

Sloane Foundation awards EMU \$50,000 to develop master's degree in bioinformatics

By Ron Podell

Eastern Michigan University is looking to grab its market share in the emerging life sciences industry by offering a cutting edge master's program that fuses information technology with molecular biology.

The Alfred P. Sloan Foundation recently awarded the University \$50,000 to develop a master's program in applied bioinformatics, which combines life and computer sciences, mathematics, and management. Some of this money will fund a series of workshops this summer to further prepare EMU's bioinformatics faculty. EMU's proposal to the Sloan Foundation ranked first among more than 60 submitted because of its strong partnerships with business and industry in southeastern Michigan.

"Location, location, location—that's what sells. And EMU is fortunate to be strategically situated in Michigan's Life Sciences Corridor. But, let's take the credit for putting together a solid program and finding the resources and will to launch it," said Henry Zot, associate professor of biology and coordinator of the master's program.

"This is a great example of community engagement and a program designed around the real needs of the life science industry," EMU President Samuel A.

Kirkpatrick said at the most recent Board of Regents meeting.

Bioinformatics has increasingly been applied to non-academic problems in biotechnology, such as those in molecular biology that focus on how genes are organized. Using powerful computer algo-

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Samuel A. Kirkpatrick
President
Eastern Michigan University

rithms, bioinformatics specialists extract information about individual genes from the massive stores of data collected by the recently completed human genome project. For example, Pfizer Inc., among others, is looking at the connections between certain genes and diseases, Zot said. Biotech firms also are active in improving drug design, another field that bioinformatics specialists would benefit.

The pharmaceutical industry currently presents the greatest requirements for

trained professionals, but needs are rapidly increasing in the fields of infectious diseases, criminal forensics, agriculture and environmental science. "Typically, a small company will have someone specialized in life sciences or someone from the computer side," Zot said. "But, they usually don't have enough people trained in both areas. These are the types of folks our program would produce."

Previous studies of workforce need in bioinformatics at a national level have documented a demand for skilled workers that exceeds the number of students training in the field. A survey of 176 U.S. bioinformatics and biotechnology employers conducted by the Center for Public Policy at Virginia Commonwealth University during the summer of 2001 revealed that more than half of the bioinformatics employers expect to be hiring over the next five years. Master's level candidates may expect entry-level salaries of \$25,000-\$45,000.

According to Zot, there are nearly 80 pharmaceutical, bioinformatic or genomic/proteomic companies in Washtenaw County. EMU's location amidst these companies provides numerous and varied opportunities for internship experiences (a program requirement)

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EMU's finest earn Distinguished Faculty Awards

Eisenbach's childhood fascination with bugs leads to passion for teaching biology

For stories on other Distinguished Faculty Award winners, see pages 2-3.

By Kathleen Shields

Jokes about cockroaches aside, Jamin Eisenbach found growing up that there were more than enough bugs in New York City to fuel his fascination.

Luckily for Eastern Michigan University students, Eisenbach's parents encouraged his interest, even permitting him to join the Junior Entomological Society of New York.

Eisenbach, the 2002 recipient of the Ronald W. Collins Distinguished Faculty Teaching II Award, teaches introductory biology courses for both majors and non-majors. He also teaches principles of conservation and an upper- and graduate-level entomology course. His love of the field helps with the very different attitudes his students bring to class, he said.

"I love teaching the intro-

ductory courses because of the challenge," he said. "Each class is an ever-changing mixture of capabilities, work ethic and interest. There are students who love biology; students who are suffering through a basic studies requirement; and those somewhere in the middle of the spectrum."

For Eisenbach,, a big highlight is seeing the in-between students get turned on by biology. Some of those same students even go on to major in biology, he said.

"There are not a lot of strokes for teaching in academia," he said. "One is seeing your students get that spark, that love of a subject. Another is winning an award like this. It's great that this institution has a mechanism in place to do that."

Although the nomination procedures for the Teaching II Award state that it is for

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BIOLOGY BUFF: Biology professor Jamin Eisenbach teaches his favorite subject during a recent class session. Eisenbach is the winner of the Ronald W. Collins Distinguished Faculty Teaching II Award.

