

In Review

CAMPUS LIFE

Fanfare

BRIGHT NIGHT: Sabrina Hu '16 (right) and Jessica Cheung '14 perform during China Nite, an annual celebration of the Chinese New Year sponsored by the Chinese Students' Association. Held this February in Strong Auditorium, the evening featured performances—such as “A Rainy Night,” a work choreographed by Jasmine Cen '16 that combined traditional and modern elements of Chinese fan dance (pictured)—as part of a program of skits, dances, and other presentations to celebrate Chinese culture. **PHOTOGRAPH BY KEITH WALTERS FOR ROCHESTER REVIEW**







ATHLETICS

Tourney Talk

TEAM MEETING: Men's basketball coach Luke Flockerzi talks with the Yellowjackets during a break in their January game against NYU, a victory that helped launch the men to a No. 1 ranking in late January. While the men later fell out of the top spot, going into the final game of the season for the men and the women, both teams were waiting to find out whether they had secured a place in the Division III national tournament. Follow the Yellowjackets at the athletics website: www.uofrathletics.com. **PHOTOGRAPH BY KEITH WALTERS FOR ROCHESTER REVIEW**



ROCHESTER UNIVERSITY
ST. LOUIS

NCAA

ROCHESTER

ROCHESTER

ROCHESTER

ROCHESTER

3

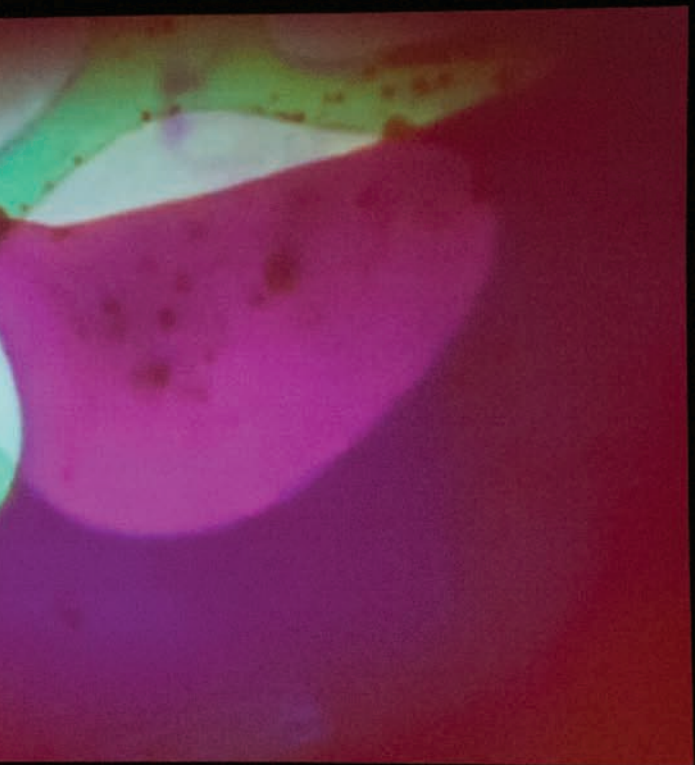
32

CONCERTS

Like It's 1969

MUSICAL MOMENT: Actors Jon Patrick Walker as John Lennon (left), David Chandler as Luciano Berio, and Robert Stanton as Karlheinz Stockhausen rehearse *1969*, a multimedia work by Eastman-born new music ensemble Alarm Will Sound. The ensemble, which includes more than a dozen Eastman graduates, presented a special performance of the work at Kodak Hall in February. Developed by conductor Alan Pierson '06E (DMA), Nigel Maister, director of the International Theatre Program, and writer Andrew Kupfer, *1969* includes arrangements by Gavin Chuck '04E (PhD), Stefan Freund '02E (DMA), Payton MacDonald '01E (DMA), and Matt Marks '02E. PHOTOGRAPH BY ADAM FENSTER







Flour City Provisions, a 20,000-square-foot supermarket, will feature fresh market groceries and prepared foods.

Celebration Drive will be a new, signaled street through the center of College Town, connecting Mt. Hope Avenue with East Drive.

CAMPUS DEVELOPMENT

Welcome to College Town

Work begins this spring on a 500,000-square-foot project to create College Town, a planned, mixed-use development at the intersection of Mt. Hope and Elmwood avenues that's designed to create an urban village center for students, residents, and shoppers alike. "This project will create a vibrant neighborhood, enhance the quality of life for this community, and spur economic development by adding hundreds of jobs and millions in tax dollars to the city and region," President Joel Seligman said this winter in announcing College Town. Based on a partnership involving the University, the City of Rochester, development partners Fairmount Properties and Gilbane Development, and Mt. Hope neighborhood leaders, the project is designed to serve as a gateway to the River Campus and to the Medical Center. Located on 14 acres of land owned by the University, College Town is expected to be completed by summer 2014.

A 20,000-square-foot, two-story **Barnes & Noble** bookstore will serve as the University's official campus bookstore as well as a traditional bookstore for the community, featuring special events, children's story hours, and book signings.

FACTS & FIGURES

Counting Up College Town

Since the 1990s, University, City of Rochester, and neighborhood planners have been exploring ways to develop the area near Mt. Hope and Elmwood avenues.

In 2008, plans for the intersection coalesced through workshops and meetings involving area residents and representatives from the Mt. Hope Avenue Task Force, the Mt. Hope Business Association, the South East Area Coalition, Mt. Hope Cemetery, the City, and the University.

In December, the project received \$4 million from New York's Regional Economic Development Council program. Another key piece of financing was announced late last year, when Sen. Charles Schumer (D-NY) helped secure a \$20 million loan from the U.S. Department of Housing and Urban Development to the City of Rochester to support the project.

Under the plans, the University will own the acreage on which College Town sits and lease it long-term to the partnership College Town LLC, which will manage the development.

In addition to anchor tenants Hilton Garden Inn, Barnes & Noble, and Flour City Provisions, the development includes 73,000 square feet of street-level shops and restaurants, 50,000 square feet of office space, and 154,000 square feet of rental residential space.

