BGSU to recruit, aid future math and science teachers

An ambitious plan by BGSU to recruit and educate science and math teachers has been chosen for state funding. The $3 million Science and Math Education in Action grant will encourage and enable promising students to "Choose Ohio First" when selecting a college and, later, to find in-state teaching jobs.

Students in the program will receive from $2,000 to $4,250 per year in Choose Ohio First scholarships, along with intensive academic assistance, career counseling and the opportunity to conduct research and gain related work experience as undergraduates. Combined with other scholarships from BGSU, the future teachers could receive up to $9,250 as seniors. "We want to give them the support, the community and the encouragement to meet high standards and be successful," said Dr. Bob Midden, leader of the grant-writing team.

"In essence, the primary goal of Science and Math Education in Action (SMEA) is to assist in the development and preparation of STEM (science, technology, engineering and mathematics) teachers who have the experiences, tools and skills necessary to have a positive impact on the learning of Pre-K-12 students in Ohio schools," said Dr. Julia Matuga, associate dean of the College of Education and Human Development.

The state initiative is aimed at two of Gov. Ted Strickland and Ohio Board of Regents Chancellor Eric Fingerhut's objectives in addressing Ohio's needs: graduating more students and keeping graduates in Ohio. By helping to better prepare the citizens of tomorrow, it also will play a role in work-force development, seen as another key to the state's economic development. "Inspiring and effectively educating Pre-K-12 students in the STEM areas is a critical contribution to the future development of the state," Matuga noted.

Part of the Ohio Innovation Partnership, the $100 million Choose Ohio First scholarship program seeks to improve the state's competitiveness in science and math education. BGSU's grant is one of 17 proposals funded. Bowling Green will partner with the University of Findlay and Owens, Terra and Northwest State community colleges to immediately begin recruiting Ohio students who have an interest in science or math and in becoming teachers, and whose high school grades, classes and activities indicate an interest in those fields. Those who come in through the community colleges will be able to finish their four-year degrees at BGSU.

To be eligible for the scholarships, STEM students do not have to initially declare teacher education as a major but in their first and second years must participate in experiences with Pre-K-12 students, exposing them to teaching as a profession. This is a strategy to recruit those STEM students who may not have considered teaching as a profession by providing them with teaching experiences early in their college education, said Dr. Rosalind Hammond, interim education dean.

The grant team anticipates enrolling about 50 students on main campus and 10 at BGSU Firelands, with another 15 each at Findlay and Terra, 12 at Northwest State and 10 at Owens. BGSU Admissions Director Gary Swegan and Student Financial Aid Director Greg Guzman will collaborate to set them up with the scholarships, which are renewable for four years as long as they maintain the required grade point average and take the approved schedule of courses.

Bowling Green is equally matching the state funding, said Dr. Deanne Snavely, acting dean of the Graduate College. "Choose Ohio First puts money directly into students' pockets," Snavely said. The University's portion, coming largely from the colleges of education and arts and sciences, in addition to Student Financial Aid, pays for hiring a director and administrative support and for the programming on campus, she explained.
BGSU’s program builds on its longstanding strength in teacher education, Midden said, and combines that with the content areas in science and math. The University has also been a leader in the study of teaching and learning, and will incorporate proven, research-based teaching strategies into the content-area courses, said Midden, a chemistry faculty member. He is also the director of COSMOS, which aims to strengthen the skills of public school science and math teachers as well as education majors. According to the board of regents, Bowling Green’s plan “builds on BGSU’s excellent track record on graduating highly prepared teaching professionals in Ohio.”

“A fair amount has been learned in the last 20 years about what has limited student interest in math and science,” Midden observed. “We’re making some important changes in the ‘gateway’ courses and will use what has nationally been found to be most effective. We will use active learning, present the material so it is meaningful and engage students in service-learning.”

