OSU TODAY

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Perspective

Go Global

Become an international citizen today

NANI PYBUS, SENIOR COORDINATOR OF THE INTERNATIONAL BUREAUS, SCHOOL OF INTERNATIONAL STUDIES

The School of International Studies, a unit of OSU International Education & Outreach, had the distinct pleasure this week to host on campus Ms. Harriet Mayor Fulbright, chairwoman of the Fulbright International Center, and Tony Claudino, U.S. Student Fulbright Program Outreach director.

The Wes Watkins Distinguished Lectureship audience learned of Ms. Fulbright's extraordinary efforts to sustain the vision conceived 60 years ago by her late husband, Sen. J. William Fulbright, of scholarly exchange between the United States and other nations serving to bring about understanding and peace around the world. The program that bears Sen. Fulbright's name has enabled more than 250,000 American scholars to engage in collaborative study and research overseas. In discussions with administrators, students, faculty and advisers, Mr. Claudino shared strategies that will be useful as we seek to increase the number of Fulbright Program participants from our university.

The opportunity to become a part of the Fulbright legacy is, simultaneously, a chance to contribute to Oklahoma State University's legacy of international exchange and outreach. This tradition dates to 1950 when President Henry G. Bennett was chosen by President Truman to administer the Point Four Program, predecessor to the U.S. Agency for International Development. Dr. Bennett established more than 105 projects in 33 countries, and in locales around the world, including in the Middle East, Africa and Asia, Oklahoma State still is regarded for its early outreach and remembered as the first American institution to share Western education and the prospect of a better life.

OSU's international heritage is embodied by the goodwill created by its many ambassadors. In addition to the thousands of international students who've come here and returned home, the students, alumni, faculty and staff who have spent time overseas established the relationships in which most of the university's current international endeavors are rooted.

The merits of international study and exchange today are irrefutable. From economic markets and cultural conflict resolution to immigration and the development of solutions and technologies for health, energy and environmental problems, the issues that require the immediate attention of leaders and our best scholars exist on a global scale.

We live in a world without borders that demands truly "international" citizens. As a Fulbright Scholar, a student in the School of International Studies, a Peace Corps volunteer or via one of the dozens of study abroad/cultural immersion programs available at OSU, there is no better time to expand one's horizons.

Hale becomes OSU's latest Goldwater Scholar

Mechanical and aerospace engineering junior Melinda Hale has been named a Goldwater Scholar. The national distinction recognizes undergraduates with aspirations in mathematics, the natural sciences or engineering.

Melinda Hale

A native of Fishkill, N.Y., Hale is the 13th OSU student to receive the honor.

"There is no better affirmation to the quality of our students and the education they are receiving than for our best to compete successfully with the nation's best for prestigious scholarships like the Goldwater," said OSU System CEO and President David Schmidly. "I congratulate Melinda on this special accomplishment and also want to commend her professors, advisers and all those who help our students reach their goals."At age 18, Hale is OSU's youngest Goldwater Scholar.

"I came to OSU at age 16," said Hale, who is in her second year in OSU's School of Mechanical and Aerospace Engineering.

Home-schooled until she completed high school at age 13, she attended Duchess Community College in Poughkeepsie, N.Y., near her home before enrolling at OSU.

Selection for the Goldwater Scholarship, which provides up to $7,500 per year, is based on academic potential - an evaluation of transcript, grade point average and reference letters - and research acumen. Hale's application centered on her internship in summer 2005 at IBM's Hudson Valley Research Center in Hopewell Junction, N.Y.

She acknowledges, however, that her successful application for the award is attributable largely to the quality of education she is receiving at OSU.

"The fact OSU has had so many Goldwater winners shows that it competes on the national level with other engineering schools," Hale said. "The faculty here are very dedicated to what they do, and that dedication produces an education that I think rivals more respected, big-name engineering schools."

Established in 1989 in honor of the late Sen. Barry M. Goldwater, the scholarship program selects just 300 recipients each year from as many as 3,000 applicants. In addition to Hale, chemical engineering junior Michael Gamble, received an honorable mention in this year's competition.

Briefly Speaking...

Engineering alumnus endows $1 million scholarship

The OSU Foundation announced this week Michael and Patricia Harris of Dallas, Texas, have provided $1 million for the university in their estate plan to create the Michael Harris Endowed Scholarship in mechanical engineering. The scholarship will benefit juniors and seniors in OSU's School of Mechanical and Aerospace Engineering.

Harris, who enrolled at OSU after serving in the Army Reserve, completed his degree in mechanical engineering in 1966. He spent his career as a project engineer with Phillips Petroleum in Bartlesville, New York, the North Sea, Venezuela and Dallas.

