

# In Review



**EASTMAN SCHOOL**  
**Birthday Bow**

FAREWELL FINALE: On the eve of his 90th birthday, noted violinist and strings teacher Zvi Zeitlin presented his final recital as a full-time member of the Eastman faculty. Billing the performance as his “Farewell Faculty Recital,” Zeitlin—with Eastman pianist Barry Snyder and a student quartet—presented a February program of Schubert in Kilbourn Hall. A musical prodigy who was an 11-year-old scholarship student at the Juilliard School, Zeitlin joined Eastman’s faculty in 1967, earning accolades as a performer and teacher. During his eight decades as a concert violinist, he performed with most of the great orchestras of the world under such conductors as Leonard Bernstein, Zubin Mehta, Christoph von Dohnanyi, James Levine, and Pierre Boulez. For more photos, visit [www.rochester.edu/news/photos/zeitlin](http://www.rochester.edu/news/photos/zeitlin). PHOTOGRAPH BY KATE MELTON FOR ROCHESTER REVIEW



## STUDENT SPACES

# Learning Laboratory

**CHEMICAL SPACE:** A new teaching laboratory in Hutchison Hall is providing chemistry students with a state-of-the-art space designed to foster collaboration among small groups so they can better discuss, plan, carry out, and analyze experiments. Opened last fall, the 2,400-square-foot lab in Hutchison Hall features energy-efficient fume hoods that allow each student to work within an individual hood. The new lab also features multimedia technology as well as a workspace that can be configured easily depending on the course. For more photos and a 360-degree view of the new lab, visit [www.rochester.edu/news/photos/chemistry-lab](http://www.rochester.edu/news/photos/chemistry-lab).

PHOTOGRAPH BY ADAM FENSTER





## UNIVERSITY COLLECTIONS

# Movable Feats

PAPER CACHET: A pop-up illustration of the *Pinta* and the *Santa Maria* from Voitech Kubasta's 1961 *How Columbus Discovered America, or Christoph Columbus Genuensis* is one of more than 50 examples of pop-up books, interactive mechanisms, and other feats of paper engineering on display at Rush Rhees Library through Aug. 17. Drawn from the collections of the Department of Rare Books, Special Collections, and Preservation, the works in the exhibition *Springing to Life: Movable Books and Mechanical Devices* span nearly 500 years of movable book technology. For more photos and a video, visit [www.rochester.edu/news/photos/popup-books](http://www.rochester.edu/news/photos/popup-books).

PHOTOGRAPH BY ADAM FENSTER





## STUDENT ENGAGEMENT

# A Different Kind of Break

**Student groups organize trips to build homes and fight poverty as part of alternative spring break.**

By Maya Dukmasova '12 (T5)

SINCE SHE WAS 14 YEARS OLD, JESSICA Nielsen '14 has been taking vacation time to build houses. Every summer she would travel from her hometown of Durham, Conn., to Booneville, Ky., located in one of the poorest counties in the country, to volunteer two weeks of her time and labor to help families in need of a new home.

"It's something that becomes part of you as you do it. I can't really imagine life without doing it," says the English and anthropology double major.

When she arrived at Rochester, Nielsen was happy to find a similar opportunity for community service with the student chapter of Habitat for Humanity and the group's alternative spring break trip. During the trip, students work together with a family who agrees to contribute 400 "sweat equity" hours toward building a new home. The project includes a small, interest-free mortgage the family will have 20 years to repay.

This year, Nielsen is leading the Habitat trip to Greensboro, N.C., and is looking forward to connecting with a new community and the homeowners she will help.

"You're physically building a house for someone, and you are putting your time, effort, sweat into it. It's definitely rewarding, much more rewarding than just writing a check," she says, "You get total satisfaction out of knowing, 'Oh, their bedroom? I built that bedroom.'"

As Rochester undergraduates take a week off classes in mid-March for the academic calendar's annual spring break, several students like Nielsen will be heading to less conventional destinations. Designed as an opportunity for travel and service, alternative spring break trips have been organized by University student groups for nearly two decades.

In addition to traveling to sites across the country, several students plan to undertake service programs in Rochester, in conjunc-



tion with the University's M. K. Gandhi Institute for Nonviolence and the Rochester Center for Community Leadership.

For many, the service trips are a welcome change from the stereotypical vacation-oriented spring break experience.

