Biology program has a growth spurt

By Amanda Preuss

If someone asked you what the fastest-growing major at Metropolitan State was, you might not guess that it’s biology. You probably wouldn’t guess, either, that biology is the second largest major in the College of Arts and Sciences. In general, enrollment at Metropolitan State remains flat; within the biology major, the numbers are rising at a rapid rate.

In the past, the Natural Sciences Department existed only to provide students with the courses they needed to fulfill general education requirements. About five years ago, the department declared biology an official major, and it’s been growing steadily ever since. In fact, it was only three years ago that the department graduated its first biology major. That number has doubled each year since then, and in fall 2005, 23 students graduated with a major in biology. The department is expecting between 40 and 45 students to graduate with a biology degree in spring 2006.

Students enrolled in the program in the first three years that the major was offered were typical Metropolitan State students. They had two-year degrees in fields like nursing, dental hygiene and other health and environment-related fields, and they were looking to finish a four-year degree. “We still have those students in our major,” says John Schneider, professor and acting chair of the Natural Sciences Department. However, now that the program is starting to be recognized, it has generated an influx of younger students. “At least one-third, maybe one-half, of our students are typical 18-, 19- or 20-year old first-year students,” Schneider says.

Biology major Brendan Garman works on an experiment for his general biology lab. Enrollment in the biology program has grown dramatically in the last few years.
Elizabeth G. Burr (Religious Studies) published an article, “Learning to Teach Islam as a Non-Muslim in the Twin Cities,” in the July 2005 issue of Teaching Theology and Religion. Most of the article is based on her experience teaching religious studies at Metropolitan State. She also traveled with her husband to Syria, Turkey, Palestine and Israel. She published an article based on her travels, “Reflections on Syria,” in the September 2005 issue of the Women Against Military Madness newsletter.

Virginia Card (Natural Sciences) presented a paper, “Size-Class Distributions from a 70-Year Record of a Freshwater Centric Diatom,” in November 2005 at the 18th biennial North American Diatom Symposium in Mobile, Ala. She has been working on the research for this presentation with Metropolitan State students Bob Ellis, Beatriz Carracelas and May Kou Heu (see page 6). Virginia is on sabbatical at the Paleoenvironmental Research and Assessment Lab of Queen’s University in Kingston, Ontario. She gave a talk titled “Diatom Life-Cycles and the Paleoecological Record” at the Biology Department of Queen’s University, December 2005.

Camille D’Ambrose and Allen Hamilton (Communication, Writing and the Arts) had the leading roles in the Jungle Theater’s production of Joanna Murray-Smith’s play Honour. The play made the Ten Best Lists for 2005 in the Star Tribune and Pioneer Press.

Sue Fitzgerald (Information and Computer Sciences) has been appointed as program chair for the Association for Computing Machinery (ACM) Special Interest Group in Computer Science Education (SIGCSE) annual conference in 2008. She will also be the conference chair in 2009. This international conference, which attracts over 1,000 participants each year, is the premier conference in computer science education.

Kris Frykman (Communication, Writing and the Arts) presented “Body of Stories” at the National Storytelling Alliance, February 2005. She published the article, “Is Your Body Aching with Stories?” in the 2005 winter edition of Storytelling Magazine. In addition, Kris was curator for a survivor’s art show titled “Journey through the Arts” at Minneapolis Community and Technical College in April 2005, as part of National End Sexual Violence Day.

Mike Green (Mathematics) was on sabbatical in fall 2005. He studied some of the recent changes to the actuarial examination requirements and looked at a number of actuarial science programs in order to develop a program at Metropolitan State.

Maythee Kantar (Communication, Writing and the Arts) attended a weeklong television industry seminar sponsored by the Academy of Television Arts and Sciences in November 2005. Every year 20 faculty who teach film or media studies are selected from across the country to attend the seminar. The seminar introduces faculty to leading executives, producers and writers in the current television industry.

Jill Averil Keen (Literature and Language) directed and performed a reader’s theater production of the introduction to Boccaccio’s Decameron. The performance opened the day session of the conference, “Medieval Inventions: The Hospital?” sponsored by the Center for Medieval Studies and the Institute of Advanced Study at the University of Minnesota, February 2006.


Rhona Leibel (Practical Philosophy and Ethics) was invited to participate in a journalism ethics workshop at the University of Oregon in May 2006. Her article, co-authored with Garry Pech, “Writing in Solidarity: Steps Toward an Ethic of Care in Journalism,” has been accepted for publication by the Journal of Mass Media Ethics.

continued on page 4
New faculty member: Rikki Wagstrom

By Carolyn Whitson

interested in creating a program that better serves majors who do not wish to pursue graduate work in mathematics.

Rikki says that one of the most appealing aspects of Metropolitan State is the diversity of its student population. She appreciates her older students’ openness in approaching a subject with which they may have little previous experience. “Often my older students see they’ve missed something that would now be of great use to them, and they approach the work with willingness, a sense of purpose and a sense of humor.”

