Student and faculty research appears in leading journals

Kristina Csaszar

In the community of scientists, everyone plays a part. Even undergraduates can make significant contributions to forwarding humankind's knowledge on important topics, as happened recently at BGSU.

Kristina Csaszar, a senior double major in chemistry and mathematics, has had a paper accepted by the prestigious Journal of Molecular Biology, which publishes some of the most important discoveries in biochemistry and molecular biology.

Csaszar is working on computer simulation and modeling of RNA, 3-D structure and function with Neocles Leontis, chemistry, and Craig Zirbel, mathematics and statistics. Her work will have application in understanding how RNA molecules "jiggle and dance" (fold and unfold) as they carry out their roles in the cells life cycle.

Paul Moore

To the general public, lobsters are well known for their tasty, but are perhaps under-appreciated for their superior ability to identify scents underwater, which is crucial for them to be able to locate prey or elude predators. Among scientists, however, their olfactory sense is legendary. An article on their sophisticated capacity to discriminate between odors and respond appropriately has been published in the Nov. 30 issue of Science, co-authored by Paul Moore, biology, titled "Lobster Sniffing: Antennule Design and Hyalin Molecular Basis for Information." Science is one of the world's leading scientific journals.

An understanding of lobsters' ability could have other applications. The Army and Navy, for example, are interested in using their technique to detect land or underwater mines through their remote inspections.

What has been previously unknown is exactly how lobsters do what they do. The Science article describes an experiment in which Moore and his co-researchers created a model of a lobster nose using a cast-off exoskeleton and wiring it to a dummy lobster. They then observed the up-and-down movements of the nose and studied the effect on the surrounding water, which they had injected with fluorescent dye. The upward and downward strokes, they discovered, serve different purposes in trapping and filtering "plumes" of odors.

Moore's co-researchers are Mimi Koehl, Michael McCay and Tim Cooper, University of California at Berkeley; Jeffrey Kossel and Megan Wiley, Stanford University; and John Crimlitti, from the University of Colorado.

The article, which she co-wrote with Nadia Speckova, Richard Serr, Jim Springer and Leontis, is titled "Molecular Dynamics of Frameshifting Pauses.""Kristina's role in the project was to set up calculations, process, analyze, and graph data and help with writing the paper," Leontis said of his student.

The reviewers at the journal were most impressed. "I found this to be an unusually good and thorough discussion of a molecular dynamics simulation, on a very interesting structural motif. I am not aware of any previous work on pseudoknots that comes close to this in quality, thoroughness and biological relevance. I think it will establish a "baseline" for further computational and structural studies," the journal reviewer wrote in his recommendation.

Csaszar is the recipient of a 2000-2001 Goldwater Scholarship, which was designed to encourage outstanding students to pursue careers in the fields of mathematics, the natural sciences, and engineering. It is the premier undergraduate award of its type in these fields.

Melkote named a Fulbright Scholar

"I'm looking forward to a very productive semester," says Srinivas Melkote, telecommunications. Melkote is heading off at the end of this month to Manipal University, on the southwest coast of India, to teach as a Fulbright Scholar and visiting professor for the spring semester.

At Manipal, which is one of India's leading private universities and its second-largest teaching college for medicine, Melkote will teach classes in research methodology. He will also teach development communications methodology using the recent second edition of his textbook, Communication for Development in the Third World: Theory and Practice for Empowerment.

One of the missions of the Fulbright program is to fill a need in the host institution, Melkote said. The faculty at Manipal has asked for his help in modifying the communications curriculum to include new technologies such as the World Wide Web, the Internet and multi-media.

While at Manipal, one of his most important activities will be conducting a week of workshops to be offered to communications faculty from across India on the use of the Statistical Package for Social Sciences, a computer software package for data analysis.

"I feel very good about doing these workshops," Melkote said. "Computers are widely available in classrooms in schools and universities in India, but we don't have computer-literate professors. Faculty tend to be of the 'old school.' They may use the Internet, but are not able to 'crunch their data.' I think this workshop will be very beneficial to the faculty.

Melkote also plans to travel in India to sites where development communications projects are under way; collecting digital video and photo images for an interactive CD-ROM he envisions as a companion to his development communications book.

Fulbright scholars serve as "cultural ambassadors," he noted. The program is sponsored by the U.S. Department of State, with additional funding from host institutions in the U.S. and abroad.

Two other BGSU faculty members have Fulbright grants this year: Wendell Mayo, director of the Creative Writing Program, in Lithuania, and Salim Elwazani, architecture, in Bahrain.

Schooldays, holidays of yore

Beverly France '60, center, coordinator of the Little Red Schoolhouse, explains Christmas traditions of the past to third grade students. Elementary students Kathryn Hartley, 9, left, and Kaitlyn Baker, 9, right, during "A Day at the Schoolhouse" Nov. 28. The schoolhouse was alive with activity the past two weeks as third- and fourth-graders from throughout northwest Ohio attended a special daylong program of lessons, carol-singing and crafts conducted by retired teachers from the Bowling Green area. Both the teachers and many of the children dressed in period costume to reflect the history of the schoolhouse, which was brought to the BGSU campus from Norwalk in 1975, 100 years after it was constructed.
Ronald Knopf wins professional award

Ronald Knopf, a reading specialist in the Office of Multicultural and Academic Initiatives, received the "Award for Outstanding Contribution to Developmental Education by a Part-time or Adjunct Professional" from the Ohio Association for Developmental Education last month.

This statewide award is given yearly to the professional who demonstrates exceptional teaching abilities and concern for students' academic progress and who also forms effective links with those faculty and staff who interact with developmental students.