Csicsila teaches students Twain in a unique way

By Summer Wilhelm

Joseph Csicsila doesn't confine his teachings to the classroom. Or, for that matter, to the state.

Last summer, he traveled with 18 undergraduate and graduate students to Elmira, N.Y., to teach a five-day course at Mark Twain's summerhouse, located at Elmira College. The class, "Mark Twain for Teachers," allowed students the experience of an intensive, five-day study about Twain right on the famous author's front porch.

"It was the experience of a lifetime," said Csicsila, assistant professor, department of English language and literature. "Our mornings were spent discussing Twain's work or the novel of the day. During the afternoons, we would approach the topic of teaching Twain to others; discuss brainstorming we had; or what problems there might be. It was truly a great experience."

Csicsila is currently working with a graduate student from his Mark Twain course to write a book for teachers interested in branching out from the standard books high schools are using. The book in progress would include course plans, paper ideas, background information and more.

"It's a really exciting project to work on," Csicsila said. "We're hoping that teachers will expand their



TWAIN TALKER: Joseph Csicsila, assistant professor of English language and literature, taught a group of students about Mark Twain last summer on the famous author's front porch in Elmira, N.Y. Csicsila recently was named winner of the Ronald W. Collins Distinguished Faculty Teaching I Award.

horizons to not only authors like Twain, but to others as well."

When Csicsila received word that he was one of four EMU professors chosen to receive a Ronald W. Collins Distinguished Faculty Award, he was surprised.

"The call came over break and I really hadn't been expecting it be-

cause I was told the deadline for winners had passed," he said. "I was very happy, very pleased."

Csicsila was granted the Teaching I Award — which is given to faculty with less than five years seniority — for his passion and dedication to teaching.

Throughout grammar school and

high school, Csicsila had a handful of very influential teachers who made profound impacts on him. But it wasn't until his college years that he decided to become a teacher.

"I started college as an economics major and I spent a couple of years in the 'real business world.' But, it just wasn't very satisfying. It didn't move me in ways I expected a career to," he said. "That was when I turned to teaching."

Csicsila has never regretted his choice to teach.

"I'm one of those people who found something they're passionate about," he said. "It's a great experience to watch students develop a newfound appreciation for the subject you've taught. I absolutely love what I do."

Csicsila earned a bachelor's degree in English from the University of Michigan; a master's degree in English from Auburn University; and a doctorate in English from the University of Nevada. He joined the department of English language and literature in 1996 as a lecturer and was hired as a tenure-track faculty member in 2000.

He is currently the executive coordinator for the Mark Twain Circle of America, a scholarly organization; and review editor for the "To Wit" journal of the American Humor Studies Association.

Bach developing international reputation as mistletoe expert

By Carol Anderson

Catherine Bach isn't royalty, a head of state or a well-known movie star. But, she is somewhat of a celebrity in New Zealand.

During a recent trip to the country, she was welcomed with newspaper headlines declaring her the savior of the New Zealand mistletoe. News of her research also aired on an evening newscast.

These reactions halfway across the globe lend support to the University's decision to grant Bach, a professor of biology, this year's Ronald W. Collins Distinguished Faculty Research Award for Scholarly/Creative Activity.

"Receiving this award means a great deal to me," said Bach, who is currently in New Zealand on a Faculty Research Fellowship. Bach is researching the effects of

forest fragmentation on the biology of mistletoe plants.

The Scholarly/Creative Activity award is granted based on a nominee's record of scholarly and creative activity in publications, performances and other professional recognition, such as grants in support of such activity.

"Although this research will be important to basic plant-animal biology, I hope it also will lead to solutions to help stop the decline in mistletoe that is occurring in New Zealand," Bach said.

Bach is an internationally-recognized ecologist, said Kevin Kuehn, an EMU assistant professor of biology, and one of her nominators for the award. The National Science Foundation has funded much of her research.