"The service trips in which our students participate are beneficial in at least two fundamental ways: they broaden the perspectives of our students, and they strengthen communities by building social

▲ **TAKING A BREAK:** Leah Gregorio '12 (left) and Jessica Nielsen '14 are helping organize alternative spring break trips, during which students work on community and service projects at sites around the country.

capital," says Glenn Cerosaletti, director of the Rochester Center for Community Leadership, which helps groups conceive and implement their service projects.

Since the trips are planned and carried out by students they provide "a transformative leadership experience," he says. "This is about a reciprocal partnership in which students and community members get to know each other and learn from one another." This spring, in addition to the Habitat trip to North Carolina, student groups will travel to Baltimore and Boston.

For the past 12 years, the Catholic Newman Community has traveled to Baltimore to tutor and mentor children at Holy Angels Catholic School and serve meals at the

Corpus Christi food shelter. The project is the longest-running such effort on campus.

"Our goal is just to expose our students to urban poverty," says Leah Gregorio '12, one of the leaders of this year's trip who has participated since her sophomore year. "Each night we have a reflection time and those always blossom into discussions of social justice and urban poverty."

Though the students live simply and stay at a parish church, they have plenty of time to see Baltimore, and the last day is reserved for a cultural trip to Washington, D.C. Gregorio, a political science major from Wethersfield, Conn., and her fellow leaders aim to continue similar service projects in Rochester when they return, "just so our volunteers can see that these problems aren't unique to the city of Baltimore, that they exist in our communities here at school and communities back at home."

Newman, Habitat, Roteract, Circle K, and other service-oriented organizations can receive logistical and financial support for their projects from the Community Service Network, a student-run umbrella organization for service groups. The network partnered with Alpha Phi Omega, a coed community service fraternity, for a trip to Boston.

"Our goal is to introduce students who are participating in the trip to different types of community service," says Mallory Laboulaye '12 (T5), president of the network and Alpha Phi Omega.

"This is an opportunity for [students] to dedicate a whole week of service to people they don't know and just to see that they're not isolated individuals in society," says Laboulaye, a neuroscience major from Horseheads, N.Y.

Whether groups venture to a different country or volunteer in Rochester, those who go on alternative spring break say the experiences prove to be fun and rewarding.

"These are students who are giving up their time, a whole week where they could be going on vacation, going home, relaxing, and they're giving up their time to help the environment, or people, and I think it just says a lot about the Rochester students," says Gregorio. "It's a lot of kids who spend their spring break—when many other people are going to Cancun or doing things like that—just really being selfless." **R**

*Maya Dukmasova '12 (T5) is a freelance writer and Take Five Scholar majoring in philosophy and religion.*



## UNIVERSITY HISTORY

# New Residence Hall, Courtyard Honor Presidents O'Brien and Jackson

The names of two recent Rochester presidents will become part of the River Campus landscape later this year.

A new 150-student building, scheduled to open this fall, will be named in honor of Dennis O'Brien, who served as Rochester's eighth president from 1984 to 1994.

A newly redesigned courtyard will be named in recognition of Thomas Jackson, who served as Rochester's ninth president from 1994 to 2005. Jackson Court is adjacent to the new O'Brien Hall.

"It is fitting that our newest residence hall and its beautiful outdoor gathering space will honor Dennis O'Brien and Thomas Jackson," says President Joel Seligman. "Their commitment to and investment in undergraduate education continues to make Rochester a leader in recognizing that student living and learning are integral to a successful college experience."

O'Brien Hall is situated at the intersection of Wilson Boulevard and Intercampus Drive and overlooks the Genesee River.

Designed to complement the existing Anderson, Sage, and Wilder halls—all named for important figures in the University's history—the new building is part of an effort to establish a quad-like courtyard, the new Jackson Court, to help

unify the area and draw students toward a natural gathering place.

The construction of O'Brien Hall is targeted to meet LEED gold certification standards—a first for the River Campus—to reduce negative environmental impacts and improve energy performance, among many goals.

As the first residence hall built on the River Campus in 42 years, the interior design of O'Brien Hall will differ dramatically from other River Campus living spaces.

Upper floors will offer more study rooms and lounges while common areas on the first floor will be flexible for meetings, event planning, and music and dance rehearsals, among other activities.

Sophomores, juniors, and seniors will live in O'Brien Hall with a combination of singles, doubles, and adjoining doubles.

The established buildings surrounding Jackson Court have been named for Martin Anderson, the University's first president (1853-88); John Wilder, the first chairman of the Board of Trustees (1850-58); and William Sage, the first secretary and treasurer of the Board of Trustees (1850-90).

