \$15.5 million to \$40 million in competitive federal research grants each year.

"NDSU can position itself for more sponsored research, especially in its areas of strength," said Dale Zetocha, executive director of the NDSU Research Foundation, which facilitates the patenting, licensing and distribution of net revenue from licensing of technologies from NDSU's research programs. "With President Chapman's new emphasis, it is important to patent NDSU technologies that have commercial potential. Successful licensing of these technologies can result in licensing revenue and also enhance NDSU's reputation with the possibility of attracting additional research funding."

### Process patent is joint effort of NDSU and industry

One of the patents, "Compounds Containing Tetradechlorocyclohexasilane Dianion," is considered a prime example of how the university can work together with private business.

The patent, earned by Philip Boudjouk, professor of chemistry; B.K. Kim, NDSU PhD '98; M.P. Remington Jr., graduate student; and B.P.S. Chauhan, research associate, is for a "controlled mini-polymerization" that is described as an inexpensive and efficient way to link six atoms of silicon in one ring. "This is an immediate precursor to electronic materials and it may become a very useful precursor to silicon used in industry, especially the semi-conductor industry," said Boudjouk.

The patent is a result of four years of study and was a collaboration with Dow Corning, which paid for the patent process in the United States and 19 jurisdictions in Europe. "This is a great example of a fruitful interaction of a university and industry," Boudjouk said, noting the research has already attracted attention from German manufacturing firms. "Dow Corning gets the first shot at commercializing the process, while the university retains 100 percent ownership of the rights."

Boudjouk said the next step of the research is to use the process to combine silicon with other metals to help control electronic properties. "If we are successful in that, it could lead to additional patents in the future," Boudjouk said.

### Process patent may provide new uses for crambe

Another new patent may open the door to additional products from a North Dakota crop.

Boudjouk; Mukund Sibi, professor of chemistry; and Jianguo Ji, research associate, earned a patent for "Method for Preparation of Carboxylic Acids," which is a process that harnesses oxygen from the air to replace ozone in chemical methods. This work is important because ozone is a powerful oxidant used to kill bacteria, but it is very costly. By using oxygen, the method becomes much less expensive.

Specifically, the process is being utilized to find non-food uses for the crop crambe. Using the method, the scientists have developed precursors for nylon, perfumes and high-performance lubricants. The research has drawn the attention of companies in the United States, Italy, Germany and England.

"It is an exciting thing to receive a patent," Sibi said. "This is an avenue I don't normally pursue. This is a different mission and a facet of science not many people know about. Our colleagues read about our research in journals, but a patent is a different matter all together. It feels good."

### New methods may be used in drug market

One patent and another soon on the way are expected to have their impact felt in the manufacture of pharmaceutical drugs.

Sibi, along with Prasad K. Despande, research associate, and Anthony J. LaLoggia, graduate student, received a patent for "Diarylaminopropanediol and Diarylmethyl-oxazolidinone Compounds," which may find uses in the chiral drug market. This is a new method of preparing optically active diarylalanines, which have the potential to dramatically enhance the therapeutic activity of peptide analogs.

The university also has received notice that a patent will be allowed for a method to produce unnatural amino acids called "beta amino acids." The patent, "Method of Preparation of B-Amino Acids—RFT-28," was developed by Sibi, John J. Shay, research associate; Craig P. Jasperse, visiting faculty from the Moorhead State University chemistry department; and Mei Liu, graduate student.

"These beta amino acids are precursors to prepare beta lactams, which are penicillin-like compounds," explained Sibi. "There is renewed interest in this area because of the new wonder drug Taxol, which is used for cancer chemotherapy. That particular drug has beta amino acid as a portion of it."

The successful patents for these processes is part of a continuing NDSU effort to innovatively contribute to research, development and technological advances. With the latest patents, the total number of NDSU research-related patents now stands at 30.

"Patents are not only important in protecting the intellectual property rights of technologies developed at NDSU, but they also add value when approaching potential licensees to commercialize a technology," Zetocha said. "Companies can justify investing in a technology, including scale-up and additional research and development, if they have exclusive rights to a technology."

The research efforts provide significant opportunities for both NDSU faculty and industry. They also yield a great learning experience for NDSU students. "Even if they are not directly involved in the work, students are in the same lab and they learn a little about this emerging research," said Boudjouk. "In addition they meet people from industry who visit campus, so they can establish a network with professionals in the field. It really is a very good education process for those both directly and indirectly involved."

## ND EPSCoR announces requests for proposals

### Research opportunities in science, math, engineering

ND EPSCoR invites proposals from interested researchers in the sciences, engineering and mathematics. This request for proposals is for individual, tenure track faculty members who plan to initiate a research program in one or more areas supported by the National Science Foundation. This request is made in anticipation of continued funding of ND EPSCoR from NSF and the state of North Dakota.

Proposals (original plus 10 copies) are due in one of the ND EPSCoR offices by noon Friday, Jan. 7. Following the review process, awards will be announced on or about April 1. Awards can be made for \$10,000 to \$40,000 (indirect costs are waived) for up to 24 months. ND EPSCoR anticipates making 15-30 awards. Award recipients will be funded in installments and will be required to submit proposals on the ND EPSCoR funded project to NSF in order to continue receiving support from ND EPSCoR. Funds will be available May 1.