She has had 42 peer-reviewed publications in 19 different scientific journals. Ten



FRIEND OF THE MISTLETOE: Catherine Bach, an assistant professor of biology, has been the subject of newspaper articles in New Zealand, which praise her for her efforts to save the mistletoe in that country.

Bach recently was awarded a Ronald W. Collins Distinguished Faculty Award for Scholarly/Creative Activity.

of the papers appeared in "Ecology" and "Ecological Monographs" journals, considered the most prestigious journals in the field, Kuehn said. She was the subject editor of "Ecology" which is a distinguished position, he said.

"If you look at the faculty

in biology, Cathy is the leader of the pack. She sets the pace," Kuehn said. "She's phenomenal. Her research programs are on a par with or better than those at major institutions."

Bach's main area of research interest and expertise centers on the ecological interactions between plants and

animals. However, her research publications span fields as diverse as marine biology, tropical ecology, plant ecology and insect ecology. Her early research on agricultural pests suggested ways to minimize their economic impact.

"I have always studied basic ecological questions, often with the hopes of contributing to the solving of environmental problems," Bach said.

Bach, who also is the undergraduate advising coordinator, mentors students involved in her research projects. She said there was no way to describe her students' excitement at seeing their names published in a scientific journal.

"We're really lucky to have Cathy," Kuehn said. "She enriches the lives of her students and the entire University community."

Lintner contributes to campus technology progress

By Tom Perkins

On-line registration, changes to tuition payment methods and the possibility of receiving grades through e-mail are all part of the technology transformation that has been occurring the last couple of years at Eastern Michigan University. Mildred Lintner, professor of computer science, serves as an indispensable aide in coordinating this ongoing process.

Her contributions to the Banner Steering Committee and others groups on campus, have earned Lintner the Ronald W. Collins Distinguished Faculty Award for Service to the University.

"It is important," Lintner said of the public recognition. "It makes me feel good, and it kind of ensures I'll come back and do more."

As a member of the University's Banner Steering Committee, Lintner played a key role in bringing the Banner System — a package of software tools purchased from SCT Corp. that replaces all major administrative or core software systems on campus — to EMU.

"The steering committee is the group that initially interviewed half a dozen companies that had integrated university software before recommending the Banner system to the President and Board Of Regents.

Lintner was recently named to the University Technology Advisory Committee. The committee will advise on implementing strategies for using technology and expand the ways technology is used across all facets of campus.

"With a commitment to the department, to her students and to her colleagues, she would be very difficult to replace. There are few people who possess these qualities," said Hartmut Hoft, department head of computer science.

Lintner recently was elected chair of the computer science department's executive committee, a policy group that advises Hoft on instructional procedures. She participated in the coordination of this year's departmental program review, and also



AN IMPROV MOMENT: Mildred Lintner, professor of computer science, plays a song on her ukelele after receiving her Distinguished Faculty Award for Service to the University.

clears time to serve on the Faculty Council, where she was vice-president for several years.

Lintner's journey to her current position on campus has been marked by a series of twists and turns with two recurring themes, her love of communication and problem solving.

"I can't remember a time in my life when teaching was not my goal," she said.

Her parents never finished high school and pressed her to excel in school. So, from the time she was very young, Lintner was inspired by education. Her hard work resulted in three degrees, including a doctorate in communications from the University of Michigan; a master's degree from Bowling Green State University; and a bachelor's degree in sec-

ondary education from Temple University.

Before plunging into the field of computer science, Lintner spent 25 years as a professional costume designer and six years as chair of the theater department for Bowling Green State University.

In an attempt to more efficiently design costumes, Lintner began taking a computer course that she thought could serve as a tool for her theatrical endeavors. When a position in the computer science department at Bowling Green suddenly became available mid-term, the department head asked Lintner to fill in.

"I said to him 'You're out of your mind, I'm not done with my first FORTRAN course,'" Lintner recalled. "He said 'Oh you'll know it real well by the time it's done.'"

Lintner said he was right, and soon she was immersed in the field of computer science, exhibiting a deeper understanding of its workings. After obtaining her master's degree, she looked to land a job in higher education in Michigan, eventually landing at Eastern Michigan.