A naming ceremony for the new building and courtyard will be held in May.

—Sharon Dickman

## BRIEFING BOOK

# Kodak's New Moment

## What does the future hold for Kodak? We ask campus experts.

Interviews by Husna Haq

THE JANUARY ANNOUNCEMENT THAT EASTMAN KODAK CO. had filed for Chapter 11 bankruptcy protection caught few economic, financial, and community observers by surprise. The Rochester-based film and imaging pioneer had struggled to find its footing in the shifting digital sands of the Internet age.

But the news marked a rare moment in commercial history where everyone from the most fumbling amateur shutterbug to the most sophisticated Wall Street whiz kid stopped to reflect on the influence of the 120-plus-year-old company.

We asked a few University experts to share their thoughts.

### 'A Valuable Opportunity'

THE RECESSION HASTENED KODAK'S DECISION to declare Chapter 11, but it wasn't the dominant cause. The dominant reason was growing competition from copycats like Fuji as well as changes in film technology. As the saying goes, "Imitation is the sincerest form of flattery." Any successful and innovative company ultimately invites competition from imitators. For Kodak, these competitors were the likes of Fuji, which is a successful company today because it was able to move away from film—which now accounts for only 10 percent of its revenue stream—and make money in new fields like plasma screens. Later challenges came from changes in film technology, of which Kodak was itself an inventor. For example, a Kodak scientist invented the digital camera in 1976. Kodak was too slow, however, to make the shift to the new technology and clung too much to the past instead of being willing to cannibalize itself along the way. As a result, other companies did the cannibalization for it.

Declaring Chapter 11 bankruptcy protection gives Kodak a valuable opportunity to reset the demands on its cash flow and to prioritize which creditors should be repaid and to what extent. According to a recent

study out of Stanford, 76 percent of companies successfully emerge from Chapter 11, typically by becoming smaller and more focused. Witness how much success GM has had coming out of its bankruptcy over the last three years.

I am optimistic that Kodak will be able to restructure and redefine itself. There are a lot of talented folks there who have the capacity to turn its assets into a real winner, but it will take considerable hard work and ingenuity.

Kodak will leave a lasting imprint on Rochester. The influence it has had on the economy of Rochester and the educational system it has nurtured in this region will be a lasting testament to its success. I would argue that the impact of alumni from all of the universities George Eastman and Kodak supported over the years will be Kodak's greatest legacy.

*—Mark Zupan, dean of the Simon School of Business*

### 'Like the Loss of a Friend'

WHAT HAPPENED AT KODAK IS THE CONSEQUENCE of a disruptive technological innovation. In film, you had a product that was profitable by any business standard, but by the late 1970s when digital emerged, Kodak was looking at a substitute in electronic cameras that represented less than 10 percent of the profit that you could get from film. At that point, Kodak's posture was to determine how it could position itself to enter that market but not stimulate or accelerate the profit-damaging transformation from film to digital. It wasn't that they weren't aware of the change, it wasn't that they didn't have the technology—in fact, they had the lion's share of intellectual property at that time—and it wasn't a question of missing the market or not having R&D capabilities. It was more a question of market timing and what would produce the best results for the shareholders. Of course, what happened was that a very profitable product stream in traditional photography was made obsolete by digital.

Kodak recognized the technological transformation and began to look at ways to diversify its business. It entered the copier business, the health sciences market, and pharmaceuticals. Kodak saw the transition

coming, invested considerable sums of money in diversifying and developing new businesses, then as its strategy evolved, Kodak disposed of those businesses.

That turmoil is unsettling for a company. It is financially unsettling and leads to a lot of organizational turmoil. Looking backward, I think in some cases Kodak might have moved faster in restructuring. But that's looking in the rearview mirror. It's hard to say they made a mistake. I don't know of another company that has undergone a transition as traumatic. It's a company based on organic chemistry, that has a terrific brand, and here comes electronic imaging—low profitability, doesn't use organic chemistry or Kodak's manufacturing capability, and it's presented with a direct substitute for its primary product. It was a difficult time for Kodak. I'm not willing to say had they jumped into digital that they'd be in much better shape than they are today.

Kodak's strategy today appears to be honing in on the printing business, an extremely competitive market. Another opportunity for it is in commercial print-on-demand, an emerging disruptive innovation in printing based on the just-in-time concept.