While working on her doctorate, Rikki was involved with math programs for middle and high school girls. After completing her Ph.D. at the University of Nebraska-Lincoln, she taught a course in mathematical chaos to high school girls during a one-week summer camp at the university. She is working with Cindy Kaus (Mathematics Department), Rose Chu (Urban Teachers Program) and Sarah Hansen (Math Center) to develop a summer math camp for middle school girls. The organizers plan to bring together girls from diverse ethnic backgrounds, particularly those from underserved groups in the community. Unlike most other math enrichment programs in the Twin Cities, the program is not looking to attract only “gifted” students, but rather any girl with an interest in learning more about mathematics.

Rikki considers herself a social person in her professional work, and

What do most people think of, when they think “math professor”? “Nerdy, anti-social and usually male.” So says Rikki Wagstrom, newly appointed assistant professor in the Mathematics Department. Rikki is intent on breaking through these stereotypes. “I like to emphasize that I am no different from my students. In high school, I took math courses because they were requirements. It wasn’t until I took calculus that I became interested in the discipline. I was amazed how calculus helped me to interpret the world around me.” Rikki has since committed her professional life to helping others appreciate the power of math.

Rikki previously taught at Calvin College in Grand Rapids, Mich. A generalist in applied mathematics by training, Rikki is teaching Partial Differential Equations, Calculus and Exploring Functions this year. She is also working with the math department on developing a strong applied mathematics program. She is particularly

New in the library

Here’s just a small sample of new arrivals in Metropolitan State’s Library and Learning Center.

Fanning the Flames: Fans and Consumer Culture in Contemporary Japan by William W. Kelly, SUNY Press, 2004
Freakonomics: A Rogue Economist Explores the Hidden Side of Everything, by Steven D. Levitt, William Morrow, 2005
Miss Manners’ Guide to Excruciatingly Correct Behavior, by Judith Martin, W. W. Norton, 2005
Race in Another America: The Significance of Skin Color in Brazil, by Edward Eric Telles, Princeton University Press, 2004
Rabbit-Proof Fence, Miramax, 2003

continued on page 8
Alison McGhee (Communication, Writing and the Arts) will have two books out this year: *A Brave Witch*, a picture book, published by Simon & Schuster; and *Falling Boy*, a novel, published by Picador USA.


Nancy Sather (Natural Sciences) spent a term doing historical research and writing as a Bremer Fellow at the Center for Rural and Regional Studies at Southwest Minnesota State University. Her interdisciplinary historical research was part of a project to compile a popular anthology of 17th to 19th century descriptions of Minnesota’s natural resources, accompanied by an annotated bibliography and a locally modularized set of learning materials that can be used by grassroots learning circles as a springboard for land use discussions in the prairie region of the state.

Lori Schroeder (Communication, Writing and the Arts) had her article, “Reducing Learner Fear to Realize Student Potential,” published in the Fall 2005 issue of *On Teaching and Learning*, produced by the Collaboration for the Advancement of College Teaching & Learning. In February 2006 she co-presented the paper “Fostering Student Public Speaking Success” with J. Jondahl at the annual “Realizing Student Potential” conference, Minneapolis.

Metropolitan State University College of Arts and Sciences

The Indignant Herring

by Lawrence Moe

As Neptune’s streams at close of day lost gold in darkening salt green spray, twin herrings having time to kill decided they could use a swill; and so in submarine café they had a drink with entremets, and sat together at the bar ‘mid denizens crepuscular.

A shad named Ammon ran backgammon while music wafted from a Hammond played, with sole, by a singing salmon who crooned a tuna high and dry: “Oh, where the sea socks, there sockeye!”

The herring twins pushed back their dish and chatted with some cuttlefish, relaxing in the flow as drifters, while savoring brandy in their snifters.

But soon one herring finned away to seek out piscine interplay. The herring left alone was frosted to be by nosy cod accosted, who asked, “Your brother, where’d he go?”

“Shark! How in halibut would I know?” The indignant herring waved his flipper, and asked, “Am I my brother’s kipper?”

From Hudibrastic Shaggy Herrings from the Cerf

Meet the CAS Staff

If you’ve ever called or visited the College of Arts and Sciences, you’ve met a staff member in the college. Here’s a little more information about each one.

By Dara Trooien

(Trinh) Fred Carpenter

**Area of support:** Master of science in technical communication as well as other programs in communication, writing and the arts; also community faculty member teaching courses in design for communication majors

**Years at Metropolitan State:** Three

**Activities outside of work:** Cooking, reading, gardening, Web surfing, watching TV

**Favorite places to travel:** The state of Minnesota in its many seasons

**Interesting fact:** At one time had fun searching online for religious action figures and unusual snow globes

Eddie Kramer

**Area of support:** Primarily information and computer sciences

**Years at Metropolitan State:** Two

**Activities outside of work:** Playing soccer and following the sport religiously

**Favorite places to travel:** The mountains of Wyoming, Idaho and Montana; Edinburgh, Scotland, where he used to live

**Interesting fact:** Currently pursuing a master’s degree in elementary education

Dina Inderlee

**Area of support:** Center for Academic Excellence, which includes the Academic Testing Center, the Math Center and the Writing Center.