Here are some other facts and figures about the project:

\$17 million Total in public infrastructure improvements invested by the City of Rochester in the Mt. Hope and Elmwood avenue intersection, including landscaped medians, new sidewalks, broadened roadways, reduced curb cuts, new signals, signage, and traffic controls.

\$2.5 million Estimated annual sales tax generated from the retail operations of College Town, in addition to \$1.8 million in income taxes and \$600,000 in annual hotel taxes.

1,200 Estimated number of new jobs to be created, both in construction and in local services.

A five-story, **1,560-space parking garage** will provide parking, including 948 spaces for University use.

A five-story, 150-room **Hilton Garden Inn and Conference Center**, built by E.J. Del Monte Corp. of Rochester, will provide hotel space for visitors as well as meeting and conference space for University programs.





COGNITIVE SCIENCE

My, How You've Grown!

Cognitive scientist Jessica Cantlon investigates how kids' brains change as they acquire intellectual skills.

By Susan Hagen

HOW DOES LEARNING CHANGE THE BRAIN?

That's a question that Jessica Cantlon, assistant professor of brain and cognitive sciences, has been asking—and with the help of children, Big Bird, and a functional magnetic resonance imaging (fMRI) machine, she has begun to find the answer.

Children whose neural maps more closely resembled those of adults scored higher on standardized math and verbal tests in

Cantlon's study. In other words, the brain's neural structure, like other parts of the body, develops along predictable pathways as it matures.

Cantlon's study also confirmed locations in the brain where the developing abilities lie. For verbal tasks, adult-like neural patterns in the Broca area—which is involved in speech and language—predicted higher verbal test scores in children. For math, better scores were linked to more mature patterns in the intraparietal sulcus, a region



“But this is the first study to use the method as a tool for understanding development,” Cantlon says.

The novel use of brain imaging during everyday activities like watching television opens the door to studying other thought processes in naturalistic settings and may one day help to diagnose and treat learning disabilities. It isn’t possible at this point to measure the thought processes of the children while they’re engaged in an actual classroom lesson,

on numbers, words, shapes, and other subjects. The children then took standardized IQ tests for math and verbal ability.

To capture neural responses, researchers turned to fMRI. Unlike X-rays, CAT scans, and other types of brain imaging, fMRI involves no risks, injections, surgery, or exposure to radiation. Using magnetic fields, the scans virtually segment the brain into a three-dimensional grid of about 40,000 pixels, known as voxels, and measure the intensity of neural signals in each of those tiny sectors. The study, which was carried out over three years, produced 609 scans of each participant—one every two seconds—as they watched the video clip. Using sta-

“Psychologists have behavioral tests for trying to get to the bottom of learning impairments, but these new imaging studies provide a totally independent source of information about children’s learning based on what’s happening in the brain.”

but by using the educational television show, Cantlon has sought to do the next best thing.

Eventually, insight from fMRI may help pinpoint the cause when a child experiences difficulties mastering school work. “Psychologists have behavioral tests for trying to get to the bottom of learning impairments, but these new imaging studies provide a totally independent

source of information about children’s learning based on what’s happening in the brain,” she says.

Until the advent of fMRI the only way to evaluate children’s cognitive development was behavioral testing. “A future goal for cognitive neuroscientists is that brain data could be used to inform diagnoses and interventions in learning—but that is still a distant goal,” says Cantlon.


She and her former research assistant, Rosa Li, now a graduate student at Duke, published their findings in the journal *PLoS Biology*.

For the investigation, 27 children between the ages of 4 and 11 and 20 adults watched the same 20-minute *Sesame Street* video. Like the regular program, the recording featured a variety of short clips focused

tistical algorithms, the researchers then created neural maps of the thought processes for the children and the adults and compared the groups.

Using normal activities, such as television watching, may provide more accurate indications of children’s learning and brain development than the short, simple tasks typical of fMRI studies, Cantlon and Li argue. Like the *Sesame Street* video, they say, academic lessons in schools are delivered in a richly complex environment.

To test that assumption, Cantlon and Li had the children perform traditional fMRI tasks by matching simple pictures of faces, numbers, words, or shapes. During the more limited activities, the neural responses didn’t predict children’s test scores, as they did when children watched the video.

While the authors don’t advocate television watching, the study does show that “neural patterns during an everyday activity like watching television are related to a person’s intellectual maturity,” Cantlon says. “It’s not the case that if you put a child in front of an educational TV program that nothing is happening—that the brain just sort of zones out. Instead, what we see is that the patterns of neural activity that children are showing are meaningful and related to their intellectual abilities.” 

of the brain known to be involved in the processing of numbers.

Cantlon used fMRI to observe the neural activity of children and adults while they watched a video from *Sesame Street*. Scientists are just beginning to use brain imaging to understand how people process thought during real-life experiences. For example, researchers have compared scans of adults watching an entertaining movie to see if neural responses are similar across different individuals.

LOOKING TO LEARN: Research assistants Vy Vo (left) and Courtney Lussier help Mason Ray, 4, of Penfield, N.Y., become acquainted with an fMRI machine. Cognitive scientist Jessica Cantlon (opposite) is carrying out research using brain imaging to find out how kids’ brains change as they learn.