Kodak is and has been an extraordinarily good company. It has been able to acquire through its reputation a population of fine people. The sense I get is a broad feeling of sadness about this. It strikes me that many Kodak alumni and active employees are going through stages of mourning. It was like the loss of a friend more than of a cold, distant corporation.

*—Larry Matteson, executive professor of business administration at the Simon School and a former Kodak executive*

### 'Regional Economy Has Been Able to Grow'

KODAK HAD A RUN ON FILM THAT LASTED 90





**OPTIMISTIC VIEW:**

"I am optimistic that Kodak will be able to restructure and redefine itself," says Simon School Dean Mark Zupan. "But it will take considerable hard work and ingenuity."

years. When you have a product that's so successful for so long, you have a classic example of creative destruction. How do you destroy something that's been your lifeblood and pick up something (like digital technology) that destroys your business?

The gross margin of film is enormously high compared to digital. If I were a manager at Kodak in the 1980s and we had a gross margin that high, why would I even think about doing digital? You've got to have a certain amount of vision to be able to look out on the horizon and realize what's coming.

We were in denial in this community for a good 10 years about Kodak. Community leaders didn't get on board until 20 years later, they didn't say we have to restructure our economy or consider doing business in a different way. People just thought, "Don't worry, Kodak's going to come back." If you're in a slide for 20 years, with decreasing employment every year, somebody should have looked at this and

thought about how we're going to restructure our economy.

Kodak's decision to file Chapter 11 had a relatively minor effect on the regional economy because most of the jobs were already gone. The impact was psychological rather than real.

Kodak has given Rochester tremendous potential in attracting a workforce with good education and skills and providing that workforce with good benefits. Its retirement program was quite generous, enough that people could start new businesses if they chose. And its workforce was well educated. Rochester didn't have the same problem that, say, Buffalo or Akron or another rust belt city had, where many people who were laid off had only a high school education.

Fortunately, our regional economy has been able to grow during Kodak's downsizing. Rochester created 12,000 jobs last year. We have some big successes like Paychex as well as in telecom, optics, and pho-

tonics. And we are incredibly diverse in terms of small businesses—we have many companies under 100 people. We're never going to see a Kodak-size company here again. We're more into hitting singles and doubles. We're not trying to hit home runs. That's good because no matter what industry is up or down, it's not going to ruin the entire economy.

It takes about 20 years to transition an economy; it takes a generation of people to go through the system. You have to have a clear vision of where you're going, foster entrepreneurship and diversity, and build a community that celebrates the arts. We're five to seven years into that 20-year transition.

*—Duncan Moore, vice provost for entrepreneurship and the Rudolf and Hilda Kingslake Professor of Optical Engineering*

*Husna Haq is a Rochester-based freelance writer.*

# Discovery

## Cupid's Arrow Turns Digital

Online dating has not only shed its stigma, it has surpassed all forms of matchmaking in the United States other than meeting through friends, according to a new analysis of research on the burgeoning relationship industry.

While the digital revolution in romance is a boon to lonely-hearts, Rochester and other psychological scientists who prepared the report say that the

industry's claims of offering a "science-based" approach with sophisticated algorithm-based matching have not been substantiated by independent research. Such claims "should be given little credence," they conclude in the journal *Psychological Science in the Public Interest*.

"Online dating is definitely a new and much needed twist on relationships," says **Harry**

**Reis**, one of the five authors of the study and professor of psychology.

But he cautions that comparing dozens and sometimes hundreds of possible dates may encourage a "shopping" mentality in which people become judgmental and picky, focusing exclusively on narrow sets of criteria like attractiveness or interests. —Susan Hagen



## Of Blood, Bone, and Leukemia

Rochester researchers have discovered new links between cells that result in leukemia and cells that help form bones, offering a fresh perspective on how the blood cancer progresses

and raising the possibility that therapies for bone disorders could help in the treatment of leukemia.

Led by graduate student **Benjamin Frisch** in the James P.

Wilmot Cancer Center laboratory of author **Laura Calvi**, associate professor of medicine, the study found that leukemia disrupts normal blood production in counterintuitive ways.

The work, published in the journal *Blood*, suggests that leukemia cells, which are known to disrupt normal blood production, also disrupt the function of bone cells. —Leslie Orr

# Scientists Discover ‘Saturn on Steroids’

An unusual eclipse in a constellation roughly 420 light years away is offering the first glimpse of a planetary ring system outside the solar system.