**Time at Metropolitan State:** Less than a year

**Activities outside of work:** Crafts such as beading, crocheting, knitting and sewing; working in the yard during the summer months; doing jigsaw puzzles and reading books

**Favorite places to travel:** Winona, during the fall to look at the changing colors of the leaves
Growth spurt, continued from page 1

olds seeking biology degrees,” Schneider says. Within the biology major, students are younger than the majority of students in the university as a whole.

One reason for the success of the biology program is that it provides a solid curriculum. After completing the 49-credit major, students have a strong foundation in both biology and chemistry as well as a core of knowledge in cell and molecular biology; physiology and organismal biology; and ecology and evolutionary biology. Schneider says, “Our biology and science curriculum is now on par with any program in the Twin Cities other than perhaps the University of Minnesota.” The U of M only has an advantage, according to Schneider, because its laboratories are better equipped.

Along with the curriculum offered in the biology major at Metropolitan State, students may also seek internship opportunities. The Minnesota Department of Natural Resources looks for students each summer to help with field research. Students who participate might count songbirds, species-type aquatic vegetation by looking at herbicide results, or enter data from the field into laboratory databases. A few students have participated in internships at field research stations affiliated with University of Minnesota research professors; others have worked in summer research programs within the College of Biological Sciences at the University of Minnesota. Some students have been lucky enough to intern at the Minnesota Zoological Society, where they fed,
washed and helped move the animals. The product development areas of 3M and Cargill also offer internship opportunities.

Most students who graduate from Metropolitan State with a degree in biology do not end their education there. A career in the sciences takes many steps, and most students set their sights on graduate school, medical school, pharmacy school, or other health-related or science-related programs after graduation. “In the last year or two, three students have gone on to medical school, three to graduate school, one to pharmacy school, and a few into master’s programs in health,” says Schneider.

The program’s future looks bright. The biology faculty are now working with computer science faculty to start a bioinformatics minor. Bioinformatics is the application of information sciences to biology; it involves creating and maintaining databases of biological information. Perhaps most exciting is the prospect of a new science center on the co-located Minneapolis Community and Technical College and Metropolitan State campus that would enable the program to offer upper-division courses in Minneapolis as well as St. Paul.

For more information about the biology program at Metropolitan State, call 651-793-1441, visit the Web site at http://www.metrostate.edu/cas/naturalsci/majors.html, or stop by St. John’s Hall and talk to an advisor.

Amanda Preuss is majoring in writing.

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**If it’s spring, it’s baseball!**

*From Take Time for Paradise: Americans and Their Games, by A. Bartlett Giamatti. Giamatti was a Renaissance scholar, President of Yale University and Commissioner of Major League Baseball.*

**If baseball is a narrative, an epic of exile and return, a vast communal poem about separation, loss and the hope for reunion—if baseball is a Romance Epic—it is finally told by the audience.**

*It is the Romance Epic of homecoming America sings to itself*

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**Meet the CAS staff, continued from page 3**

**LISA ANN McMAHON**

*Area of support:* Communication, writing and the arts

*Years at Metropolitan State:* 15

*Activities outside of work:* Being a mom to her three-year-old son; shopping; reading (great fiction, in particular); traveling; and visiting friends

*Favorite place to travel:* Duluth

*Interesting fact:* Never missed a Bruce Springsteen and the E Street Band tour

**DIANA REICHEL**

*Area of support:* Whole college, including the dean, faculty, staff, students and advisors

*Years at Metropolitan State:* 15

*Activities outside of work:* Being a wife and mother; exercising

*Favorite places to travel:* Her retirement home, a cabin in Sandstone County, on Bass Lake

*Interesting fact:* Loves to cook and eat lutefisk with white sauce and butter

**KRIS MERILATT**

*Area of support:* Ethnic and religious studies, literature and language, practical philosophy and ethics

*Years at Metropolitan State:* Seven

*Activities outside of work:* Reading; remodeling her home, including refinishing woodwork and putting up sheetrock

*Favorite place to travel:* Mexico

*Interesting fact:* Has visited 47 states in the U.S.

**CAROLYN TATUM**

*Area of support:* Mathematics and social sciences

*Years at Metropolitan State:* 15

*Activities outside of work:* Gardening, quilting, knitting and learning to play the piano

*Interesting fact:* Worked in many areas of the university, including admissions, diagnostic assessment, the School of Nursing and the College of Management

*Dara Trooien is majoring in writing*
Rikki Wagstrom, continued from page 3

she enjoys collaborating with others on projects. She is currently collaborating on a forest-modeling project with another mathematician, a biologist and a plant ecologist, all from other universities in the Midwest and on the West Coast. They are analyzing what happens if you fragment a large forest into small wood lots. “Can we predict what the composition of the fragments will look like? How do we effectively quantify the variables that affect the fragments?”

Here, too, Rikki demonstrates her commitment to the concept of applied mathematics—how mathematics reveals relations that affect all of us and our world. “I want my students to see that mathematics is a discipline which is relevant to their lives. Everyone is capable of enjoying mathematics.”