Researchers must follow the guidelines in the most recent NSF Grant Proposal Guide, with the following exceptions: 1) the page limit is eight double-spaced pages for the project description with margins greater than one inch and font size 10 or larger; 2) salary for PIs cannot exceed one summer month per year (fringes must be listed on the budget); 3) travel expenses cannot exceed 10 percent of the budget or \$1,000/year, whichever is less; 4) proposals must receive the appropriate institutional signatures prior to submission to the EPSCoR office.

### Proposals requested for funding for new faculty

ND EPSCoR invites proposals from department chairs requesting start-up funds for faculty to be hired during fiscal year 2001. The major goal of this program is to staff research universities with new faculty who will be competitive for NSF CAREER awards.

Chairs intending to apply should submit an abstract including a brief description of the desired qualifications of a successful candidate by noon Friday, Oct. 1. These abstracts will be used to assist in the selection of a review panel for the full proposals. These abstracts are not a requirement and will not be part of the evaluation.

Proposals (original plus 10 copies, double-sided if possible) are due in one of the ND EPSCoR offices by 12 noon, Friday, Nov. 5. Following an external panel review process that will include an interview with the chair submitting the proposal; awards will be announced on or about Dec. 15. ND EPSCoR anticipates making 5-10 awards. Funds will be available Aug. 16, 2000.

Discussions of the program with the project director are encouraged. Notifying the steering committee of intent to submit via the requested abstract improves chances of selecting an appropriate panel.

The current NSF Grant Proposal Guide can be obtained on the web at: [www.nsf.gov/cgi-bin/getpub?nsf002](http://www.nsf.gov/cgi-bin/getpub?nsf002).

## People

### Outstanding NDSU alumni to be honored at Homecoming

The NDSU Alumni Association has announced the 1999 Alumni Achievement recipients and the Heritage Award for Alumni Service recipient. The awards will be presented at the 1999 NDSU Alumni Honors Dinner on Friday, Oct. 8, in the Great Hall of the Fargo Holiday Inn. Alumni Achievement awards will be given to alumni who have excelled in their profession. The Heritage Award for Alumni Service signifies outstanding volunteer service to NDSU. The Alumni Honors social will begin at 6 p.m., followed by dinner at 6:45 p.m. and the awards presentation at 7:30 p.m. For dinner reservations, call the NDSU Alumni Association at 1-6800.

#### Alumni Achievement Honorees



**Bernauer**

**David W. Bernauer** received a bachelor's degree from NDSU in pharmacy in 1967. He is currently the president and chief operating officer of Walgreen Co., the nation's largest drugstore chain. Bernauer began working as a pharmacist intern at Walgreen Co. in 1966, after receiving a Walgreen scholarship. He joined the company upon graduation in 1967.

After holding various store manager positions, he became a district manager in 1979 and regional vice president in 1987. Bernauer also has held the positions of vice president and treasurer, vice president of purchasing and merchandising, and senior vice president and chief information officer. During his career, Bernauer has established himself as a national leader toward advancing the profession of pharmacy.



**Crockett**

**Dr. Susan J. Crockett** graduated from NDSU in 1970 with a master's degree in food and nutrition. She received her doctorate in epidemiology in 1987 from the University of Minnesota. Crockett recently was named the director of health and nutrition with General Mills Inc., Minneapolis. Previously, Crockett served for nine years as the dean of the

College of Human Development at Syracuse University, Syracuse, N.Y. At Syracuse University, Crockett was instrumental in shaping and guiding the curricula, student programs, development work and general administration for the college. Crockett also has served NDSU in many roles. Within the College of Human Development and Education, Crockett was the chair and an associate professor for the Department of Food and Nutrition, director of student services and assistant to the dean. In 1987, Crockett received a national award from the U.S. Secretary of Health and Human Services. The award honored her innovations in health promotion and disease prevention.



**Van Beek**

**Dr. Allen L. Van Beek** graduated from NDSU with a bachelor's degree in bacteriology in 1966. He attended medical school at the University of North Dakota and earned his medical degree from the University of Minnesota in 1968. He completed an internship, residency and fellowship in surgery, with an emphasis on microsurgical techniques. Dr. Van Beek became a household name in North

Dakota in 1992 when he re-attached the arms of John

Thompson, whose arms were severed in a farm accident. He has published more than 55 articles about microsurgery and seven videos illustrating the microsurgical techniques that he has developed. He is a pioneer in the microsurgery field and has been recognized internationally for his contributions. Van Beek is associated with five major hospitals in the Twin Cities region of Minnesota. He also serves as a clinical associate professor in the department of surgery for the University of Minnesota Medical School.

### Heritage Award for Alumni Service



Slotten

**Russell H. Slotten** earned a bachelor's degree in 1956 and a master's degree in 1961, both in agricultural engineering. His professional career includes positions with Northern States Power, Dayton-Hudson Corp. and First Bank. He retired from First Bank in 1990 and accepted employment at NDSU. Slotten was the executive director of the NDSU Research Foundation and served as the assistant to two

NDSU presidents, Jim Ozbun and Thomas Plough. His dedication to NDSU includes serving as the Alumni Association Board of Directors president from 1987 to 1989. Slotten also has been a trustee of the NDSU Development Foundation for the past 10 years. As a trustee, he has served as the treasurer and has held leadership roles for the Centennial Campaign, College of Engineering and Architecture Campaign, the \$20,000,000 Campaign for North Dakota State University and Bison Bidders Bowl. Slotten has been a visible leader and volunteer at NDSU and has shared his experiences in marketing and public relations for the benefit of NDSU.