The junior and senior years of the SMEA program will focus on preparing STEM education professionals through a newly designed curriculum thread, Teachers as Researchers, that will be infused in required education-preparation coursework, Matuga explained. SMEA students will utilize classroom research methods learned in these courses to design and conduct action research while student teaching, thereby documenting the impact their teaching has on Pre-K–12 student learning in a STEM area.

SMEA will draw upon some of the University’s already established and proven avenues for providing students high-quality preparation and support, in addition to the scholarship assistance. Like the AIMS program, which works with women and minorities to enroll and mentor them through to graduate degrees in math and science, the new program begins with a five-week summer bridge experience that brings students to campus early.

“The goal is to introduce them to the rigors of college study and give them time to get to know one another and their faculty mentors,” Midden said.

Most SMEA students will spend their first year living in the Natural and Health Sciences Residential Community, located in Offenhauer West, where they will have access to exam review sessions, walk-in tutoring, small-group study sessions and other resources directly related to their coursework. “We have everything they need to get their work done,” said Robert Harr, director of the community. “We’re giving them the opportunities and the assistance along with the synergy of working and living with other students.”

The community will also facilitate the research projects required of each freshman and host science seminars.

The required internships and work experiences, in the sophomore year, will also help students boost their learning and ultimately be better teachers, by demonstrating the application of knowledge in the real world. “The work experience gives teachers a good opportunity to enrich their experience and expand their teaching,” Midden said.

Dr. James Michael Smith, vice president for economic development and regional growth, has been in discussion with hospitals and businesses from Norwalk and Sandusky to Fremont and Toledo to explore potential sites for student placements. “There’s going to be a large number of opportunities,” he predicted. “This will be a great way to tie industry more closely to the educational experience.”

Building such a comprehensive program required teamwork from numerous areas on campus, Snavely said. The working group includes members from the education college and its School of Family and Consumer Sciences, the College of Arts and Sciences, Continuing and Extended Education, AIMS, the College of Health and Human Services, the Office of Service-Learning and COSMOS, among others.

“They all played important roles, as have faculty and administrators from each of the partnering institutions,” Midden said.

“It’s been a great collaborative effort and will continue to be,” Snavely said.
Ribeau encourages campus to uphold ideals at farewell picnic

After 13 years, it’s hard to say goodbye, but the campus and community gathered with President Sidney Ribeau and Paula Whetsel-Ribeau July 8 to reminisce and celebrate their time together before the Ribeaus leave for Washington, D.C., and their new lives at Howard University.

The mood was both festive and bittersweet at the farewell picnic under a tent on the University Hall lawn. About 800 people—including faculty, staff, students, retirees, past and present trustees, community members, and government officials—were on hand to wish the couple well and enjoy a last meal together. As Ribeau recalled, the picnic was appropriate because it was the way the campus had celebrated his inauguration in 1995 on a sunny September day. “They asked if I wanted a fancy dinner with chandeliers, and I said that’s really not my style,” he said.

“Transitions are always hard, but this transition has been particularly difficult for us,” he acknowledged. “Bowling Green State University in 1995 believed in me, and I promised with all my heart, soul and spirit to do the best I could to make a difference.”

Ribeau reiterated his guiding belief that any person—no matter what creed, race or color—deserves the chance to improve his or her life through education, and that in a democratic republic, citizens have the responsibility to help create a better quality of life for all. Referring to his earlier statement on “good hearts, able minds, the capacity to change the world,” the president reminded those gathered that each person has something valuable to contribute.

“This is the beginning of a very exciting period for BGSU, and it is the conclusion of the most significant and meaningful period of my life,” he said.

It was Ribeau’s belief in the power to achieve that many of the speakers and guests cited as his most notable characteristic. “We used to say ‘We can’t,’” remembered Michael Marsh, immediate past president of the board of trustees and a member of the committee that hired Ribeau. “But he instilled in us that we can, from building a new student union when everyone said we couldn’t, to increasing enrollment and retention,” to raising double the money the fund-raising experts said was possible for the capital campaign. “It’s that attitude that is still here today,” Marsh said. “Together we can still make BGSU great. He did it and everyone in this room did it, too.”