Executives on hand for Spears School of Business' CEO Day

OSU alumni Jack Allen Jr. and Chuck Watson will be the featured speakers for the Critical Issues Forum during the Spears School of Business' CEO Day. Students and the public are invited to attend the free event at 2 p.m., Tuesday, April 4 in the Wes Watkins Center.

Allen, who has been recognized among the top 25 most innovative insurance agents in the country, is an advocate for both individual attainment and corporate team building. Watson, co-founder and chair of Eagle Energy Partners, is the former CEO of Dynegy Inc. He also worked at Conoco for several years after graduating from OSU.

NTSO to host Kids on Kampus

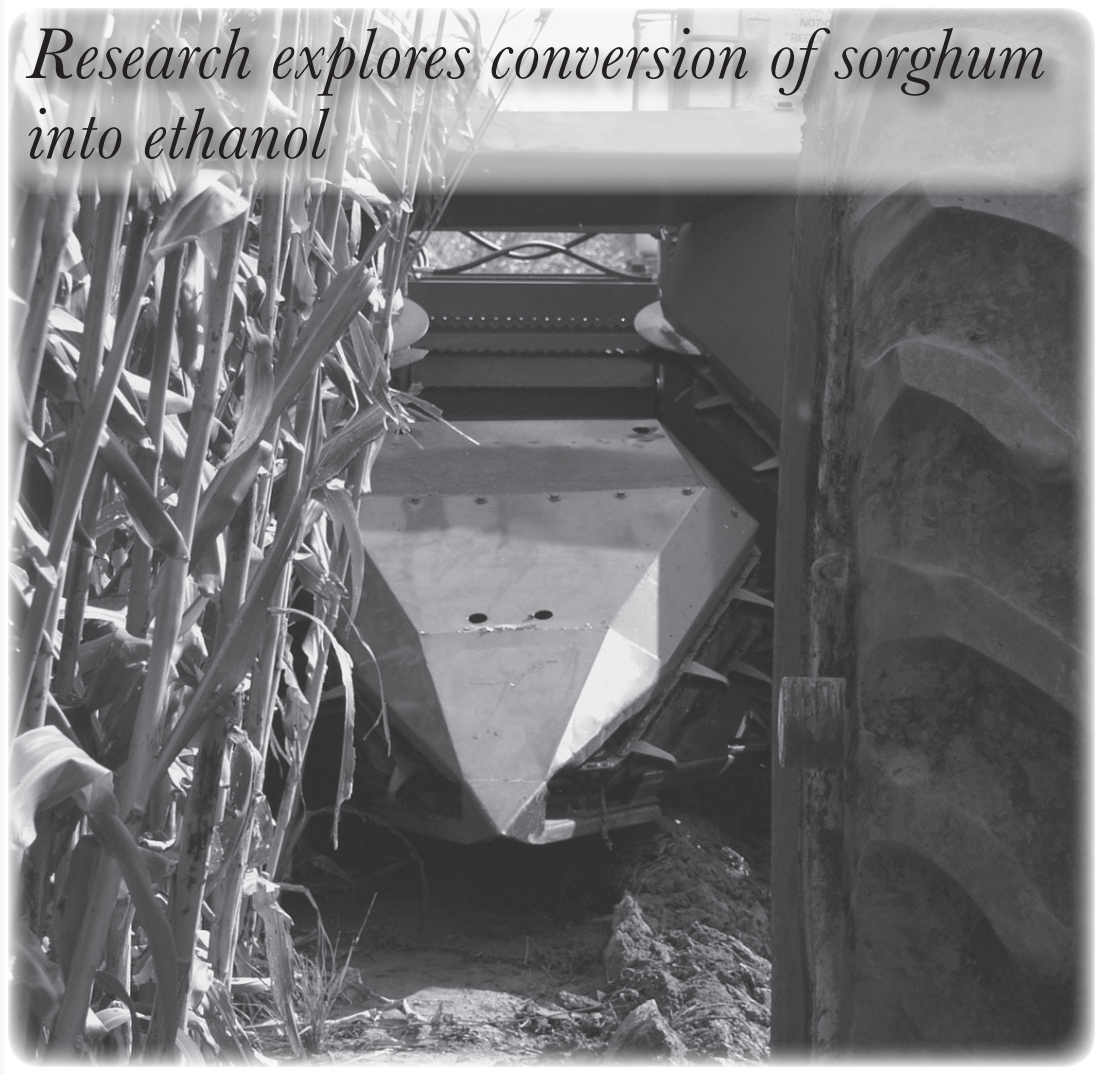
More than 2,000 children and parents are expected to participate in "Kids on Kampus" next week. Hosted by the Non-Traditional Student Organization to celebrate those in the OSU community who have children, the annual event will be held 10 a.m. – 2 p.m. on Friday, April 7.

