

NDSU and federal scientific labs form partnership



U.S. Sen. Byron Dorgan announces new research agreements between NDSU and two federal scientific laboratories.

NDSU officials have signed research agreements to conduct collaborative projects with two federal scientific laboratories. Under the agreements, NDSU will conduct separate research projects involving solar cells, polymers and radio frequency identification. The announcement was made at a news conference with NDSU officials and U.S. Sen. Byron Dorgan on Aug. 18.

The projects totaling more than \$100,000 in research funding will be conducted with Sandia National Laboratories, Albuquerque, N.M., and with Pacific Northwest National Laboratory, Richland, Wash. "Partnering with these federal research laboratories brings us the opportunity to really showcase the incredible things we have going on not only here at NDSU, but all up and down the Red River Valley," said NDSU President Joseph A. Chapman.

The partnerships could eventually serve as a pipeline for students who may someday want to pursue a career at one of the national laboratories. "We really relish these sorts of collaborations," said Alton Romig, senior vice president and deputy laboratories director for Integrated Technologies and Systems at Sandia National Laboratories.

"We have five graduates of NDSU working at the laboratory," said Barry Merrill, associate laboratory director at National Security Directorate, Pacific Northwest National Laboratory. "That's a relatively small number of graduates for 4,000 staff. We hope to change that," said Merrill.

Directors of five national laboratories toured NDSU in 2007 at the request of Dorgan and the Red River Valley Research Corridor. Dorgan leads the congressional committee that funds national laboratories.

In early 2008, representatives from the NDSU Office of Research, Creative Activities and Technology Transfer visited two of the national laboratories to discuss NDSU research capabilities. "Representatives from national laboratories who previously visited NDSU noted the mix of young student researchers and experienced researchers, saying the youth and dynamics add to the already impressive capabilities shown here," said Philip Boudjouk, vice president for research, creative activities and technology transfer at NDSU. "Partnering with Sandia National Laboratories and Pacific Northwest National Laboratory offers an opportunity to showcase research expertise at NDSU, as we continue to build upon high-tech opportunities for the region."

In one project, NDSU and Sandia National Laboratories will explore how thin-film silicon solar cells can be made using a liquid form of silicon. In another project, NDSU will use its combinatorial chemistry expertise to assist in the development of polymers used in purification membranes for water and sensors.

In a third project, NDSU's Center for Nanoscale Science and Engineering will assist Pacific Northwest National Laboratory with expertise on the design and operation of a large-scale radio frequency identification and wireless sensor lab.

"It's Happening at State" deadline change

Due to the Labor Day holiday, the deadline for submitting information for the Sept. 3 issue of "It's Happening at State" is noon Wednesday, Aug. 27.

NEXT ISSUE

Publication date: Wednesday, Sept. 3
Submissions due: noon Aug. 27

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NDSU, DSU form collaborative engineering program

NDSU and Dickinson State University have joined forces for a new engineering program. The two universities signed a memorandum of understanding Aug. 18 in Dickinson to provide a collaborative curriculum in computer, electrical, industrial and manufacturing engineering.

After successful completion of two years of a structured curriculum at DSU, students will transfer to NDSU so they can complete the NDSU bachelor's degree.

"This will have a profound impact on the engineering and manufacturing sectors of our state's economy," said NDSU President Joseph A. Chapman. "We expect this agreement to help meet the increased need for engineers in the western part of North Dakota, where manufacturing has taken a resounding leap forward. It allows Dickinson area students to remain close to home for two years as they prepare to complete their degrees at NDSU."

To help facilitate the engineering collaboration through increased relationships with local industrial and manufacturing companies, NDSU also will have Extension engineers in Dickinson, Bismarck and Minot.

According to President Chapman, the agreement is similar in design to the successful collaboration in agriculture the universities have enjoyed since 2000. "DSU has been a great partner in agriculture and we look forward to more success with the engineering agreement," Chapman said. "This agreement adds to the strength of the North Dakota University System, and is a wonderful example of how the eastern and western parts of our state can work together to achieve lasting success for all of us."

All students admitted to DSU and declaring one of the four engineering majors will pay the NDSU engineering program fee. Students enrolled in DSU courses will pay DSU tuition, while those taking NDSU courses will pay NDSU tuition. NDSU will review and approve all core curriculum course offerings in the cooperative program, ensuring that courses taught at DSU are equivalent in content and structure to the courses taught at NDSU.