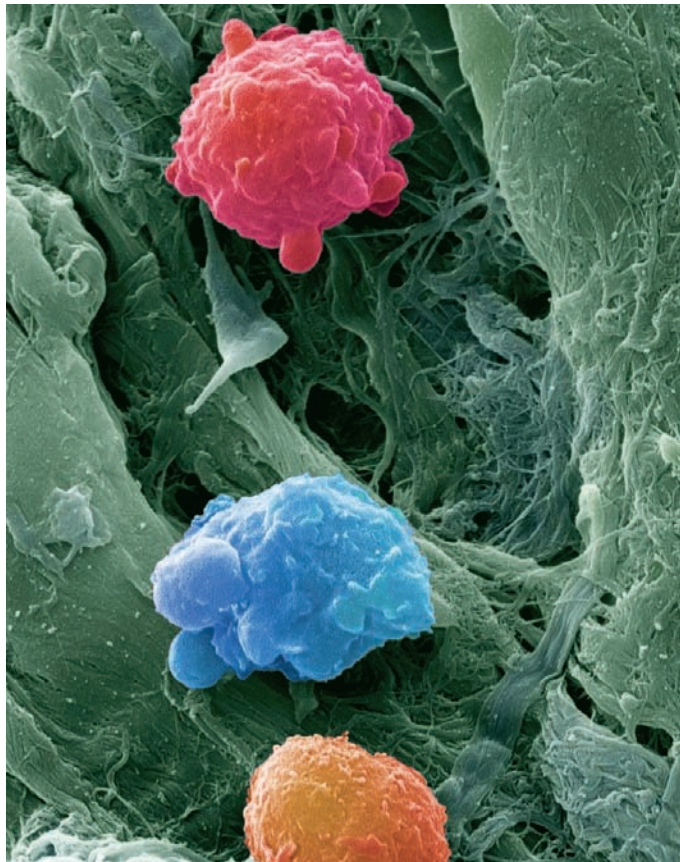


Cell Metabolism Yields New Insights

Medical Center scientists think they know why one of the most aggressive cancers is so difficult to cure. Some cells that drive acute myeloid leukemia appear to have a much slower metabolism than most other tumor cells.

While that seems to allow leukemia cells to survive better, it may also allow for a new approach to fighting several forms of leukemia. In a study published in the online edition of *Cell Stem Cell*, the team found that leukemia stem cells generate all the energy they need in a cellular powerhouse called the mitochondrion, by way of a single process, oxidative phosphorylation. Other cancer cells and normal stem cells also rely on a second fuel source, known as glycolysis, to generate energy. Even the most modern cancer treatments were developed under the assumption that all cancer metabolism relies on glycolysis.

The research team has been testing an experimental drug tailored to attack the unique metabolic status. **Craig Jordan**, the Philip and Marilyn Wehrheim Professor at the Wilmot Cancer Center and a corresponding author of the study, is working



SLOW METABOLISM: Scientists have found some leukemia cells generate their energy in a different way than previously thought.

on forming a partnership with a drug maker to conduct further testing. The compound under

laboratory study has already been used in clinical trials.

—Leslie Orr

Skin Cells Show Promise in Treating MS

Human brain cells created by reprogramming skin cells have the potential to be highly effective in treating multiple sclerosis and other myelin disorders.

A study by Medical Center scientists is the first successful attempt to use special cells—known technically as human induced pluripotent stem cells, or hiPSC—to produce a population of cells that are critical to neural signaling in the brain.

It “appears that cells derived from this source are at least as effective as those created using embryonic or tissue-specific stem

cells,” says neurologist **Steven Goldman**, the Edward and Alma Vollertsen Rykenboer Professor of Neurology. He was lead author of the study, which was published in *Cell Stem Cell*.

The discovery opens the door to potential new treatments using hiPSC-derived cells for a range of neurological diseases characterized by the loss of myelin, a fatty tissue that ensheathes the connections between nerve cells and ensures the crisp transmission of signals from one cell to another.

When myelin tissue is damaged, communication between

cells can be disrupted or even lost.

Multiple sclerosis is the most common myelin disorder, a condition in which the body’s own immune system attacks and destroys myelin. Loss of myelin is also the hallmark of a group of serious, often fatal, diseases known as pediatric leukodystrophies. Several thousand children are born in the United States with some form of leukodystrophy every year.

—Mark Michaud

#how’s your health?

Rochester researchers last year showed how Twitter can be used to predict the likelihood of a particular Twitter user becoming sick. Now they’ve used the social media application to model how other factors—including exposure to pollution, social status, and interpersonal interaction—influence health.

Henry Kautz ’87 (PhD), professor of computer science, and postdoctoral researcher **Adam Sadilek** ’12 (PhD) have developed a data-mining technology that allows them to monitor tweets—many of which are geo-tagged, showing Twitter users’ locations—and make predictions. By following thousands of users, researchers can estimate interactions between users and between users and their environment.

At the International Conference on Web Searching and Data Mining in February, Sadilek showed how the new model accounts for many of the factors that affect health and how it can complement traditional studies in life sciences. Using tweets collected in New York City over a month, they looked at 70 factors—including how often a person takes the subway, goes to the gym, or dines at a particular restaurant—and then evaluated their impact on users’ health.

Some results—such as proximity to pollution sources having a negative effect on health—aren’t surprising. Never before, however, has such impact been extracted from the online behavior of a large, online population.

The team’s paper also indicates a broader pattern, in which virtually any activity involving human contact leads to significantly increased health risks.

—Leonor Sierra



Model for Brain Signaling Flawed

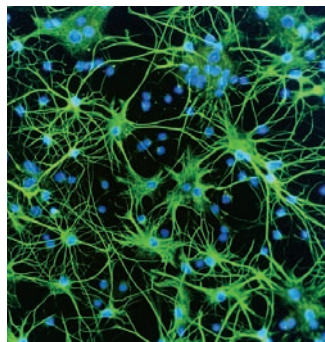
A new study has overturned a long-accepted understanding of how brain cells communicate. The new work indicates that the tripartite synapse—a model long accepted by the scientific community, in which multiple cells collaborate to move signals in the central nervous system—doesn't exist in the adult brain.

The longheld concept doesn't represent the process for transmitting signals between neurons in the brain beyond the developmental stage, say Medical Center scientists in a study published in *Science*.

Neurons are connected to each other via axons or "arms" that extend from the cell's main body. Communication between neighboring neurons takes

place where axons meet other nerve cells—called a synaptic juncture—when an electrical charge causes chemicals called neurotransmitters or glutamate to be released by one cell and "read" by receptors on the surface of the other. The two cells don't actually touch, so the chemical messages must pass through a gap in the synaptic juncture. The space around this gap is insulated by glial, or non-neuron, cells known as astrocytes.