### Hansen receives accounting educator award



Hansen

James Hansen, assistant professor of business administration, received the "Outstanding Educator Award" at the annual meeting of the North Dakota Society of CPAs Sept. 19 in Fargo.

"The award really recognizes the hard work and dedication of all accounting professors across North Dakota and in the border city schools," Hansen said. "It's nice to win the award and I'm proud of it, but this is also a nice recognition for our College of Business Administration. We have a great faculty to work with and, of course, the students are what this is all about. As teachers, we should always strive to make a difference in students' lives."

Hansen was on the NDSU faculty from 1979 to 1989 and returned to campus in 1992. He earned his bachelor's degree from the University of North Dakota, his master's degree at NDSU and his doctorate in accounting from the University of Nebraska, Lincoln.

The society is a statewide professional organization for certified public accountants. With about 1,400 members, the society promotes professional competence, integrity and objectivity, with the mission to help the members excel in their profession.

### Stammen participates in school-to-work conference

Ron Stammen, associate professor of education, is now serving as a facilitator for the "Core of Discovery" School-to-Work Institute being held Sept. 28 to 30 at the Radisson Inn, Bismarck.

The School-to-Work Institute is an intensive hands on learning process designed to help School-to-Work teams enhance and sustain strategies to achieve their goals as contained in their local area consortia or partnership plans.

There are 30 consortia and partnerships funded to develop programs in North Dakota. These groups have memberships ranging from single school districts such as the Fargo Public Schools to multiple-member schools such as the Northwest North Dakota Area Consortium consisting of 13 school districts, including Williston. Lt. Gov. Rosemarie Myrdal is chair of the School-to-Work Initiative Management Team; Dean Monteith is the State School-to-Work Opportunities System administrator and Stammen serves as the overall project external evaluator.

Stammen also participated in a facilitator refresher workshop Sept. 26 and 27. The workshop was conducted by Barbara Upston, Management Consulting Associates, Berkley, Calif.

### Stewart work published in Science

Mary Stewart, assistant professor of zoology, co-wrote an article that appeared in the Sept. 24 issue of *Science*, the Washington, D.C.-based weekly journal of the American Association for the Advancement of Science. The article, "Drosophila S6 Kinase: A Regulator of Cell Size," explores animal cell growth and division.

The four-page article is based on work Stewart participated in during her time as a post-doctoral fellow at Friedrich Miescher Institute, Basel, Switzerland. It was co-written with Jacques Montagne, Sara C. Kozma and George Thomas of the institute and Hugo Stocker and Ernst Hafen of the University of Zurich, Zurich, Switzerland.

"Before cells divide, generally they increase their mass. The article is about how a gene product in cells of animals, in this case the fruit fly, regulates growth," Stewart explained. The research found that dS6K positively affects growth in a cell-autonomous and compartment-dependent manner and suggested that S6Ks may play a critical role in organ hypertrophy.

While considered basic research, Stewart is hopeful the work may eventually lead to important practical applications. "If we better understand how cells grow and divide, we will know more in the long-term," she said. "Research in this area should increase our knowledge of how cell growth is regulated during development and, possibly, during cancerous process. For example, research that allows us to more fully understand how cell growth and division is regulated could affect how we think about cancerous growths."

Stewart, who joined the NDSU faculty in 1997, earned her bachelor's degree at the University of Nebraska at Kearney and her doctorate in biology at Kansas State University, Manhattan.

## Brunton to consult for video documentary series on shamanism

Shamanism is probably as old as humanity itself, but the topic is not well known or understood by many people in the Western world. Now an NDSU faculty member will help introduce this ancient form of spiritual healing to television viewers in Europe and across America.

Bill Brunton, associate professor of sociology and anthropology, is the anthropological consultant for a video documentary project called "The Golden Thread." Over the course of this academic year, Brunton will assist camera crews and writers from Kintop Pictures, Los Angeles, in their search for shamans around the world.

"Shaman" is a word that comes from Siberia that means something like "they who know." They are people who intentionally alter their consciousness, and when they do so, they are able to contact compassionate spiritual beings who provide them with knowledge and power to use for healing. To assist the shaman in reaching an appropriate state of intuitive, imaginal thought, techniques such as drumming, dancing, twirling, singing, ingesting entheogenic plant substances, chanting or staring into a fire are used.

"We're trying to tell a story that is very important. This is a documentary that goes to the heart of humanity," Brunton said. "Shamanism is a deep, ancient spiritual tradition that is imbedded in every culture. Essentially, it is a universal belief, and practices resulting from that belief, that one can acquire healing from a spiritual source—that is the essence of shamanism."

Brunton certainly knows the subject. Internationally recognized for his work on shamanism, he has traveled around the globe for research and scientific meetings with funding from the Foundation for Shamanic Studies, for whom he also edits a semi-annual journal, *Shamanism*. Brunton has co-lead research expeditions to northern China and Inner Mongolia, and to Tuva, a Central Asian region north of Mongolia. Active in the International Society for Shamanistic Research, Brunton's work has been published internationally.