The agreement was signed by President Chapman; Richard McCallum, DSU president; Craig Schnell, NDSU provost and vice president for academic affairs; and Rich Brauhn, DSU vice president for academic affairs.

Five Bison football games to be televised

Five NDSU football games will be televised this fall, including two road games, four statewide broadcasts, and national coverage of the Northern Iowa game on Fox College Sports. NDSU broadcasting director Jeremy Jorgenson made the announcement July 31.

In addition, the "Craig Bohl Football Show" will re-air after the late local news Sunday nights on KVLV-TV as part of a new two-year television contract between NDSU, KVLV and KXJB-TV. The show will continue to air live on KXJB-TV and statewide NBC affiliates Sundays at 10:30 a.m.

"We are very happy to be associated with Bison athletics for two more years," said Charley Johnson, general manager for

KVLV and KXJB. "Our sports and production teams enjoy and take great pride in producing Bison football and basketball games, as well as the 'Craig Bohl Football Show.'"

Home games against Southern Illinois University (Oct. 4), Western Illinois University (Oct. 11) and South Dakota State University (Nov. 22) will be carried live on the North Dakota NBC Network. Kickoff for the Western Illinois game was changed from 6 p.m. to 3 p.m.

The Youngstown State University game Sept. 20 will air live on KX4 only. The Northern Iowa game Oct. 18 will be live on FCS and the North Dakota NBC Network, and tape-delayed on FSN Midwest.

"We are excited about our televised game schedule this year," said NDSU athletics director Gene Taylor. "We were able to add a couple of road league contests for our fans who can't make those trips, which was one of our goals. We are also pleased our television partners KVLV and KXJB will produce three of our home games across the state."

Single-game tickets went on sale Friday, Aug. 1, in the Bison Sports Arena ticket office and online at *GoBison.com*. For group tickets or more information, call toll free (888) 231-NDSU.

Sioux County Extension experiences success with energy education curriculum

Today's young people are facing many challenges, especially in their education goals. There is a greater demand for them to excel while facing evolving changes in the United States and the global business world with emphasis in science, engineering and technology education.

In 2006, the NDSU Extension Service was selected to be in a partnership with the U.S. Department of Energy under the direction of the National Association of State Universities and Land-Grant Colleges. Through the partnership, the Department of Energy's Office of Energy Efficiency and Renewable Energy has provided funding, and the National Energy Education Development Project provided a curriculum to promote an energy conscious and educated society by creating effective networks of students, educators, business, government and community leaders to design and deliver objective, multi-sided energy education programs.

Sioux County Extension has been using the National Energy Education Development curriculum in 4-H school enrichment programs since fall 2007. According to Sue Isbell, Sioux County Extension agent, they have taught several series of renewable energy education programs. Students were tested before and after the program was administered. Students at Fort Yates, N.D., increased their scores by 83 percent, proving that the energy education programs are an effective method of engaging youth in a process of discovery and exploration into science of energy.

Nationally, 4-H has set a goal to reach 1 million new youth in science, engineering and technology projects during the next five years. North Dakota 4-H Youth Development programs also have set goals to increase the number of youth involved with experiences in 4-H science, engineering and technology. Isbell says the National Energy Education Development curriculum will be used with 4-H school enrichment and after-school programs to help reach these goals.

Japanese feed team learns about DDGS at Northern Crops Institute

The Japanese Feed Industry DDGS Pelleting Team attended the Distiller's Dried Grains with Solubles (DDGS): Nutrition, Use and Feed Manufacturing Short Course at the Northern Crops Institute during the week of Aug. 11.

The team learned about how to incorporate DDGS into high quality pelleted feed. DDGS, co-products of ethanol production, are used in beef, dairy cattle, poultry and swine diets.

"Worldwide, there is an increased demand for distiller's dried grains, driven primarily by the increase in corn prices," says Kim Koch, Northern Crops Institute Feed Center manager and coordinator of the course. "The U.S. is by far the largest producer of corn fuel ethanol in the world, and we are exporting record amounts of DDGS. Northern Crops Institute continues to offer this kind of educational program to promote the utilization of U.S. distiller's grains globally.

"Japan is not such a large DDGS user yet, but feed companies are considering their use quite seriously," Koch said. "This short course group represents feed companies, a poultry company and a large farmers' organization. These feed companies have tried to use DDGS, but have had some problems. We discussed how to modify their equipment and formulations to increase their satisfaction with the pelleted feed."