Among the day's events on the library lawn will be fun and educational activities for children as well as information on parenting and child issues and resources for families in the Stillwater area. A noon rally is also scheduled.

Contact NTSO at 744-7508 or visit www.osunontrads.org for more information, including contingency plans in the event of rain.

One Sweet Idea...

Research explores conversion of sorghum into ethanol



BY MANDY GROSS

Agriculture products increasingly are being evaluated as energy alternatives, and the production of ethanol as a fossil fuel additive is a popular solution. Sweet sorghum, a low input, high carbohydrate producer that may be cultivated in nearly all temperate climates, is a renewable energy crop currently under research as an ethanol source at OSU's Food & Agricultural Products Center.

Dr. Danielle Bellmer, FAPC food processing engineer, is investigating an ethanol production process in which sweet sorghum juice may be collected, fermented and distilled in the field.

Essentially alcohol produced by fermenting and distilling simple sugars derived from starch crops, such as corn, ethanol production requires heat processing to convert the starch into simple sugars. These simple sugars may be directly "juiced" from sorghum stalks, but corn remains a more popular ethanol source because simple sugars derived from sweet sorghum must be fermented immediately. And while starch may be stored for long periods of time, the harvest season for sweet sorghum is only a few months, according to Bellmer.

"Since the sorghum juice cannot be easily stored, the processing plant would only be in production for a few months out of the year, making it economically unfeasible," she said.

Lee McClune, president of Sorganol Production Co. Inc. in Knoxville, Iowa, approached the FAPC for assistance with his concept for a simple sugar in-field harvester. The implement uses a standard forage chopper/header and feed rollers to both harvest and "juice" in a single pass, with the potential to harvest 4,000 to 6,000 gallons of juice per acre.

Much of the FAPC's contributions to the project involve the fermentation process, which must begin immediately after harvesting. Yeasts used for fermentation operate within a finite optimum temperature range, posing a problem for fermentation in non-temperature controlled environments. Bellmer is investigating the use of temperature-tolerant yeast strains that may enable fermentation to occur in large storage containers in the open with little or no pretreatment of the juice.

A final component of the in-field, sorghum to ethanol process may be supplied by an Oklahoma manufacturer. David McDowell, owner of Fasttech, a company located in Ferris, developed a distiller that uses diluted blackstrap molasses, combined with yeast and enzymes, to produce 21 percent ethanol, which is then distilled to about 99 percent ethanol. The distillation unit can be used for the ethanol produced from sorghum, and Fasttech currently is working on mobile version of the unit. Both Bellmer and McDowell say a cooperative group of farmers could potentially own one distillation unit.

The idea of using sweet sorghum for commercial ethanol production is not new. In fact sugar cane is cultivated in Brazil for the same purpose. By obtaining data through research by the FAPC, however, McClune hopes the entire process of converting sweet sorghum into ethanol will become more marketable.

"[Bellmer] has been very helpful, very encouraging, and I certainly appreciate all the efforts and everything she's done," McClune said.

The FAPC is dedicated to helping Oklahoma agriculturalists develop value-added enterprises in order to keep products, jobs and dollars in Oklahoma. Through research and collaboration with agricultural entrepreneurs, like McClune and McDowell, it is hoped a system will be developed that can allow farmers to produce their own alternative fuel, Bellmer said.

"Rural agricultural producers will then have the ability to fuel their own machinery, as well as a means of generating additional income," Bellmer said.

Have you met...

Goutam Chakraborty

Efforts to improve learning at OSU by Dr. Goutam Chakraborty, associate professor of marketing, is drawing raves from a software provider dedicated to educating the next generation of business analysts. The Data Mining Certificate program Chakraborty founded at OSU has awarded 28 certificates, making it SAS's largest data mining certificate program in the nation.

Combining elements of his background in both marketing and engineering, Chakraborty developed the certification with SAS to have broad-based appeal. Consequently, students in business administration, chemical engineering, industrial engineering, human environmental sciences, international studies and management science information systems are learning to write, model and understand complex statistical programs. They also are receiving a competitive advantage in the job market. Demand from companies for employees adept at business analytics has resulted in those who have completed the certificate earning annual salaries estimated as much as $10,000 to $15,000 higher than their counterparts.

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