The television documentary will be a series of six or more programs. Funded by a German media company called Axel Springer Verlag AG and a German documentary television company, ZDF, the documentary will be released in both German and English versions. The series is expected to air on German television and be offered to American and other networks.

Brunton's job will be to help the filmmakers decide precisely what they want to document, where they want to go, who they need to work with and how they should go about filming and other documentation. Using his many contacts around the world, Brunton will assist them in locating local experts and shamans.

The programs will focus on the personal stories of people who have had their lives changed by shamanism. "It's a captivating idea that will be of interest to Europeans, Americans and people wherever," Brunton said. "These human interest stories draw us in to the subject."

The production will show how different cultures use different rituals and methods, but the underlying "golden thread" remains the same.

"It's proper in some cultures to ritually turn in a clockwise manner and improper to turn the other way. In some cultures, east is the sacred direction and west is the direction the souls of the dead go. Each culture puts its own spin on things," Brunton explained. "But, there's a core of things in shamanic practice that is universal or near-universal, which includes the altering of consciousness, communicating with spirits and doing healing work. The rituals and ceremonial dress are just specific cultural contexts.

"We want to tell this rich, deep human story to illustrate that shamanism is from all over the world," he said. "We want to reflect it off the different faces, landscapes, climates and conditions of humanity."

Brunton notes that shamanism is having a rebirth in Europe and the United States. A growing number of people are reading about it and becoming fascinated by it, according to Brunton. He hopes the project allows even more people to learn about the subject. "This documentary may introduce people to the idea that shamanism is much more universal than the descriptions of religions would have you believe," he said.

The videotaping portion of the project is expected to be completed in May 2000, followed by an editing process.

## McCullagh presents paper on hearing protection for farmers

Marjorie McCullagh, assistant professor of nursing, recently presented a paper at the 1999 National Nursing Research State of the Science Conference in Washington, D.C.

The paper, "Factors Influencing Hearing Protector Use Among Farmers," was part of a symposium on promotion of hearing protector use among diverse populations, including factory workers, construction workers, Mexican-Americans and farmers. Farmers are high-risk for noise-induced hearing loss, but do not benefit from protection offered to workers in other occupations. Obtaining information about these factors is an initial step in the design of scientifically based interventions to promote use of hearing protectors and decrease the level of noise-induced hearing loss among farmers in each age group.

The conference was co-sponsored by 19 leading nursing organizations, including Friends of the National Institute of Nursing Research and the American Academy of Nursing.

## Kapplinger selected for North Carolina exhibition

Kent Kapplinger, assistant professor of art, has been selected for the "Origins of the Species...ist" exhibition at Appalachian State University, Boone, N.C. The subtitle of the exhibition is "Examining issues surrounding the hierarchy of animals." The national art exhibition and lecture series focus on issues concerning the relationships between humans and the animal world. The show will run until Oct. 22.

Kapplinger joined the NDSU faculty in 1992. His works are biographical landscapes which define a personal search for balance, order and regeneration through the medium of print-making and drawing. His work has been exhibited internationally in England, Japan, Slovenia and Spain.

## Agricultural and biosystems engineering faculty participate in conference

Members of the agricultural and biosystems engineering department participated in the 1999 American Society of Agricultural Engineers international meeting in Toronto in July. Participants included Earl Stegman, professor and chair; Jim Lindley, associate professor; Kenneth Hellevang, associate professor; Tom Scherer, associate professor; Suranjan Panigrahi, assistant professor; and Saidul Borhan, graduate student.

Borhan present the research paper, "Multispectral Imaging Technique for Nitrogen Determination in Potato Leaves," by Borhan, Panigrahi and H. Gu. Panigrahi presented a research paper, "Evaluation of Different Color Coordinate Systems for Color Evaluation of Food Products," by Panigrahi and Curt Doetkett. The faculty also attended and officiated various technical committee during the conference.

## Events

### Women's Studies Lecture to explore race, property issues



**Matsuda**

Mari Matsuda, professor of law at Georgetown University Law Center, will present the Women's Studies Lecture, "Narratives of Property and Power," at 8 p.m. Tuesday, Oct. 12 in Beckwith Auditorium.

Matsuda will discuss the legal case of a women's organization that held and attempted to sell a building originally purchased by a Japanese-American community. She believes the case illustrates that privilege is imbedded historically and people may lose their land through law in ways that are fundamentally unjust. The lecture will expand into a discussion of the interactions of law, land ownership, racism and patriarchy.

Matsuda received her bachelor's degree from Arizona State University, her doctorate of law at the University of Hawaii and a second law degree at Harvard. Prior to her present appointment at Georgetown, she was a law professor at the University of California, Los Angeles School of Law and the University of Hawaii School of Law.

She has served as a judicial training consultant in Micronesia and South Africa and has written several articles and books on constitutional law and other divisions of the law including hate speech, affirmative action and feminist theory.

The Women's Studies Lecture is hosted by the Women's Studies Program. It is being presented as part of the Lyceum of the Liberal Arts, which is a series of four presentations by distinguished scholars. The lyceum is organized by the College of Arts, Humanities and Social Sciences and receives funding from NDSU and the North Dakota Humanities Council. For more information contact Kathleen Slobin at 1-8939.