Guest speakers included Robert Thaler, professor of animal and range sciences at SDSU; Greg Lardy, professor of animal and range science at NDSU; and Darwin Britzman, International Nutrition Consulting Inc.

The participants also toured Larson Aquaculture Independent Research, Lake Preston, S.D.; Bones Feed Yard, Parker, S.D.; and the NDSU Dairy Unit. The North Dakota Corn Utilization Council hosted the team at a dinner in Fargo.

Tri-College University receives grant from Dakota Medical Foundation

Tri-College University received a \$1,400 grant from Dakota Medical Foundation. Funding will be used for automated external defibrillators at NDSU Downtown where Tri-College University offices are located.

Tri-College University was founded in 1970 and is a consortium between Concordia College, Minnesota State University Moorhead and NDSU. The three institutions have a combined enrollment in excess of 27,000 full- and part-time students, of which more than 17,000 come from outside the Fargo-Moorhead metro area. NDSU Downtown sees an average of 500 to 600 students, faculty and guests per day.

The mission of Tri-College University is to assist Concordia College, MSUM and NDSU by promoting cooperative efforts that will enrich the academic environment for the benefit of students, faculty and the community.

Dakota Medical Foundation, Fargo, focuses on improving health and access to medical and dental care in the region, with a special emphasis on children. Since 1996, the foundation has invested more than \$33 million to 300 nonprofit organizations in the region. For more information about the foundation, visit its Web site at www.dakmed.org.

Publications Services wins awards in national contest

Two projects produced by NDSU's Publications Services recently won awards in the 38th Annual University and College Designers Association Design Competition. Judges evaluated nearly 1,600 entries and gave 193 awards. NDSU received Awards of Excellence for the 2007 Annual Report, produced for the Office of the President, and the "Senior Speak" recruiting brochure, designed for the Office of Admission. Other winners in NDSU's categories included the University of Notre Dame, Cornell University and Tulane University.

The University and College Designers Association was founded in 1970 as the nation's first and only association for professionals involved in the creation of visual communications for educational institutions. It now has more than 1,000 members throughout the United States and Canada.

Midwest Motor Express vice president speaks to military logistics students

A leader in the international freight logistics industry addressed students in the NDSU Master of Military Logistics Program June 24.

Ron Martin, vice president of international logistics for Midwest Motor Express Inc., spoke to the 12 students during the final class in a series focusing on logistics case studies. Martin has been with the company for 37 years. An industry leader for international freight logistics in the upper Midwest, the company services 14 states and has partnerships in all 50 states, all Canadian provinces and Puerto Rico.

The main focus of Martin's presentation was the increase in freight movement that the United States can expect during the next eight years. Studies show that during that time, truck transport will increase by more than 32 percent and intermodal rail movements (crates on flat cars) will increase by more than 77 percent.

"Those increases will have very large impacts on our day-to-day activities," Martin said. He cited Fargo as an example. Currently, 72 trains go through Fargo each day. That's the current capacity for train transportation, which is the case in most areas across the country.

Capt. Stephen W. Turner, a student in the class, said that he expected to benefit in his military career from the knowledge that Martin brought to the class. In particular, he mentioned Martin's comments on the use of Radio Frequency Identification tags in logistics. He noted that the Army has widely adopted radio frequency identification technology.

Martin's presentation was part of a series of classes featuring logistics case studies, which are part of the overall Master of Military Logistics Program. The 12-month intensive program is designed for military logistics officers and Department of Defense civilians.

The master of military logistics is offered through the College of Graduate and Interdisciplinary Studies at NDSU and is administered through Upper Great Plains Transportation Institute. For more information on the master's of military logistics, visit www.ndsu.edu/gradschool or contact Jody Bohn at 1-7930.

PEOPLE

Freeman to retire after 40-year career



Freeman

For decades, Thomas Freeman has tried to find needles in haystacks. On Sept. 12, after 40 years on the NDSU campus, he will end his search.

Freeman is the director of NDSU's Electron Microscopy Center, a laboratory filled with sophisticated equipment that produces images of incredibly small pieces of the world around us.

The researchers work with items so tiny that it's difficult to comprehend. A typical sample used in Transmission Electron Microscopy, for example, is 600 Angstroms thick (one Angstrom is equivalent to 254 billionths of an inch).