Under the tripartite synapse model, both astrocytes and neurons were believed to play a role in the conversation between cells—an understanding based largely on animal models, which showed active receptors and



SIGNALS: A new look at neurons

neurotransmitters between not only the nerve cells but also the nearby astrocytes. Scientists believed that they must, in some way, modulate the signaling process between brain cells.

While this model has held sway for decades, scientists have long been frustrated by their inability

to influence the process by targeting it with drugs.

Collaborating with researchers at the Institute of Optics, **Maiken Nedergaard**, lead author of the study and codirector of the Center for Translational Neuromedicine, and her team developed a new 2-photon microscope that enables researchers to observe glial activity in the living brain. They discovered that glial cells don't directly respond to synaptic neuronal signaling.

The transmission process of the tripartite synapse model "appears to just be a simplistic signaling pathway that 'teaches' the synapse how to behave," Nedergaard says. "Once the brain matures, it goes away."

—Mark Michaud

Men Are from Earth, Women Are from Earth

For decades, popular writers have entertained readers with the premise that men and women are so psychologically dissimilar they could hail from different planets. But a new study shows it's time for those theories to come back to Earth.

A Rochester-led analysis of 122 different characteristics—from empathy and sexuality to scientific inclination and extroversion—involving more than 13,000 people shows that men and women, by and large, don't fall into different groups. In other words, no matter how inscrutable your partner may seem, gender is probably only a small part of the reason.

Instead of clustering at either end of the spectrum—the way scores do with height and physical strength—psychological indicators fall along a linear gradation for both genders. With few exceptions, variability within each sex and overlap between

the sexes is so extensive that study authors **Harry Reis**, professor of psychology, and **Bobbi Carothers '03** (PhD) conclude it would be inaccurate to use

personality types, attitudes, or psychological indicators as a sorting scheme. "Sex is not nearly as confining a category as stereotypes and even some

academic studies would have us believe," says Carothers. The study was published in the *Journal of Personality and Social Psychology*. —Susan Hagen



WOMEN'S STUDIES

The Lady with the Alligator Purse

This spring a course and a companion Humanities Project are examining Rochester resident Susan B. Anthony. Her connection with 19th-century reform movements—for abolition, temperance, and women's suffrage—are well known, but less so are details of the physical, material, and cultural worlds that shaped her life and work.

Honey Meconi, the Susan B. Anthony Professor of Gender and Women's Studies, developed the course and project.

How did Susan B. Anthony become the iconic figure of the women's suffrage movement?

People assume it was her brainchild, but she wasn't there at the beginning. Her parents and her sister got involved in the movement for women's suffrage before Anthony did.

Elizabeth Cady Stanton, one of the originators of the movement, became more radical as the years went on and became controversial even within the movement. Anthony was more pragmatic. And she was out in public much more. Cady Stanton had seven children to bring up. But Anthony was one of the best-traveled people in the world at the time, male or female. She was considered indefatigable, going from coast to coast, sometimes staying in a different town every night. She traveled around New York state in winter because she knew most entertainers wouldn't—and so people would come out to hear someone talking about almost anything.

You brought Miss Manners to campus to talk about Anthony. What's the connection?

You could argue that it was the social expectations for women that really spurred the whole

thing. Cady Stanton traveled to London with her abolitionist husband in 1840 for the World Anti-Slavery Convention. Lucretia Mott was there, too, and at the convention women weren't permitted to be delegates, to speak, or to sit with the men. And Cady Stanton and Mott decided there should also be a movement to end this quasi slavery for women. Obviously it took them eight years to get around to starting that movement.

Women didn't have a public voice. Women could work behind the scenes, but it was unladylike to speak in public. So was clapping—women waved their handkerchiefs in what was called a "Chautauqua salute."

Did Anthony play a special role in the movement?

Because her family was involved in abolition, she got involved, too. She found that her *métier* was being a professional organizer.

As an unmarried woman, Anthony could make a business contract. A married woman couldn't make a business contract in her name—and almost everyone else in the movement was married. So Anthony was the one who could rent the halls. In a sense she was the business manager.

The project looks at fashion, too. How is it important to the movement?

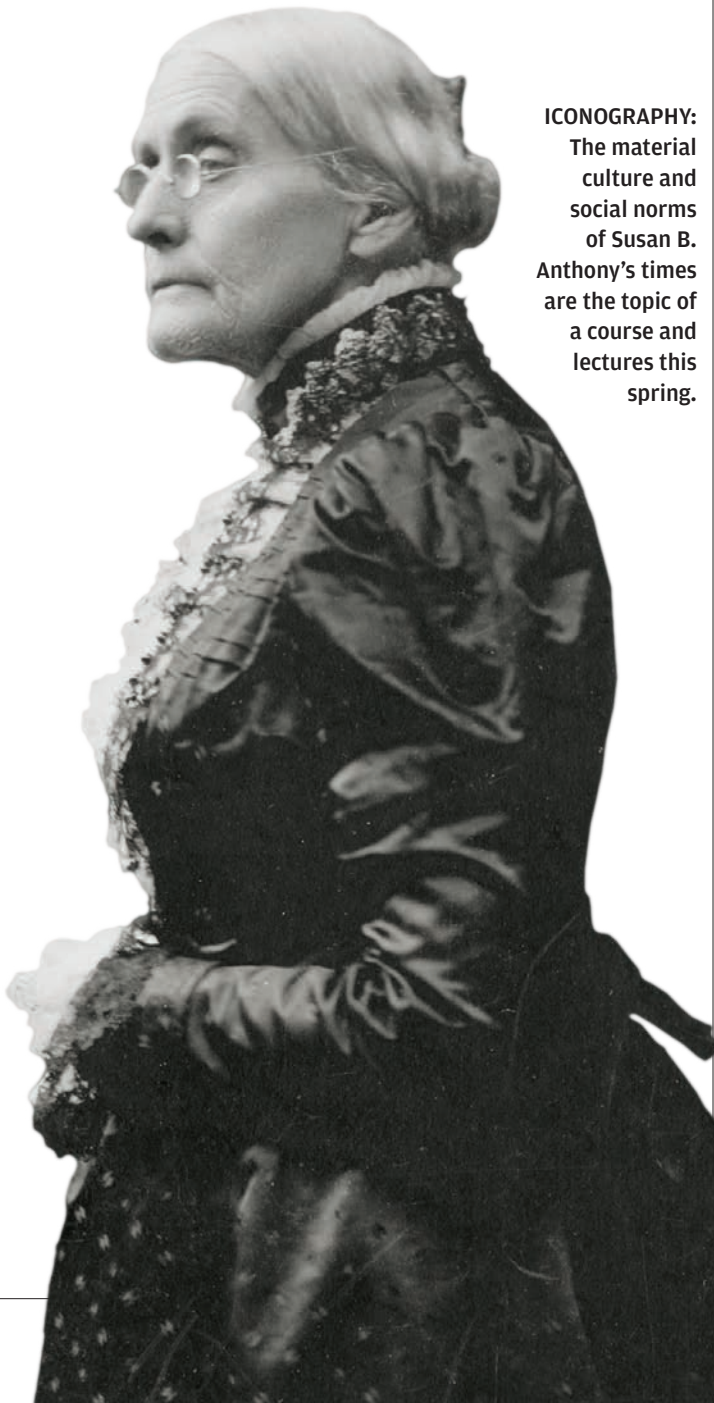
Anthony, like other members of the movement, adopted a style of dress—a shorter skirt, with pantaloons—that gave women freer movement. Crowds of men would jeer and laugh, and the women stopped wearing those clothes because it was detracting from their message. Anthony wore stylish black dresses. When