## Horizons seminar to discuss Y2K

Jeff Lesmeister, Lesmeister & Associates, and Jeff Leff, host of "Viewpoint" on WDAY radio, are scheduled to present "Y2K Catastrophe, Minor Inconvenience? How Prepared Should You Be?" at noon Wednesday, Oct. 6, in the Memorial Union Cul de Sac lounge.

"Horizons" is a weekly series of noon forums that provide an opportunity for students, faculty, staff and the public to address current issues. The sessions are presented by United Campus Ministry and the University Lutheran Center. For more information, contact United Campus Ministry at 235-0672 or the University Lutheran Center at 232-2587.

## ITS to present Technology Lunchbox Series

Several staff members from Information Technology Services will present another series of twice-monthly noon-hour demonstrations covering a variety of topics beginning Monday, Oct. 4. All sessions will be held from 12:10-12:50 p.m. in the Memorial Union University Chamber. The sessions are free and open to anyone on the NDSU campus. Registration is not required.

Food and beverages are available for purchase from the Memorial Union Food Court or you can bring your own lunch.

Oct. 4  
Are You Y2K OK?

Oct. 18  
CourseInfo 3.0 Demonstration

Nov. 1  
Are You Y2K OK? (Repeated)

Nov. 15  
Open Object-Learning System (OOLS) Demonstration

Nov. 29  
Office 2000 - What's New, What's Not or Should I Upgrade

Dec. 13  
Hand-Held Computer Demonstration

For information regarding the content of these sessions visit [www.ndsu.nodak.edu/instruct/lolsen/lunchbox](http://www.ndsu.nodak.edu/instruct/lolsen/lunchbox) or contact Lorna Olsen at 1-6328 or [lorna\\_olsen@ndsu.nodak.edu](mailto:lorna_olsen@ndsu.nodak.edu).

## Alumni Center, Ehly Hall dedications scheduled for Homecoming week

Faculty and staff are invited to dedication ceremonies for two new NDSU buildings—Ehly Hall and the Alumni Center—on Oct. 7-8 during Homecoming week festivities.

The dedication of the College of Engineering and Architecture's Ehly Hall is planned for 9 a.m. Thursday, Oct. 7. Speakers will include NDSU President Joseph A. Chapman, major contributor Raymond Ehly Sr. and Otto Helweg, dean of engineering and architecture.

Dedication ceremonies for the new NDSU Alumni Center are scheduled for 9 a.m. Friday, Oct. 8, at 1241 N. University Drive. Speakers will include Chapman; Jim Miller, NDSU Development Foundation executive director; foundation trustees Warren Diederich and John Q. Paulsen; and Alumni Association President David Maring. A ribbon cutting will be held and key donors recognized.

### Ehly Hall funded with private donations

The \$1.6 million structure is the first academic building on the NDSU campus to be funded entirely with private contributions. The 14,800 square foot building includes a materials and construction laboratory, library, study area, architectural studio space and an inter-active video classroom.

Ehly Hall is named in honor of Raymond Ehly Sr., who contributed \$700,000 to the project. Ehly earned a degree in civil engineering from NDSU in 1955 and later pursued a career as a contractor, eventually becoming president of Asphalt, Inc., Moorhead. In 1969, he relocated the business to El Cajon, Calif. Ehly now is semi-retired. He and his wife, Joni, divide their time between their residence in Blaine, Wash., and their home in Cabo San Lucas, Mexico.

Craig Helenske, who earned his bachelor's degree in architecture from NDSU in 1974, was the lead architect on the project. A principal of Triebwasser Helenske and Associates, he used the project as a teaching tool for students. Sixteen NDSU students in architecture, landscape architecture, construction management and other engineering disciplines developed working designs for the new building in the spring of 1997 during an intensive eight-hour design session called a charette.

### Alumni Center funded by alumni and friends

The \$3.5 million Alumni center houses the offices of the NDSU Alumni Association and the NDSU Development Foundation. The 30,520 square foot building was funded solely with private contributions from NDSU alumni and friends.

"This building will be an NDSU welcome site for the community and alumni. It provides an opportunity for education seminars and social gatherings," said Sherri Schmidt, Alumni Association associate executive director. "Our hope is that the center will become a landmark for NDSU and Fargo-Moorhead."

Available for campus and public use, the facility is designed to host meetings, conferences and receptions. The two-story Atrium, which has a patterned ceramic tile floor bearing the engraved names of donors, can seat 150 people in a banquet setting. The refined Cray Lounge can accommodate up to 25 people and features rich woodwork, classic-style furniture, a fireplace and beverage area. Other meeting rooms include the

Stenehjem Executive Conference Room, Klefstad Conference Room and Reimers Conference Room. All the conference rooms are equipped for cable, video, data and phone.

Other features include the two brick reliefs of stampeding bison carved by Grand Forks artist Katie McCleary that flank the main entrance. A bison weathervane, donated by Diederich, stands above the entrance cupola. The center's second-floor Hendrickson Lounge overlooks the Atrium, and the Stegner Terrace, an exterior balcony, provides a view of the President's House and campus.

Completing the exterior is the Rouzie Terrace, a brick-paved and landscaped courtyard, and the Hendrickson Circle Grove and Gazebo. The Dawson Gallery houses an antique gun collection.

"I believe this building portrays beauty, strength and stability—all of which exemplify NDSU," said Schmidt.