"Through the years, we've found a lot of needles in a lot of haystacks," Freeman said with a chuckle. "This lab has been very successful at finding things that other researchers have spent a long time looking for. There's a lot of excitement in accomplishing that."

Located in the Northern Crops Science Lab, the center conducts highly diversified research. Samples can range from plant life to animals to insects, from polymers and coatings to new nanotechnology advancements. Freeman notes that the center has done work for 21 university departments and has an active collaboration with the U.S. Department of Agriculture. An estimated 60 to 70 faculty members annually bring samples to the center.

"This is a fascinating place to work. Every day in the lab is different, and every problem is new," said Freeman, who also is a professor of plant pathology. "Frequently, we need to develop entirely new protocols – what we did for one sample, may not work for another. The problems and the excitement roll into one."

For Freeman, the flash of discovery is as exciting today as it was when he came to NDSU in 1968. "Sometimes we hit the mother lode. I sit back and say, 'Wow. Look at how this thing was put together. It's amazing how this thing actually works.' Nature has come up with unique designs to solve a variety of problems," Freeman said. "When you get the right sample at the right time, it really is a 'Wow moment.' It's the peg that resolves the process. Seeing something you don't expect leads to a new understanding and appreciation of the problem."

Freeman earned his bachelor's degree at Colorado State University, master's degree at the University of Northern Colorado and doctorate at Arizona State University. His vita includes nearly 100 refereed publications in about 50 scientific journals.

As he departs from NDSU, Freeman, age 70, has this message for his colleagues. "Thank you," he said. "You have made my job interesting, exciting and fun. I really love doing this. Retirement is hard."

New communication faculty member has two articles accepted for publication

Stephenson Beck, a new faculty member in the Department of Communication, has co-written two articles with his dissertation adviser. Beck comes to NDSU from the University of Kansas. Both articles are in the process of being published.

"The Influential Role of Socioemotional Messages in Group Interaction" will be published in *Group Dynamics: Theory, Research and Practice*. It explains how relational messages are used in breast cancer support groups in order to foster social support.

"A Foundational Framework for Evaluating Teamwork: Addressing Micro and Macro Context" will be published in *Business Communication Quarterly*. The article proposes a new way to analyze group and team interaction. By combining core group characteristics, values and concepts, a matrix is created that can be used by researchers to holistically understand group dynamics.

NDSU awarded two challenge grants



Khaita



Wolf-Hall

NDSU has received two grants from the U.S. Department of Agriculture-Cooperative State Research Education Extension Service-Higher Education Challenge Grant program. The purpose of the program is to stimulate and enable colleges and universities to provide the quality of education necessary to produce baccalaureate or higher degree level graduates capable of strengthening the nation's food and agricultural scientific and professional workforce. The grants program is highly competitive and includes two categories: regular project proposals from single institutions and joint project proposals from the leading institution and two or more partner institutions.

Margaret Khaita, assistant professor in the Department of Veterinary and Microbiological Sciences, received the regular project award. Douglas Freeman, Eugene Berry, Catherine Logue, Birgit Pruess, Penelope Gibbs, Jane Schuh, John McEvoy, Neil Dyer and Robert Barigye, all faculty from the department, are co-investigators on the project.

Although the project is in the single institution category, there is an international partnership with Makerere University in Uganda. The title of the project is "Promoting Global Expertise in Emerging Infectious Diseases of Animals." The award amount is \$142,767, and the project will take three years to complete.

The purpose of the project is to enhance the international content of higher education by adding international curricula dimensions that promote globalization of research, education and career opportunities. Through this approach, United States undergraduate and graduate students, particularly those planning to pursue a career in veterinary medicine and allied health sciences, will be trained to combat emerging infectious diseases in animals in the U.S. and the world. The objectives include developing a curriculum for a master's degree program, with an emphasis on strengthening global animal and public health security, and developing a curriculum for an undergraduate and graduate certificate, both in the area of emerging infectious diseases of animals.

Charlene Wolf-Hall, associate professor in the Department of Veterinary and Microbiological Sciences and associate director for the Great Plains Institute of Food Safety, will lead the joint project award. The project involves NDSU, South Dakota State University and New Mexico State University. NDSU co-investigators on the project include Julie Garden-Robinson, Clifford Hall, Robert

Littlefield, Suranjan Panigrahi, David Saxowsky and Cheryl Wachenheim. SDSU co-investigators include Joan Hegerfeld, Sanjeev Anand, Padmanaban Krishnan and Kasiviswanathan Muthukumarappan. NMSU co-investigators include Jeanne Gleason and Barbara Chamberlin.