huge sleeves were in, she wore black dresses with huge sleeves. And she had pretty lace collars on. She wore a beautiful cameo. She met the norms for a staid lady at the time—in a way that didn't detract from listening to what she said.

She also used to carry around a large alligator bag. There's a children's jump-rope rhyme,

"Miss Lizzie had a baby . . ." Do you know how it ends, in some versions? "Vote, says the lady with the alligator purse." She dressed in a way not to detract from her message but as an icon she was closely identified with these physical things.

—Kathleen McGarvey



ICONOGRAPHY: The material culture and social norms of Susan B. Anthony's times are the topic of a course and lectures this spring.



NEUROLOGY

Fish Food for Thought

Does the “good” outweigh the “bad” when it comes to eating fish? A new study by Medical Center researchers adds to evidence that when expectant mothers eat fish often, they’re giving their future children a boost in brain development in spite of the neurotoxin methyl mercury in fish—a food more than 3 billion people depend on for basic nutrition. Pediatric neurologist **Gary Myers** has been a member of the Seychelles Child Development Study team since it began in 1989.

What problems and benefits can come from eating fish?

If a problem is going to show up, you don’t know what age it’s going to show up in. One of the populations in our study is now 22 years old, and we have yet to find any consistent evidence of adverse effects.

What we’re looking for basically is a needle in the haystack

because these are low-level exposures.

So you’re trying to find out whether the mercury in fish causes nothing at all or something really small. The question is whether these very low levels of exposure that you get from eating fish are bad. Our study in the Seychelles has the highest level of exposure of any study in the world.

What’s become abundantly clear to us is that omega-3 long-chain fatty acids are really important, and fish is the primary source.

What do omega-3 fatty acids do for us?

They’re incorporated into the cell walls of nerve cells and other cells of the nervous system. They’re important in turning genes on and off, and in neurotransmission. They’re also anti-inflammatory. They’re beneficial across the lifespan. They tend to

prevent and decrease the significance of macular degeneration in the elderly. They’re very important to all kinds of things.

What’s the news from the latest study?

We found more beneficial effect from the long-chain fatty acids at five years of age in this second nutrition cohort. We’ve found a correlation between prenatal exposure to omega-3 fatty acids and the children’s neural development for language.

How did you start looking into the issue of mercury and fish consumption?

We’d done an earlier study, in the 1970s, in Iraq, where there was a poisoning epidemic. That study pointed to the possibility that low levels of methyl mercury exposure might have consequences for the developing fetus. Since we already knew that you could get low levels of mercury

exposure from eating fish, the natural question was, could you eat enough fish to cause a problem?

Our group looked for a place in the world where people eat a lot of fish, figuring that was our best shot at finding something wrong, if there was something wrong. And we ended up choosing the Republic of Seychelles in the Indian Ocean for a variety of reasons—they ate fish every day, sometimes twice a day, and they have a fairly high birth rate.

We started a study looking for adverse effects of mercury from eating fish on the developing fetus. And after almost 10 years, we were finding that when the mercury exposure in the women was higher in these low-level exposures, the children were actually doing better. And we knew it wasn’t the mercury, because there is no purpose of mercury in your body.

—Kathleen McGarvey

MEMORIAL ART GALLERY

The Knight's Tale

The Memorial Art Gallery has built its permanent collection through the art of storytelling.

By Kathleen McGarvey

YOU'D BE SURPRISED HOW TOUGH IT IS TO find a good suit of armor these days.

For more than a decade, beginning in the 1990s, the Memorial Art Gallery was in search of a suit of armor for its collection, spurred by its sense that such an object would hold a deep appeal for the community—its children especially—and provide an important narrative anchor for its Renaissance collection.

“But it’s very, very difficult to find armor intact,” says Nancy Norwood, curator of European art. A popular collector’s item in the 19th and early 20th centuries, armor became the victim of a heated marketplace, with dealers cobbling together suits out of wildly mismatched pieces and forgers passing off new items as artifacts of history.

And the gallery wanted a highly decorated suit of armor that would make plain armor’s significance as an art object and example of fine craftsmanship and that would—through the decorative metal etching—link to other Renaissance arts. Such a requirement made the challenge of the search even greater.

As she carried out her hunt, Norwood worked with the guidance of Stuart Pyhrr, curator of the Arms and Armor Department at the Metropolitan Museum of Art.