## Alumni Association plans events for Homecoming

The NDSU Alumni Association is planning activities throughout Homecoming week, Oct. 4-9, at NDSU. The following is a list of scheduled events:

### Monday, Oct. 4

8-10 p.m. Student and alumni bonfire  
Van Es Field

### Thursday, Oct. 7

9 a.m. Ehly Hall dedication

### Friday, Oct. 8

9 a.m. NDSU Alumni Center dedication  
11 a.m. Bison Athletic Hall of Fame lunch  
Fargo Holiday Inn, Great Hall  
(reservations recommended, contact Sports Information at 1-7197)  
6 p.m. Alumni Honors social and dinner  
Fargo Holiday Inn, Great Hall  
(\$20/person)  
7 p.m. Blue Key Homecoming Show and Coronation  
Festival Concert Hall  
(\$4 in advance, \$5 at the door)  
9:30 p.m. All alumni and friends social  
Fargo Holiday Inn, Embassy A and B

### Saturday, Oct. 9

9 a.m.-noon Alumni Center Open House  
9:30 a.m. NDSU chime dedication ceremony  
10 a.m. NDSU Homecoming parade  
12th Ave. N. and University Drive  
Homecoming Concert Choir Sing-along  
Reineke Fine Arts Building, room 120  
11 a.m.-1 p.m. Homecoming pep rally and Bison feed  
Bison Sports Arena  
(\$6/adults \$3.50/children under 10)  
1:30 p.m. Football game vs. Augustana College  
Fargodome  
6 p.m. Bison Bidders Bowl  
Fargo Holiday Inn, Great Hall  
reservations required  
(call 1-800-279-8971 for more information)



## Aircraft manufacturing seminar hosted by NDSU

Members of the industrial and manufacturing engineering faculty presented a seminar about aircraft manufacturing Sept. 21, which was attended by 10 students from the local Civil Air Patrol.

Jim Bartlett, assistant professor of mechanical and industrial engineering, presented the aero manufacturing engineering option at NDSU. R.C. "Chuck" Solly, manufacturing lab supervisor, demonstrated the computer numerical control machining of stainless steel oval parts for a B-29 aircraft and Jake Wallgren, a senior in industrial and manufacturing engineering, demonstrated rubber pad forming of ribs and composite autoclave processing.

The students also learned from aircraft component failure analysis presentations, NASA smart wing introduction and a video showing the fast assembly of a Boeing 747.

## Shorts and Reminders

### Open positions

Positions open and their closing dates through the Office of Human Resources, Room 205, Old Main:

Secretary/Receptionist/#4884  
Computer Science  
\$8.50 minimum/hour (20 hours/week)  
Sept. 30

Continuing Education Clerk  
Continuing Education  
\$16,500 minimum/year  
Oct. 1

Administrative Secretary/#4522  
Upper Great Plains Transportation Institute  
\$8.50/hour (20 hours/week; hours to be determined)  
Oct. 4

Bakery Assistant/#1124  
(7 a.m.-3:30 p.m.; M-F; 10-month position)  
Dining Services - Auxiliary Bakery  
\$5.80/hour  
Sept. 30 (internal); Oct. 14 (external)

Custodian/#1163  
(M-F; 6:30 a.m.-3 p.m.)  
Dining Services  
\$7.60/hour  
Oct. 6

Food Service Worker/#4294  
(9-month position; 7 a.m.-3:30 p.m.; M-F; occasional catering help, summer hours as available)  
Dining Services - Memorial Union  
\$5.60/hour  
Oct. 4 (extended closing date)

Nutrition Education Assistant  
Extension, Food and Nutrition (FNP)  
Dunn/McKenzie County  
Watford City, N.D.  
\$7.21/hour (12 months; 20 hours/week)  
Oct. 1

Computer Technician/#4232  
Varsity Mart Bookstore  
Commensurate with experience  
Oct. 8

Manager, Memorial Union Dining Center/#1095  
Memorial Union Dining Center  
\$38,000 minimum/year  
Sept. 30

Riparian Forester/#4745  
North Dakota Forest Service - Walhalla, N.D.  
\$21,216 minimum/year  
Oct. 20 (extended closing date)

Head of Technical Services/#0518  
NDSU Libraries  
\$32,652+/year  
Oct. 3

Position openings also are available through the NDSU Web site at [www.nodak.edu/human-resources/](http://www.nodak.edu/human-resources/).

### Union Food Court Specials

Sept. 30–Oct. 6

Try the new ready-made sandwiches in the Union Food Court at the Grab-n-Go counter.

### The Corner Deli

Thursday: ham  
Friday: tuna salad  
Monday: chicken  
Tuesday: roast beef  
Wednesday: pastrami

### More Than a Burger

Thursday: cheeseburger  
Friday: fish  
Monday: cheeseburger  
Tuesday: chicken poppers  
Wednesday: broiled chicken

### A La Carte

Thursday: hand-carved ham  
Friday: taco salad  
Monday: hot ham and Swiss wraps  
Tuesday: hand-carved roast beef  
Wednesday: pasta bar

### Soup of the Day

Thursday: cream of potato  
Friday: clam chowder  
Monday: vegetarian vegetable  
Tuesday: beer cheese  
Wednesday: tomato rice

\*Items are subject to change without notice.