Wachenheim will lead the market research analysis and Littlefield will lead the teaching workshops. Hegerfeld will lead the SDSU activities and Gleason will lead the media development work at NMSU.

The project title is "Recruitment and Retention of a Diverse Population of Food Safety Students Using Market Research for Enhanced Programs." The award amount is \$475,000.

The purpose of the project is to expand student numbers and involvement in food safety, which will increase numbers of graduates in baccalaureate degrees in the food and agricultural sciences. The objectives of this project include attracting and attaining new population demographics for NDSU and SDSU food safety programs; developing high quality curriculum tools encouraging retention in the food safety programs; training instructors to better utilize online tools and integrated curriculum; and engaging in evaluation strategies measuring participants' change in knowledge, observed behavior and program usability.

NDSU scientists are among leaders in Antarctica climate history study

NDSU researchers are among the leaders of a group of National Science Foundation-funded scientists who have discovered the last traces of tundra on the interior of Antarctica before temperatures began a relentless drop millions of years ago.

The collaboration's research, which resulted in a major advance in understanding Antarctica's climatic history, appears in the Aug. 5 issue of the Proceedings of the National Academy of Sciences.

The international team of scientists headed up by NDSU geoscientists Allan Ashworth and Adam Lewis, and David Marchant, an earth scientist at Boston University, combined evidence from glacial geology, paleoecology, dating of volcanic ashes and computer modeling, to report a major climate change centered on 14 million years ago. The three scientists spend months living in tents in Transantarctic Mountains' Dry Valleys doing their research.

They have documented the timing and magnitude of the continent's shift from warm, temperate glaciers and fringing tundra to polar glaciers and polar tundra. "The contrast couldn't be more striking," Marchant said. "It is like comparing Tierra del Fuego today with the surface of Mars – and this transition took place over a geologically short interval of roughly 200,000 years."

According to Lewis, the discovery of lake deposits with perfectly preserved fossils of mosses, diatoms and ostracods is particularly exciting to scientists. "They are the first to be found even though scientific expeditions have been visiting the Dry Valleys since their discovery during the first Scott expedition in 1902-03," said Lewis.

For Ashworth, the fossils are a paleoecological treasure trove. He notes that some ancient species of diatoms and mosses are indistinguishable from the ones today, which occur throughout the world except Antarctica.

"To be able to identify living species among the fossils is phenomenal. To think that modern counterparts have survived 14 million years on Earth without any significant changes in the details of their appearances is striking," said Ashworth, the principal paleoecologist in the research. "It must mean that these organisms are so well-adapted to their habitats that in spite of repeated climate changes and isolation of populations for millions of years, they have not become extinct but have survived."

The fossil finds and dating of volcanic ash show that roughly 14.1 million years ago, the area was home to tundra, "wet" glaciers typical of those of the mountains of Tierra Del Fuego in the high southern latitudes and seasonally ice-free lakes. The beds of long-gone lakes contain layers of sediments where dying plants and insects accumulated and were preserved.

The mean summertime temperatures would have dropped in that period by as much as 8 degrees Celsius. On average, the summertime temperatures in the Dry Valleys 14.1 million years ago would have been as much as 17 degrees warmer than the present-day average.

According to Lewis, freshness of the crystals and glass in the volcanic ash and preservation of cellular detail in the fossils indicate they have been permanently frozen since 13.9 million years ago.

The research conclusion suggests that even when global atmospheric temperatures were warmer than they are now, as occurred 3.5 million years ago during the Pliocene Epoch, and as might occur in the near future as a consequence of global warming, there was no significant melting of the East Antarctic ice sheet inland of the Dry Valleys. According to Ashworth, if this conclusion stands the test of time, it suggests a very robust ice sheet in this sector of Antarctica, and emphasizes the complex and non-uniform response of Antarctica's ice sheets to global change. "The huge uncertainties regarding the inherently unstable marine-based West Antarctic ice sheet, however, make all predictions about the future based on past behavior educated guesses at best," said Ashworth.

The National Science Foundation, in its role as manager of the United States Antarctic Program, supported the work of Ashworth, Lewis and Marchant as well as United States researchers from Lamont-Doherty Earth Observatory, Ohio State University and the University of Montana.