For certain pieces, such counsel is essential, says chief curator Marjorie Searl, and the gallery seeks out the opinions and advice of experts in the most specialized niches of art history to be sure it acquires art wisely. “Some people say the best deaccession policy is a strong accession policy, because if you’re very careful about what you bring in, then you don’t have problems at the other end,” she says.

As the search wore on, Norwood worked to arrange long-term armor loans from the Met. But then in 2006 events moved quickly: the London arms and armor dealer Peter Finer offered the gallery the opportunity to

acquire a partial suit of Renaissance armor from the Brunswick Armoury in Germany, part of a collection sold off by the Royal House of Hanover. British armor expert Ian Eaves, with whom the gallery consulted on the purchase, pronounced the suit “part of a distinctive and highly interesting group . . . [that] represents the Brunswick school of armourers at its apogee” and a “work of art of exceptional quality.”

The suit the gallery acquired features a close helmet, a breastplate, a backplate, shoulder plates, a collar—called a gorget—and thigh protectors, called tassets. Norwood likens the pieces to clothes for paper dolls: they are basic pieces of armor that could be mixed and matched as needed, to be worn for the field, tournaments, or parades.

The varied functions of the pieces—the helmet, for example, is heavy armor, not lightweight as the breastplate and tassets are—actually made the suit more interesting to the gallery. “For us, it serves an educational purpose,” says Norwood. Adding to its desirability was its unambiguous history. “We know where it came from, and so much armor has wandered. The provenance was unquestioned, and that’s extremely unusual in anything from the Renaissance—especially armor.”

The etched decoration on the armor was also key. It’s an exceptionally beautiful piece, says Norwood, with intricate etchings drawn from contemporary printed sources by artists such as Cornelis Bos and Virgil Solis.

The etching on the armor, which results from acid biting into the surface of the metal, emerged from the same practice in decorating medieval metalwork.

“It’s something you can build an art story around,” Norwood says.

Today the armor is a showpiece of a new installation, *Renaissance Remix: Art and Imagination in 16th-Century Europe*. “We expected that this suit of armor would



ART OBJECT: Intricate etchings on a suit of armor purchased by the gallery firmly tie the popular piece to art history. A medallion on the breastplate (left, middle), which shows the biblical story of “Daniel in the Lion’s Den,” is a trademark of the Brunswick armors. An inscription surrounding the medallion—a rare feature—dates the piece to 1562.



really capture people's imaginations—and I think it does," says Searl.

Appealing to imaginations, and doing so through stories that museum-goers might never even be consciously aware they're being told, is a key part of a curator's job in building a museum collection.

"Everything we have really is about communicating—with visitors, with students, with artists—about the story of art," says Searl.

Over the past hundred years, the gallery—which will mark its centennial in the fall—has built its collection, from the improvisational atmosphere of its earliest days to today, when it holds more than 12,000 works in its permanent collection.

In the first year after the gallery's founding, "just a handful of objects were essentially gifts. There was no money to buy art. The whole focus was the building," says Searl. Constructed on University Avenue, the museum building was a gift of Emily Sibley Averell Watson in memory of her son, architect James Averell, who died in 1904.

Members of the Rochester community, together with the larger artistic community, pitched in to help the gallery get its footing. "We borrowed a lot, from patrons who lived in the community—many members of

the board had wonderful collections, and they wanted the Rochester art museum to have the same quality of work," Searl says. "And the director of the gallery, George Herdle, had a lot of contacts in New York, and he'd get shows here with some of his artist friends."

Sometimes Emily Watson would purchase and donate pieces on exhibition. For example, she bought for the gallery a monotype by American Post-Impressionist painter Maurice Prendergast, making the piece the artist's first work to enter a museum collection. "Along the way some of these extremely fortuitous things happened, because people were helping us to acquire work, and they were people who were collectors and connoisseurs themselves," says Searl.

By the 1930s, however, the gallery was beginning to receive not only gifts of art but acquisition funds—funds that came then, and come today, almost exclusively from private donors. The gallery's curators could think more deliberately about what to collect.

When the gallery was founded, the trend was to create encyclopedic collections of art so broad that they encompassed the entire world of art.

That origin is still felt in the gallery now. Its permanent collection spans 5,000 years


and represents every world culture, ancient and modern.

But even with a generalist approach, curators still must make decisions. "What is the story that we're looking to tell—and how do we tell that story through objects?" says Searl.

At the center of the acquisitions process is the gallery's Art Committee, a subcommittee of the board that accepts work for the gallery on the board's behalf, approving all acquisitions, loans, and deaccessions. "You're always trying to prune a collection and acquire in a judicious way. You want to have a collection that's meaningful," says Searl, and she credits the rigorous process that the committee heads—with justifications from curators, evaluations from conservators, and assessments from specialists—as essential to their success.

"Every acquisition is important," says Norwood. "It all has a story to tell, and as a curator it's your job to tell the story—and to make good decisions."

Ultimately, it's a story of art that reaches beyond the confines of any one museum, says Searl.

"We're stewards, and we build a collection. Other museums build similar collections, and we all, together, create a great whole in terms of our cultural heritage." 

Intellectual Property Expert Named to Head Technology Transfer

An alumnus who most recently managed intellectual property issues for Abbott Medical Optics in Santa Ana, Calif., will oversee technology transfer for the University.

Scott Catlin '92 has been appointed associate vice president for innovation and technology commercialization, which includes directing the Office of Technology Transfer. That office is responsible for protecting the University's intellectual property and facilitating the commercialization of technologies.

Catlin, who earned a bachelor's degree in optical engineering at Rochester before getting his law degree at Notre Dame, was legal section head for Abbott Medical Optics. He is registered to practice before the U.S. Patent and Trademark Office.

Catlin will report to the senior vice president for research.

LICENSE LEADER: Scott Catlin '92 will lead the University's programs to commercialize research, technologies, and other intellectual property.



Scholar of Inequality Receives Douglass Medal

Noted anthropologist Yolanda Moses received the University's Frederick Douglass Medal in recognition of her scholarship and public service.