Students fondly recalled the times they had spent with Ribeau, his founding of the President’s Leadership Academy and other student-focused initiatives, and noted he never lost his connection with them. Bernard Little, former president of Undergraduate Student Government, said, “It was always a pleasure. He always made time for students—that’s the number-one thing in higher education. You could never find a better student advocate.”

Ribeau’s stature as a leader and the respect he earned in Columbus earned praise from Ohio Sen. Mark Wagoner (R-2nd District) and Rep. Randy Gardner (R-Bowling Green), who presented him a plaque unanimously endorsed by state legislators. “We will always remember his passionate and powerful voice for higher education in Columbus,” Wagoner said.

Paula Whetsel-Ribeau, who met and married her husband while he was BGSU president, earned a doctorate and went to work in student affairs, said she had only recently been able to come to grips with the move after all the friendship and support she had found at BGSU. “It’s been a privilege and an honor to have had the opportunity to work with you all and to get to know you beyond the workplace,” she said. She urged the campus to be positive and always take a moment to reflect on being part of the answer and not of the problem.
From photosynthesis to fuel: Renowned chemist to discuss research

One of the world's foremost authorities on ultrafast interactions among molecules in liquids, solids and solutions will deliver this year's W. Heinlen Hall Lecture Series at the University.

Dr. Graham R. Fleming, the Melvin Calvin Distinguished Professor of Chemistry at the University of California, Berkeley, has focused his career on the study of condensed-phase dynamics using a combination of ultrafast spectroscopy, analytical theory and simulation methods to reveal the underlying microscopic behavior of complex systems in chemistry and biology.

"He has consistently invented new experimental methods and applied them to important problems, revealing new types of information and opening up new fields of inquiry," says UC Berkeley chemistry professor David Chandler.

At BGSU, he will deliver the following lectures, each in 123 Overman Hall:

- Tuesday, July 22: "Nonlinear Spectroscopy: Especially Photon Echoes," 3:30-4:30 p.m.
- Wednesday, July 23: "Photosynthesis: The Primary Steps and Their Regulation," 3:30-4:30 p.m.
- Thursday, July 24: "Multidimensional Spectroscopy: Landscapes and Quantum Dynamics," 1:30-2:30 p.m.

Fleming points out that the underlying microscopic behavior of biological systems is generally hidden from sight in most conventional spectroscopic measurements. "One of the major goals of my group," he says, "is to develop new experimental methods and the theoretical means to analyze them, which provide detailed pictures of the interactions, dynamical pathways and quantum effects that give rise to, for example, the exquisite efficiency of photosynthetic light harvesting."

The lessons learned from natural photosynthesis can play a critical role in designing synthetic photosynthetic devices, Fleming notes. He says a major objective of his group over the next few years will be to put these ideas to practical application.

The ultimate goal is to develop artificial photosynthesis that would provide humanity with clean, efficient and sustainable energy. Fleming was instrumental in developing a proposal by UC Berkeley, Lawrence Berkeley National Laboratory and the University of Illinois to explore the science and technology of biofuels production. The proposal was selected this year by oil giant BP to receive $500 million in funding over 10 years.

Fleming received a Ph.D. in physical chemistry from the University of London in 1974 and completed various research fellowships before joining the University of Chicago, where he taught for 18 years. The British-born scientist has been on the Berkeley campus since 1997. Also a fellow of the Royal Society in England, he was elected to the National Academy of Sciences in May 2007.