Though computer science and theater are at different ends of the career spectrum, Lintner sees a tangible relation between the two.

"It doesn't really matter what field you are in. Problem solving is problem solving," she said. "There are different tools and different methodologies, but it is all problem solving."

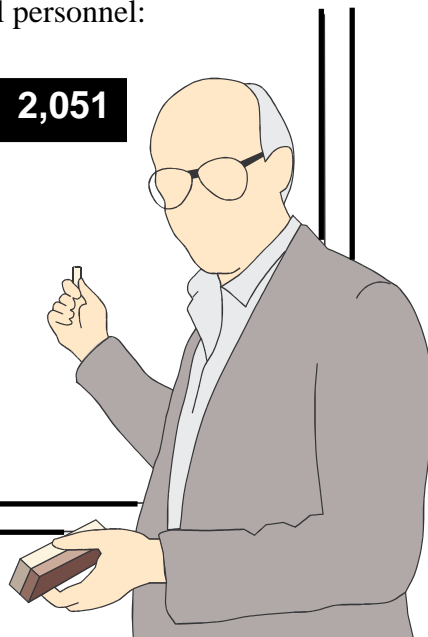
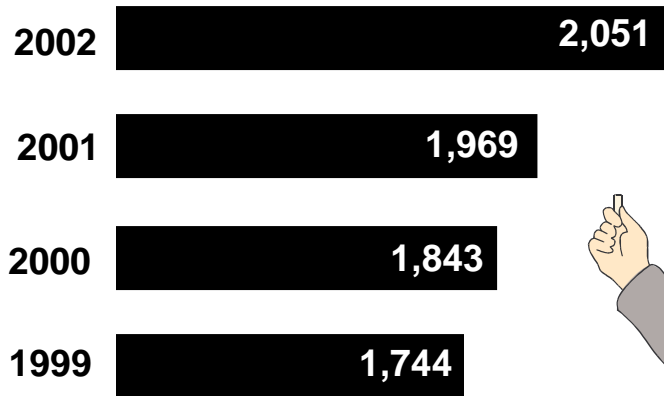
Lintner has published several books and articles on technology related topics, teaches courses in Internet training to senior citizens and their grandchildren and, having obtained her master's gardener's certificate, helps others develop their green thumb.

She also has served 15 years with the Salem and South Lyon libraries, and recently was re-elected to the Brighton Public Library Board of Trustees.

"I'm really into libraries. I think they are essential in the communities," she said.

EMU BY THE NUMBERS

Eastern Michigan University has a national reputation as a "teacher's college," because of the University's 154-year tradition of educating teachers. EMU also prepares more educational professionals -new teachers, administrators, counselors, and teachers receiving advanced credentials - than any other institution (based on the American Association of Colleges for Teacher Education). Here are the totals of EMU prepared educational personnel:



SOURCE: College of Education

Public Information becomes University Communications

The Office of Public Information has a new name - University Communications.

"The change refocuses on the office's core mission to communicate with internal and external audiences," said Rita Abent, executive director of University Marketing and Communications.

"The previous name — Office of Public Information — was misleading," said Pamela Young, director of University Communications. "As a result, the general public thought that our office handled everything from directory assistance to student records."

University Communications will continue to offer a variety of services. These include EMU Today, the daily

electronic events calendar; Focus EMU, the faculty/staff newspaper; the Newline, a telephone hotline; the University Web-based calendar; and the University Communications Web site, which includes press releases.

The office staff also develops communication strategies; offers media training for faculty and staff; and handles media relations and crisis communications.

University Communications is one of seven departments under University Marketing and Communications.

Other departments are: special events, licensing, marketing and communications, advancement publications, university publications and Web communications.

JOBSLINE

To be considered for vacant positions, all Promotional Openings Application Forms MUST BE SUBMITTED directly to the Employment Services Office in the Hover Building and received no later than 5 p.m., Tuesday, April 22. NOTE: LATE OR INCOMPLETE FORMS WILL NOT BE ACCEPTED.