Pearson, doctoral students publish article on intercultural research

Judy Pearson, professor and associate dean of communication, and doctoral students Julie Semlak, Najla Amundson and Anna Kudak published an article titled "Navigating Dialectic Contradictions Experienced by Female African Refugees During Cross-Cultural Adaptation" in the Journal of Intercultural Communication Research.

The paper emerged from a research group spawned by Communication 700, the doctoral-level introductory course in research methods. The study uncovered communication challenges faced by African refugees as they negotiated their new lives in the United States.

Buchholz attends Group Study Exchange



In May, Carol Buchholz, assistant professor in the School of Education, participated in the Rotary Foundation's Group Study Exchange to Sweden. The trip was a five-week vocational and cultural exchange offering international adventure, vocational training and education.

Buchholz During her exchange, Buchholz toured a variety of schools ranging from primary schools to universities. She also met with professors, school counselors, psychologists, principals and other school personnel. During the visits, she discussed her current research areas, gathered information about counseling best practices and discussed the possibility of developing new exchange programs with Swedish universities. In addition, Buchholz attended several cultural events with her Swedish hosts.

Open to young professionals ages 25 to 40, the Rotary Foundation is accepting applications for the 2009 Group Study Exchange to Taiwan. The deadline to register is Sept. 1. Applicants also must be employed with two or more years of experience in their professions. Applications are available on the Rotary International Web site at www.rotary.org.

While in Taiwan, team members will stay with Rotarians who provide meals, lodging and group travel within the host district. The Rotary Foundation provides a round trip air ticket. Team members pay only for personal and incidental expenses.

Rotary is a worldwide organization of more than 1.2 million business, professional and community leaders. Members of Rotary clubs, known as Rotarians, provide humanitarian service, encourage high ethical standards in all vocations and help build goodwill and peace in the world

Contact Buchholz at 1-7103 or carol.e.buchholz@ndsu.edu for more information about the 2009 Group Study Exchange to Taiwan.

NDSU communicators win awards

Four NDSU communication professionals won awards in the 2007-08 National Federation of Press Women communications contest.

Carol Renner, communications manager in research, creative activities and technology transfer, won first place for both her PowerPoint presentation on groundbreaking research at NDSU and her feature release on an NDSU professor's research appearing in National Geographic magazine.

Becky Koch, director of agriculture communication, received first place in the magazine/tabloid one- to three-color category for an issue of the North Dakota Ag Mag.

Ellen Crawford, information specialist in agriculture communication, received second place in the external annual report category for the Rural Leadership North Dakota program's class of 2005-07 summary booklet.

Delores Pavicic, media specialist for the McNair Scholars Program, won third place in the one- to three-color magazine category for the McNair Scholars Directory.

The awards will be presented during the National Federation of Press Women's annual conference in Idaho Falls, Idaho, Sept. 11-13.

EVENTS

Association of Students from India to present 'Yatra'

The Association of Students from India at NDSU and the Indo-American Association of Great Plains, Fargo, will present "Yatra – a Dance Journey Through Timeless India," on Saturday, Aug. 30, at 6:30 p.m. in Festival Concert Hall. The show is a collaborative effort of dancers from the South Asian community and guest performer Rita Slator from the Shimmy Sisters and Celtic dancer Maureen McDonald-Hins, both from the Fargo-Moorhead area.

Dance is present in every aspect of India's culture, stretching over 5,000 years. There are court dancers (Kathak), temple dancers (Bharatanatyam) and folk dancers (Punjabi bhangra or Rajasthani ghoomar) throughout India's history. Each dance technique is ancient and was common to all, but the attitude of the dancers was different.

According to Febina Mathew, director of the show and adviser of the Association of Students from India, "Yatra" traces the evolution of India's cultural heritage during the Vedic age, Muslim conquests, European colonization and post-independence. The dance drama adopts beautiful dresses, mime and histrionics from numerous dance styles and martial arts of India, Sri Lanka and Europe.

President Joseph A. Chapman and Fargo mayor Dennis Walaker will attend the program, which also is part of India's 62nd Independence Day celebration. Tickets are \$5 general admission and available at the door beginning at 5:45 p.m. Tickets can be reserved by contacting Ganapathy Mahalingam at (701) 235-8389 or ganapathy.mahalingam@ndsu.edu, Panjini Sivanna at (701) 237-9385 or Thilak Rajaraman at (701) 212-0560.

For more information or to reserve tickets, contact Mathew at (701) 367-8369 or febina.mathew@ndsu.edu.