Apply for 2002 CITE grants

The Center for Innovative and Transformative Education invites full-time faculty and staff to apply for 2002 CITE grants. The grants, which typically range from $3,000-$6,000, are designed as seed money to support projects promoting CITE's mission and goals.

The mission of the center is to "foster fully reciprocal and mutually beneficial collaborations in public education and broadly conceived interdisciplinary university study."

Deadline to apply is 3 p.m. Feb. 15, 2002. Notification of approval will occur by March 12, 2002. For a complete listing of guidelines and requirements, contact Bill Armaine, CITE director, at 2-9491, or at warmaine@bgnet.bgsu.edu. or see Monitor online.

For sale: Digital Duplicator

The sociology department has a Gestetner Cop/Printer Digital Duplicator for sale for $1,000. Contact Tammy at 2-2394 for more information.

job postings

FACULTY

There were no positions posted this week.

Contact Human Resources at 372-8421 for information regarding the following:

CLASSIFIED

(Employee wishing to apply for these positions may request a 'Request for Transfer' form.)

Deadline for employees to apply is 1 p.m. Friday, Dec. 11.

Police Officer 2 (C-169-Vb)—Public Safety (internal promotion). $13.66 per hour.

The following positions are listed on and off campus:

Police Officer 1 (C-168-Mb)—BGSU Firelands. Pay Grade 8. Twelve month, part time. Deadline: 1 p.m., Friday, Dec. 15.

Deadline for the following:

1 p.m. Friday; Dec. 21:


Golf Course Supervisor (C-176-Sb)—Student Affairs. Pay Grade 9.

Sales Clerk 2 (C-178-179-Sb)—University Bookstore/Permagine Shop. Pay Grade 4.

Sales Clerk 2 (C-177-Sb)—Bookstore/University Bookstore. Pay Grade 4.

Sales Clerk 2 (C-170-Sb)—University Post Office. Pay Grade 4.

ADMINISTRATIVE

Bookstore Director (M-006)—University Bookstore. Administrative grade 18. Review of applications will continue until the position is filled.

Assistant Director of Residence Life (residential neighborhoods) (S-093)—Office of Residence Life. Administrative grade 14. Review of applications will continue until the position is filled.

Program Coordinator (S-01-009)—Bowen-Thompson Student Union (re-advertised). Administrative grade 14. Review of applications will continue until the position is filled.


Associate Director (M-105)—Center for Applied Technology; Large Format Digital Imaging Division of NSDM. Administrative grade 15. Deadline: Dec. 18.

Laboratory Manager (M-106)—Center for Applied Technology; Large Format Digital Imaging Division of NSDM. Administrative grade 13. Deadline: Dec. 18.

Manager (S-079)—University Dining Services. Administrative grade 12. Review of applications will begin Dec. 21 and continue until the position is filled.

Assistant Men's Soccer Coach (M-111)—Intercollegiate Athletics. Deadline: Dec. 28.

www.bgsu.edu/faculty_staff/monitoronline

Tuesday, Dec. 11

Dissertation Defense. "How to Talk about Religion in Politics," by Austin Dacey, philosophy, 1:30-4 p.m., 301 Shetzel Hall.

Board of Trustees. 1:45 p.m., McFall Assembly Room.

Wednesday, Dec. 12

Brown Bag Luncheon, Finding Clarity: Predictions and Prognostications for the New Year, with Teresa Headlebrunk, noon-1 p.m., 107 Hanna Hall.

Hitchcock Film Series. "North by Northwest." (1959) starring Cary Grant and Eva Marie Saint, 7:30 p.m., Gish Film Theater.

Friday, Dec. 14

NEH Guest Speaker. "The Cultural Geography of Chicago Hot Dogs," with Bruce Kraig of Roosevelt University, 1:30 p.m., ICS Conference Room, College Park Office Building.

University Dance Alliance Student Showcase. 8 p.m., choreographed, performed and produced by the members of UDA, 222 Eppler North.

Saturday, Dec. 15

Holiday Open House, Kappa Delta Sorority, noon-4 p.m., Kappa Delta House (across from McDonald's). The campus community is invited.

Bowling Green Children's Chorus, 2 p.m., Bryan Recital Hall, Moore Musical Arts Center.

Sunday, Dec. 16


For a complete listing of job postings, complete information on the grants and the application process can be found at: www.bgsu.edu/hr/careers/ctlt/apply.html.

Through Dec. 17


Through Jan. 25

352nd Annual Faculty/Staff Exhibition. Dorothy Uber Bryan Gallery, Fine Arts Center.

*Gallery hours are 10 a.m. to 4 p.m. Tuesday through Saturday and 1 to 4 p.m. on Sundays except during winter break and observance of Martin Luther King Day, Dec. 17-18.

Through Dec. 22

Planes of Fame Aviation Show, "Secret of the Star," a show for Christmas. Showings are at 8 p.m. on Tuesdays and Fridays, and 7:30 p.m. on Sundays. There will be a 2 p.m. showing on Dec. 22. A $1 donation is suggested.

Content Development Grants available

In an effort to encourage and support the development of rich digital audio and visual content at the University, the Provost's Office, in collaboration with the Center for Teaching, Learning and Technology (CTLT), is offering Content Development Grants to interested faculty.

The grants are intended for full-time faculty—as defined in the Academic Charter—who are interested in becoming part of a faculty learning community whose collaborative purpose is to share ideas and projects about teaching and learning with technology.

A combination of individual and group grants will be awarded to faculty during each of two overlapping time periods: February-December 2002 and August 2002-April 2003. The deadline for all applications is Jan. 14, with awards to be announced Feb. 8, 2002.

Complete information on the grants and the application process can be found at: www.bgsu.edu/offices/ctlt/grants. Printed copies of the grant application guidelines are available at the CTLT, 201 University Hall.