Vacancy information may also be obtained by calling our 24-hour Jobs Line at 487-0016. Employment Services Office hours are Monday-Friday, 8 a.m. to 5 p.m.

CLERICAL/SECRETARIAL

(Hiring Rate)

CSAA0336 CS04 \$23,113 Library Assistant II, Library.

CSAA0337 CS05 \$26,118 Senior Secretary, Interdisciplinary Technology (position not available until June 30).

PROFESSIONAL/TECHNICAL

(Hiring Range)

PTAA0319 PT08 \$35,516-42,638 Workplace Education Specialist

An Affirmative Action/ Equal Opportunity Employer

(Computer Applications/Math Instructor) Continuing Education/Workforce Education, 8 a.m.-4 p.m., Monday-Friday. Grant duration 12/1/02-11/30/03 (renewal expected). Current Assignment: UAW-Ford Dearborn Stamping Plant.

The pay rates stated above reflect the hiring rate or range for a newly hired EMU employee. The pay rate or salary for current employees will be established according to the respective employee group union contract, and/or University salary administration policy guidelines.

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and eventual job placements for students.

"There's no other county in Michigan that has this large a collection of bioinformatic companies," Zot said. "We're trying to move quickly to develop our market share."

Grand Valley State University is the only other state institution to receive Sloan funding for a bioinformatics program. EMU plans to fast track the master's program by offering courses this fall,

hoping for an initial class of around 15 students, Zot said. Because there is lag time associated with the approval process for the program, graduate students who want to major in bioinformatics will be admitted into individual studies and take the bioinformatics curriculum. After the program is approved, students will be migrated to the bioinformatics program. The first graduates are expected in spring/summer 2005.

"Representatives from several local firms have applauded our efforts to address the workforce need for trained bioinformatics professionals and continue to assist us in developing and implementing a professional master's program in bioinformatics at EMU," Zot said.

Along with EMU faculty and administrators, representatives from local companies are collaborating to design the program and plan the curriculum in response to student and market needs. One unique component of the program is the inclusion of business courses as part of the curriculum, Zot added. Specifically, instruction on teamwork, consulting and non-technical communication will be provided.

For more information about the bioinformatics program, contact Henry Zot at emu_Bioinformatics@emich.edu.

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"faculty members with five or more years of teaching at EMU," Eisenbach said that his award was very much a group effort.

"The whole department pulled together," he said. "It is the most collegial and supportive group of colleagues I have ever had."

He earned a bachelor's degree in entomology from Cornell University, and master's and doctoral degrees in entomology from the University of California at Berkeley. He joined the EMU faculty in 1990, and has rung up a long list of honors, including a 2001 EMU Alumni Teaching Excellence Award.

"I love this field. I can't think of anything more fun to be involved in," Eisenbach said. "I truly try to infect the students with my love for the material."

Why I teach at Eastern Michigan University



"Teaching is about relationships; I want kids to know that when things happen to them, I'm ready to listen."

Pat Williams-Boyd
Professor
Teacher Education Department

When I came to EMU seven years ago, I had 28 years teaching experience in Kansas and was Teacher of the Year in 1983. But I could feel a unique sense of family here. Folks had a commitment to teaching and a spirit of community.

During my second year on campus, I fell off a ladder and shattered my leg. For a year during my recovery, my colleagues helped me continue teaching. I used a wheelchair and missed only one class. I did acquire a new skill though – popping wheelies.

The following year, I was walking again, but learned I had cancer. I spent months undergoing chemotherapy and a bone marrow transplant. And then my dad got sick. I drove from Ypsilanti

to Chicago every weekend for a year to help my mom.

I accepted all of the good things during the first half of my life. And when I look back at the misfortunes during my first four years at EMU, I ask myself, 'What did I learn from it?'

It's about the people who have sacrificed for me. We stand on the shoulders of giants. When you face your own mortality, you have renewed opportunity to be compassionate. Teaching is about relationships. I want kids to know when things happen to them, I'm ready to listen.

Pat Williams-Boyd