A former president of the City College of New York, Moses is a leading scholar of the origins of social inequality. A past president of the American Anthropological Association, she is currently the associate vice chancellor for diversity, equity, and excellence at the University of California at Riverside, where she also is a professor of anthropology.

She is involved in national projects to promote diversity in education with the National Council for Research on Women and the Women of Color Research Collective, and she was a driving force behind the creation of a traveling museum exhibition, *RACE: Are We So Different?*

Using comparative ethnographic and survey methods, she has focused on gender and class disparities in the Caribbean, East Africa, and the United States. More recently, she turned to issues of diversity and change in universities and colleges in the United States, India, Europe, and South Africa.



HONOREE: Yolanda Moses received the Douglass Medal.



SOUND SPACE: Kedar Shashidhar '14, who interned last summer at Blackdog Recording Studios in Rochester (above), is one of several students pursuing a new major in audio and music engineering.

New Major in Audio and Music Engineering Offered

In response to rapid changes in the field of audio engineering, the University is combining its expertise in music and engineering to help students succeed in the redefined industry.

The New York State Department of Education has certified Rochester's new

undergraduate audio and music engineering major, which is being offered to students for the first time this academic year.

Students enrolled in the major will develop knowledge and skills in recording and sound design, acoustics, electronics, digital signal processing, and computer

programming. About 15 students have declared the new major.

Beginning in fall 2013, programs for the new major will be housed in Ronald Rettner Hall for Media Arts and Innovation, now under construction between Wilson Commons and Morey Hall.



CHAMPIONSHIP POSE: Congresswoman Louise Slaughter (second from right) met with students in Rochester’s McNair program—advisor Nick Valentino, Sierrah Grigsby ’13, Alisa Jimenez ’14, and Grace Cannon ’13—after Slaughter was presented with the Champion of Science Award from the Science Coalition, a national science advocacy organization.

Science Coalition Honors Louise Slaughter

The Science Coalition honored Congresswoman Louise Slaughter this winter with its Champion of Science Award in honor of her commitment to funding basic research.

President Joel Seligman presented the award at a University event attended by Medical Center

CEO Bradford Berk ’81M (MD/PhD), researchers, and students.

Seligman called Slaughter—who holds degrees in microbiology and public health—a “true friend of science” and praised her “passion, leadership, and tenacity.”

In accepting the award,

Slaughter said, “In an age when our politics often give us reason for despair, the constant progress of science gives us confidence in the realization of a better tomorrow.”

Slaughter also toured the Upstate Stem Cell cGMP facility at the Medical Center.



PLANT LIFE: Littleleaf lindens are part of the campus arboretum’s collection.

New Memorial Honors Veterans

A memorial to honor veterans of the U.S. Armed Forces was dedicated in a January ceremony at the Saunders Research Building.

Located in the atrium, the memorial was inspired by philanthropist and namesake Philip Saunders, who provided the lead gift for the building, which opened in 2011.

The memorial is inscribed with a quote from Saunders:

“Let us never forget the sacrifices made by our veterans and their families, and may the re-

search within this building bring healing to them and others.”

The building is home to the Clinical and Translational Science Institute, as well as academic departments. It also houses research programs in cancer, pediatrics, emergency medicine, neurological disorders, and cardiovascular disease.

NAMESAKE: Philip Saunders suggested a veterans memorial in the building that bears his name.



trees, an Arbor Day observance, and student-learning projects. Last spring, Rochester was one of five Tree Campus USA schools nationally to receive \$1,000 from the Arbor Day Foundation to help fund an Arbor Day tree-planting event.

To view a tree map of the River Campus, visit www.facilities.rochester.edu/arboretum/photos/map.pdf.

MEN'S BASKETBALL

Point Taken

Point guard John DiBartolomeo '12 helps lead the Yellowjackets to the top of the national rankings.

By Dennis O'Donnell

JOHN DIBARTOLOMEO '12 CAME TO ROCHESTER as a point guard—the position on the men's basketball team best known for guiding his teammates to the basket.

And although the senior from Westport, Conn., has been the team's top scorer for the past two seasons—and ranks among the top scorers nationally in Division III—he still sees himself in the role of trying to make things happen for the team.

"I've always thought of myself as a point guard," he says. "A lot of my reads are based

season, the team was 21–3 overall and 10–3 in the UAA. At the top of the UAA for most of the season, the Yellowjackets were awaiting an NCAA tournament invitation at the end of the season.

Leading the team throughout the year has been DiBartolomeo, whose scoring average ballooned from 11.4 points per game (ppg) as a freshman to 17.7 as a sophomore and 19.1 as a junior.

His team-leading average of 22.8 points per game in early February placed him ninth in the country among Division III players. He also was ranked third in free



on how (the opponents) play us."

For most of the 2012–13 season, opponents have had difficulty keeping up with the Yellowjackets. Jumping out to an 18–0 run to start the season, the team was ranked No. 1 in the country in late January, the first top ranking in five years for men's basketball.

Going into the final weekend of the

▲ **READING RIGHT:** Known for his ability to read opposing defenses, DiBartolomeo was ranked among the nation's top in points per game, assists, and free throw percentage.

throw percentage at 91.6 percent; 17th in assist to turnover ratio, a measure of his ball handling skills; and 20th in assists with 5.5 per game.

As a freshman, he scored a then career high 30 points against Roberts Wesleyan in an overtime victory in the Wendy's College Classic semifinals at the Palestra.

"That was a one-game thing," he said of the Roberts win. "I didn't have a 'breakout' game until my sophomore year when we changed the offense."

The change in offense came with a change in the head coach's chair. Longtime

Rochester head coach Mike Neer, who recruited DiBartolomeo, retired. Luke Flockerzi, then the head coach at Skidmore College and a former Rochester assistant under Neer, was hired to succeed Neer.

Flockerzi installed an offensive system that called for DiBartolomeo—as the point guard—to have a "paint touch" on every possession. That is, to make sure he handles the ball in the lane.

"If you can draw someone to you," DiBartolomeo says, "you're doing it right."