Call the Dining Services Lunch Line daily at 1-9501 to check out soup of the day, Union Buffet and Union Food Court specials.

## Research Opportunities

The Office of Research Administration in Old Main 201K announces the following funding opportunities and deadlines. For more information, call 1-8114. For information about other grants, visit the Research Administration Web site at [www.ndsu.nodak.edu/ndsu/sizer/resadmin.html](http://www.ndsu.nodak.edu/ndsu/sizer/resadmin.html) and click on "Funding Opportunities."

**National Aeronautics and Space Administration (NASA)  
Research Opportunities in Space Life Sciences:  
Gravitational Biology and Ecology**  
[http://peer1.idi.usra.edu/peer\\_review/nra/99\\_HEDS\\_02.html](http://peer1.idi.usra.edu/peer_review/nra/99_HEDS_02.html)

**Deadline: Oct. 8 (letter of intent)  
Dec. 1 (full proposal)**

The National Aeronautics and Space Administration currently is seeking proposals for ground-based research investigations or for space-flight experiments designed for the Shuttle middeck or for the early phase of utilization of the International Space Station. Proposals addressing research emphases in molecular structures and physical interactions, developmental biology, cellular and molecular biology, organismal and comparative biology and gravitational ecology will be considered.

**North Dakota Soybean Council  
North Central Soybean Research Program**  
**Deadline: Oct. 22**

The North Central Soybean Research Program (NCSRP) is seeking research pre-proposals that develop solutions to problems that are common to soybean growers in the North Central States. Additionally, the pre-proposals should address the NCSRP's mission to maximize soybean producers' returns by coordinating research efforts, minimizing regional duplication of research and assuring that regional research efforts are targeted at problems experienced by the North Central soybean producer. The areas for priority funding include Soybean Disease Communication Program and Remote Sensing Project.

**Minnesota Wheat Research and Promotion Council  
Research and Communications Committee**  
**Deadline: Oct. 26**

The Minnesota Wheat Research and Promotion Council will be considering proposals for continuing and new research. Special consideration will be given to proposals which directly or indirectly address various aspects of Fusarium head blight, although proposals are not limited to this issue.

**National Pork Producers Council  
Pork Production and Pork Products**  
[www.nppc.org](http://www.nppc.org)  
**Deadline: Oct. 29**

Research proposals dealing with pork production and pork products are being solicited by the National Pork Producers Council. Specific areas of solicitation and priority topics are as follows: environment/on-farm, environment/public health, swine health, pork safety (pre-harvest), pork safety (post-harvest), pork quality and discovery concepts.

**Department of Education  
International Research and Studies Program**  
**Deadline: Oct. 29**

The Department of Education's International Research and Studies program will be providing grants to conduct research and studies in order to improve and strengthen foreign languages, area studies and other international fields to provide full understanding of places in which the foreign languages are commonly used.

## Calendar

### September

29 Math/Physics—MATHEMATICA seminar, 3 p.m., Civil and Industrial Engineering 205; for information call 1-8977

29 Chemistry—Dieter Schinzer, University of Magdeburg, Germany, "The Chemistry and Biology of Epothilones," 3:45 p.m., Dunbar 152

29 Employee assistance orientation meeting, 10 a.m. and 1:30 p.m., Memorial Union University Chamber

30 Chemistry—Patrick Dussault, University of Nebraska, "Peroxide Natural Products: Biomedical Importance and Recent Synthetic Advances," 3:45 p.m., Dunbar 152

### October

Through Oct. 6 exhibit of American Institute of Architects, North Dakota chapter, Memorial Union Gallery

1 Psychology—Jeff Holm, University of North Dakota, will present a lecture at 3:30 p.m. in Minard 209

1 Deadline for applications for the Research Development Support Program sponsored by the NDSU Research Foundation. Application guidelines are available at [www.ndsu.nodak.edu/ndsu/sizer/RDSPgrant.html](http://www.ndsu.nodak.edu/ndsu/sizer/RDSPgrant.html)

1 Animal and Range Sciences—Kevin Sedivec, "Seasonal Nutritional Quality of Selected Cool Season Grasses," 3:30 p.m., Hultz 104

1 Plant Sciences—Robert Gelin, "The Gene Gating Hypothesis," 3:30 p.m., Loftsgard Hall 380

4 Chemistry—Shuji Kanemasa, Kyushu University, "Enantioselective Diazoalkane Cycloadditions Catalyzed Chiral Lewis Acids," 3:45 p.m., Dunbar 152