In addition, Fleming serves as director of the UC Berkeley branch of the California Institute for Quantitative Biosciences, one of four California Institutes for Science & Innovation created by the state in 2000. For more on his research, visit www.cchem.berkeley.edu/grfgrp/

The lectureship was created by the chemistry department in 1975 to honor Dr. W. Heinlen Hall, a professor of chemistry from 1936-76 who, as chair of the department until 1971, led it through extraordinary growth and expansion. The weeklong series, which has drawn acclaimed scholars and leading research chemists, allows students and faculty to learn from and interact with cutting-edge investigators at the frontiers of chemistry research.
‘Honk!’ celebrates difference at Huron Playhouse

Hans Christian Andersen's beloved tale about the struggles of being different is brought to life in the musical "Honk!" this week at the Huron Playhouse. "Honk!" will be performed Tuesday-Saturday (July 15-19).

"A marvelously funny, frequently touching and constantly magical theatre piece, 'Honk!' is sure to have a long and lustrous life," writes one critic of the whimsical adaptation of "The Ugly Duckling."

The cast, including a corps of area youngsters, portrays a barnyard of characters, from geese and ducks to frogs and a cat in the family-friendly show about tolerance.

Curtain time is 8 p.m. nightly. Ticket prices for all Huron Playhouse productions are $12 for students and senior citizens, $14 for other adults and $9 for children under 12. For reservations and further information, call the playhouse at 419-433-4744. The box office at McCormick School, 325 Ohio St., is open Monday-Saturday from 9 a.m. to 9 p.m.

IN BRIEF

There were no news briefs this week.

CALENDAR

Wednesday, July 16
Classified Staff Council, 10 a.m., 316 Bowen-Thompson Student Union.

Thursday, July 17
Dissertation Defense, "Bayesian Model Checking in Multivariate Discrete Regression Problems," by Fanglong Dong, mathematical sciences, 10 a.m., 459 Mathematical Sciences Building.

Monday, July 21
Interim President Carol Cartwright arrives on campus.
W. Heinlen Hall Lecture Series, "Ultrafast Spectroscopy: Lasers, Wavepackets and Solvation," by Dr. Graham R. Fleming, University of California-Berkeley, 3:30-4:30 p.m., 123 Overman Hall. Hosted by the chemistry department.

Continuing Events
July 15-19
Summer Theater, "Honk!" 8 p.m. nightly.
Huron Playhouse, McCormick School, Ohio Street, Huron. Tickets are $12 for students and senior citizens, $14 for other adults, $9 for children under 12, and $11 for groups of 15 or more. For reservations, call 419-433-4744.

July 18-27
Art Exhibition, Now Ohio Summer Art Show, bringing together artists of different ages, backgrounds and media, Willard Wankelman and Dorothy Uber Bryan art galleries. Awards, including the $400 Best of Show, plus Best Young Artist and five other cash prizes, will be presented at the opening reception from 7-9 p.m. Friday (July 18). Visitors to the reception may vote on the People's Choice Award. Gallery hours are 10 a.m.-4 p.m. Tuesday-Saturday and 1-4 p.m. Sunday. Sponsored by First Solar Inc., the College of Arts & Sciences, Arts Village, Partnerships for Community Action, and Coca-Cola.
JOB POSTINGS

FACULTY
Human Movement, Sport and Leisure Studies.
• Instructor (Recreation). Call Mary Bobb, 2-7234. Deadline: July 21.
• Instructor (Motor Behavior). Call Mary Bobb, 2-7234. Deadline: July 25.


Labor Postings
http://international.bgsu.edu/index.php?x=facinfohires

Contact the Office of Human Resources at 419-372-8421 for information regarding classified and administrative positions. Position vacancy announcements may be viewed by visiting the HR Web site at www.bgsu.edu/offices/ohr/.

Employees wishing to apply for these positions must sign a "Request for Transfer" form and attach an updated resume or data sheet. This information must be turned in to Human Resources by the job deadline.

CLASSIFIED
On-campus classified:
www.bgsu.edu/offices/ohr/employment/BGSU_only/page11151.html

Off-campus classified:
www.bgsu.edu/offices/ohr/employment/cl_staff/page11145.html

ADMINISTRATIVE
www.bgsu.edu/offices/ohr/employment/adm_staff/page11137.html

OBITUARY

There were no obituaries this week.