His read-and-react philosophy as he wheels down the court tries to draw an opponent toward him.

"If no one stops you," he says, "You have to score. If I'm not shooting, I'm not making people help [on defense] and then I can't pass."

That's not a simple play that Flockerzi can draw on a white board in the middle of the week. It's a feeling for the game developed by playing, and playing, and playing some more. Since walking onto the Rochester campus for the 2009–10 season, DiBartolomeo has been working and refining his game.

Last year, he spent the summer working during the day at an advertising agency in midtown Manhattan. In the evenings, he played at one league at home in Westport, one league at the Chelsea Piers recreation site in midtown Manhattan, and a weekend league in Trumbull, Conn.

He hopes there's more basketball in his future, especially after graduation. DiBartolomeo would like the opportunity to play in Europe when his college career is finished. Assistant coach Jeff Juron played in Holland after his graduation from Rochester in 2008. He and DiBartolomeo have talked at length about finding contacts, making the adjustment to international rules, and living overseas.

DiBartolomeo wants to find a spring internship.

"All my [class] clusters are done," he says, referring to a key component of his academic work under the Rochester Curriculum. "I'll look locally to see what I can find."

Read-and-react. It's something he has been successful at. **R**

Dennis O'Donnell is director of athletic communications for the Department of Athletics and Recreation.

HIGHLIGHTS

Yellowjackets Look to National Tourneys

Women's basketball, swimming, and squash eye NCAA and national bids.

WINNING 11 OF 12 GAMES DOWN THE stretch, the Yellowjacket women's basketball team went into the final game of the regular season tied for the UAA title at 11-2. The 11 wins tied the school record for UAA victories and set up a season-ending winner-take-all game for the UAA championship and automatic bid to the NCAA Division III playoffs.

Including a first-ever sweep of Washington University, by mid-February Rochester was ranked No. 2 in the East Region.

With one game left, Ally Zywicki '15 topped the team in scoring (11.1 points per game), assists (90), and steals (34). In one six-day stretch, she matched her career high in assists (10) and points (24). Breanna Madrazo '15 was second in scoring (8.4 ppg). Jackie Walker '13 and Amy Woods '13 provided an inside presence (Walker: 8.0 ppg and 5.3 rebounds per game; Woods: 7.7 ppg; 6.6 rpg) along with Loren Wagner '14 (7.3 ppg; 8.0 rpg) and Danielle McNabb '14 (6.8 ppg; 6.3 rpg).

Swimming and diving: At the UAA championships, Rochester broke 10 school records and produced 12 NCAA provisional qualifying times.

For the men, Adam Bossert '13 qualified in the 100 breaststroke, the 200-medley relay, and the 400-medley relay. He also broke the school record in the 200 breaststroke. James Frauen '15 broke the school mark in the 200 backstroke and provisionally qualified for nationals. Frauen and Bossert were joined by Brian Wong '15 and Chris Doser '15 in the 400-medley relay, breaking a Rochester record and qualifying under the NCAA's "B" standard.

For the women, Vicky Luan '16 was part of three record-breaking efforts, one of them twice. She finished third in the 50 freestyle, breaking her own school record time (23.84) and provisionally qualified for NAAs. With Farrell Cooke '15, Meg Waring '15, and Lauren Bailey '15, Luan broke the school record in the 400-medley relay, which also met the NCAA "B" cut.

The 200-medley relay team of Karen Meess '14, Waring, Bailey, and Luan broke their own school record with a 1:47.75 time.



WOMEN'S BASKETBALL Team Spirit

FINAL FOURS: This spring marks the 10th anniversary of the first trip to the Final Four of the NCAA tournament by the Yellowjacket women's basketball team, and in recognition of the milestone, coach Jim Scheible invited members of the 2002-03 and 2003-04 teams to be honored during a game this winter. Recognized were (back row, left to right) Megan Damcott '05, Sarah Sullivan Dubowsky '03, Kelly Wescott '05, Ashley Latimer Joseph '05, Danielle Muller '07, Jessie Graham Swain '06, Megan Fish Galloway '05, Megan Krebbecks '07, and Bobbi Stewart Snowden '06; (front row) Shannon Higgins Borchardt '04, Jenna Filia '06, Tara Carrozza '05, Emily Bango '07, and Emily Lyons '07.

After the meet, the four swam a time trial, breaking the record again (1:46.39), qualifying provisionally for NAAs.

Diver Elliott Lasher '13 finished eighth on both the one- and three-meter boards—scoring more than 400 points on each—while Sara Spielman '13 finished fourth on the three-meter board and fifth on one-meter.

Squash: Rochester was ranked sixth in the mid-February rankings by the College Squash Association, going into the team championships at Yale University. That ranking would set up a match between the Yellowjackets and third-ranked Harvard University in the first round.

With a 9-5 dual match record, the team repeated as Liberty League champions. Andres Duany '13 was 9-5 at the No. 1 position in dual matches, 10-6 overall. Ten of his matches came against nationally ranked opponents. Neil Cordell '16 was 10-4 at No. 2 with Adam Perkiomaki '13 at 11-5.

Indoor track & field: Several Yellowjackets qualified for the ECAC championships in New York City in early March.

For the men, the qualifiers include distance runners Adam Pacheck '14, Dan Hamilton '13, and Yuji Wakimoto '14. Boubacar Diallo '16 qualified in both the long jump and triple jump, joining Jonathan Kuberka '16 as a qualifier in the long jump. The 4-by-800-meter relay qualified twice, and the 4-by-200-meter relay qualified three times.

Rochester's women had five ECAC qualifiers in a meet at NYU. Middle-distance qualifiers include Becky Galasso '14, Claire Crowther '13, Catherine Knox '16, Caitlyn Garbarino '16, and Cameron Edwards '16. Yvette Igbokwe '15 qualified in the 60 meters and in the 200 meters. Emily VanDenbergh '16 and Carina Luck '13 qualified in the long jump and triple jump. The 4-by-200-meter relay and 4-by-400-meter relays have both booked spots for ECACs. 📍