- 6 Math/Physics— MATHEMATICA seminar, 3 p.m., Civil and Industrial Engineering 205; for information call 1-8977
- 7 NDSU faculty/staff free preview night of the Little Country Theatre's "It Is So! (If You Think So)," 7:30 p.m., Askanase Auditorium
- 8 Opening of "Walter Piehl: Sweethearts, Roping Fools and Cowgirl Suite" exhibit at the Memorial Union Gallery. Artist on-site painting Oct. 7 and 8, reception 4-6 p.m., Oct. 8. Exhibit runs through Nov. 10. For information call 1-8239
- 8 Blue Key Homecoming show, 7:30 p.m., Festival Concert Hall
- 8 Psychology—Lisa Stewart, Moorhead State University, "Effects of Reintegrating Students with Mild Disabilities into General Education Classrooms," 3:30 p.m., Minard 209
- 8 Electrical and Computer Engineering— Noel W. Anderson, technology manager, Ag Systems, Case Corporation, "ECE in Agriculture," 3 p.m., ECE 123
- 8-9 Little Country Theatre presents "It Is So, If You Think So," 8 p.m., Askanase Auditorium
- 9 Homecoming, Gallery hours 10 a.m.-2 p.m.
- 13 Math/Physics— MATHEMATICA seminar, 3 p.m., Civil and Industrial Engineering 205; for information call 1-8977
- 14 Fall choral concert, 8 p.m., Festival Concert Hall
- 14-16 Little Country Theatre presents "It Is So, If You Think So," 8 p.m., Askanase Auditorium
- 15 Psychology—Mike Antoni, University of Miami, "The Effects of Group-based Stress Management on Distress, Endocrine and Immune Functioning in HIV-infected Persons," 3:30 p.m., Minard 209
- 17-18 High School Choral Festival
- 18 High School Choral Festival concert, 7 p.m., Festival Concert Hall
- 22 Family Weekend, Gallery hours 9:30 a.m.-6 p.m.
- 22 Jazz Ensemble concert, 8 p.m., Festival Concert Hall
- 22 Psychology—John Northup, Louisiana State University, "The Effects of Methylphenidate (Ritalin) in the Classroom: What Dosage, for What Children, for What Problems?" 3:30 p.m., Minard 209

- 22 Chemistry—Andrew Sykes, University of South Dakota, "Chemical Sensing Using Electrochemistry and Luminescence," 3:45 p.m., Dunbar 152
- 23 Festival Concert Series presents Mary Ellen Childs' CRASH, 8 p.m., Festival Concert Hall
- 23 Community pumpkin carving festival, 1-4 p.m., Art Building
- 24 Gold Star Marching Band concert, 2 p.m., Festival Concert Hall
- 25 Advising week begins for spring semester
- 27 Chemistry—Nancy Totah, University of Iowa, "The Dihydropyrene Diels-Alder Reaction: Development and Applications," 3:45 p.m., Dunbar 152
- 28 Chemistry—Robert Paine, University of New Mexico, "Expressions Through Synthesis: From Molecules to Polymers to the Solid State," 3:45 p.m., Dunbar 152
- 29 Psychology—Nancy Volgetanz, University of North Dakota, will present a lecture at 3:30 in Minard 209

## November

- Through Nov. 10 "Walter Piehl: Sweethearts, Roping Fools and Cowgirl Suite," Memorial Union Gallery; for information call 1-8239
- 1 Spring semester registration begins
- 3 Jazz Combos concert, 8 p.m., Beckwith Recital Hall
- 5 Psychology—Steve Wonderlich, Neuroscience-UND Medical School and Neuropsychiatric Research Institute, "Bulimia Nervosa: The Role of Personality and Child Abuse," 3:30 p.m., Minard 209
- 5 Heartland Brass Quintet concert, 7:30 p.m., Beckwith Recital Hall
- 11 Veteran's Day, administrative offices closed, no classes
- 11 NDSU faculty/staff free preview night of the Little Country Theatre's "Oleanna," 7:30 p.m., Walsh Studio Theatre
- 11 Chemistry—Richard Taylor, University of Notre Dame, "Synthetic Methods for Diversity Generation: From Structural to Conformational Libraries," 3:45 p.m., Dunbar 152

12 Psychology—Kevin Thompson will present a seminar at 3:30 p.m. in Minard 209

12-13 Little Country Theatre presents "Oleanna," 8 p.m., Walsh Studio Theatre

18 Chemistry—Rita Majerle, South Dakota State University, "Dendrimers: Novel materials—their interfaces and interactions," 3:45 p.m., Dunbar 152

18-20 Little Country Theatre presents "Oleanna," 8 p.m., Walsh Studio Theatre

19 Psychology—Ann Sandgren, Meritcare Medical Center, "Breast Cancer Telephone Therapy: A Novel Approach to Intervention," 3:30 p.m., Minard 209

25 Thanksgiving Day, administrative offices closed, no classes

26 Administrative offices open, no classes

29 Classes resume

29 Chemistry—Sheila David, University of Utah, will present a seminar at 3:45 p.m. in Dunbar 152

**University Relations**  
**North Dakota State University**  
**PO Box 5167**  
**Fargo, ND 58105**

## December

2 Chemistry—Cecelia Giuliv, University of Minnesota-Duluth, "Nitric Oxide in Mitochondria," 3:45 p.m., Dunbar 152

3 Psychology—Jim Mitchell, Neuroscience-UND Medical School and Neuropsychiatric Research Institute, "Recent Research on the Treatment of Bulimia Nervosa," 3:30 p.m., Minard 209

3-5 Madrigal Dinners, 6:30 p.m., Festival Concert Hall, Grand Lobby

6 Tri-College Percussion Ensemble and Marimba Choir concert, 8 p.m., Festival Concert Hall

7 Jazz Ensemble and Jazz Lab Band concert, 8 p.m., Festival Concert Hall

8 Brass Ensemble and Gold Star Concert Band concert, 8 p.m., Festival Concert Hall

10 Annual Chili Feed and SAS Art Sale, 11:30 a.m.-1:30 p.m., Art Building