SHORTS AND REMINDERS

Staff Senate nominations sought

The NDSU Staff Senate is seeking nominations for an open seat in the 1000/3000 bands, which includes staff members in the administrative, managerial and professional categories.

The NDSU Staff Senate is comprised of 5 percent of regular benefited employees elected at large from the university's job categories. Nominators are asked to check with the person they are nominating before sending in the nomination. Nominees are encouraged to discuss with their supervisors the opportunity of serving before being nominated.

For more information, contact Heather Heger, membership officer, at 1-8293 or Barb Geeslin, Election Committee chair, at 1-8805.

Positions Available

Positions open and screening dates through the Office of Human Resources, Stop N Go Center, 1919 North University Drive, Suite H102:

Administrative Secretary/#00019223
Animal Sciences
\$27,000+/year
Aug. 31

Office Assistant
Vice President for Finance and Administration
\$27,000+/year
Sept. 3

Custodian/#00020733
Dining Services – West Dining Center
12 months, Monday to Friday, 6:30 a.m. to 3 p.m.
\$9.50+/hour
Sept. 5

Lead Caterer/#00023314
Dining Services – Memorial Union
12 months, Monday to Friday, with weekends
\$9+/hour
Open until filled

Crop Quality Specialist/#00023981
Northern Crops Institute
\$45,000+/year
Oct. 3

Research Specialist
North Central Research Extension Center
5400 Highway 83 South, Minot, N.D.
Salary commensurate with experience

Head Teacher
Child Development and Family Science
\$32,000-\$35,000/year
Aug. 28

Clinic Coordinator/#00019547
Child Development and Family Science
0.5 to 0.7 full-time employee
\$17,000-\$25,000 dependent on hours
Aug. 30

Learning Technology Specialist
Academic Research and Learning Technology
\$40,000+/year
Sept. 8

Web Application Developer
Academic Research and Learning Technology
\$48,000+/year
Sept. 8

Equity and Diversity Center Outreach Coordinator/ #00026193
Office of Equity and Diversity
Salary commensurate with experience
Sept. 18

Web Specialist
Upper Great Plains Transportation Institute
\$32,000+/year
Open until filled

Web Technology Specialist/#00021062
Ag Communications
\$43,000+/year
Open until filled

Health Educator/#00018539
Student Wellness
\$30,000+/year
Open until filled

Programmer Analyst
NDUS ConnectND
Fargo
\$50,000+/year
Open until filled

Position openings also are available through the NDSU Web site at www.ndsu.edu/jobs.

CALENDAR

August

- 23 – Sept. 6 Weeks of Welcome
- 28 Living Learning Center West Grand Opening, 2 p.m.
- 28 Football vs. Austin Peay, 7 p.m., Fargodome
- 30 “Yatra – Journey Through Timeless India,” sponsored by Association of Students from India and Indo-American Association of Great Plains, 6:30 p.m., Festival Concert Hall, \$5 general admission, children under 12 get in free
- 31 Soccer vs. University of Minnesota, 1 p.m., Ellig Sports Complex

September

- 1 Labor Day holiday observed – university closed
- 3 Student Organization Fair, 10 a.m. to 2 p.m., Babbling Brook
- 3 Soil science seminar – “Global Climate Change and its Local Implications in North Dakota,” Adnan Akyuz, NDSU assistant professor of climatology and state climatologist, 3 p.m., Loftsgard 114
- 4 Career Center – Part-time Jobs Fair, 11 a.m. to 2 p.m., Memorial Union, Great Plains Ballroom
- 4 Wallman Wellness Center – Annual 5K Run and One-Mile Fun Walk/Run, registration begins at 5 p.m., events begin at 6:30 p.m.
- 5 Men and Women’s Cross Country Bison Invitational
- 5 Volleyball vs. Illinois-Chicago, 7 p.m., Bentson Bunker Fieldhouse
- 6 Volleyball vs. University of Texas El Paso, 10 a.m., Bentson Bunker Fieldhouse
- 6 Volleyball vs. Northern Colorado, 4 p.m., Bentson Bunker Fieldhouse

Non-discrimination Policy

North Dakota State University does not discriminate on the basis of race, color, national origin, religion, sex, disability, age, Vietnam Era Veterans status, sexual orientation, marital status or public assistance status. Direct inquiries to the Executive Director and Chief Diversity Officer, 205 Old Main, 1-7708.

University Relations

North Dakota State University

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