Led by **Eric Mamajek**, assistant professor of physics and astronomy, an international team discovered the extra-solar planetary system while

tracking patterns of light in the Centaurus constellation, part of a massive star formation between 380 to 470 light years from the sun.

Using data from SuperWASP (Wide Angle Search for Planets) and All Sky Automated Survey (ASAS), the researchers noticed that the light pattern from

one star in the cluster showed dramatic changes over a 54-day period in early 2007.

Rochester graduate student **Mark Pecaut** and Mamajek identified the pattern as consistent with a protoplanetary disk—similar to that of Saturn—passing in front of the star, dimming its light accordingly.

“After we ruled out the eclipse being due to a spherical star or a circumstellar disk passing in front of the star, I realized that the only plausible explanation was some sort of dust ring system orbiting a smaller companion—basically a ‘Saturn on steroids,’” says Mamajek.  
—Peter Iglinski

## Starve a Virus, Feed a Cure?

A new finding indicates that a protective protein in some of our immune cells may be an important key to fighting HIV and may provide important clues to understanding how other viruses elude our body's defenses.

Publishing online in *Nature Immunology*, the international team including Medical Center scientists report that the protein seems to block the ability of HIV to replicate by starving the virus of the molecular building blocks

that it needs to replicate. **Baek Kim**, professor of microbiology and immunology and one of three corresponding authors of the paper, says the findings may explain why certain anti-HIV drugs used today are more effec-

tive under some circumstances than others. Researchers hope the work will help lead to a way to make anti-HIV drugs more effective, as well as further research into herpes viruses and other pathogens. —Tom Rickey

## A Pill for Heat Stroke?

In a study published in the journal *Nature Medicine*, Medical Center scientists outline what they believe is one of the first drugs to combat heat stroke. An experimental therapy called AICAR—once dubbed the “couch potato pill” for its ability to mimic the effects of exercise in sedentary mice—protected animals that were genetically

predisposed to heat stroke from the potentially life-threatening condition.

**Robert Dirksen**, the study's author and professor of pharmacology and physiology, says the finding is an important first step toward developing a drug therapy that may be part of the standard treatment for heat stroke in the future.

According to a recent study in the *American Journal of Preventive Medicine*, the number of heat-related injuries in the United States more than doubled from 1997 to 2006. In that 10-year period, an estimated 55,000 people were treated for the condition in emergency rooms across the country.

—Emily Boynton



## University Joins International Network

Rochester is joining a select group of universities around the world as part of a consortium designed to “stretch international ambitions.” The Worldwide Universities Network, established in 2000 with a mission to accelerate the creation of knowledge and develop leaders who will be prepared to address the signifi-

cant challenges and opportunities in a rapidly changing world, now has 18 members, including Rochester. “Joining WUN signifies our conviction that we must be strongly coupled to the best researchers everywhere in the world,” says Peter Lennie, senior vice president and the Robert L. and Mary L. Sproull Dean of the

Faculty of Arts, Sciences, and Engineering. Other U.S. institutions in the network are the University of Washington, Penn State University, and the University of Wisconsin at Madison. International universities include the University of Alberta; the University of Auckland; the University of Bergen; the University

of Bristol; the University of Cape Town; Chinese University of Hong Kong; the University of Leeds; Nanjing University; the University of Sheffield; the University of Southampton; the University of Sydney; the University of Western Australia; the University of York; and Zhejiang University.

—Sharon Dickman

### Mary Ann Mavrinac Named Dean of River Campus Libraries

The River Campus Libraries have a new dean. University of Toronto library leader Mary Ann Mavrinac has been named vice provost and the Andrew H. and Janet Dayton Neilly Dean of River Campus Libraries and will begin her new role June 1. At Toronto, Mavrinac spearheaded the planning and oversaw the 2006 completion of a state-of-the-art facility that was recognized with an innovation achievement award from the Canadian Association of College and University Libraries. She also supervises support for the digital humanities, open access, and scholarly communications at Toronto. Her team provides academic support for the campus Blackboard learning management system, and is the go-to institution for video, podcasting,



**LIBRARY LEADER:** Toronto's Mary Ann Mavrinac is the new Andrew H. and Janet Dayton Neilly Dean of River Campus Libraries.

and emerging technologies. At Rochester, Mavrinac will assume leadership of a library system with a reputation for innovation and user-centered approaches, earning national and international recognition for an anthropo-

logical approach to the creation of services and physical spaces and for developing new online tools for academics. Mavrinac succeeds Susan Gibbons, who was named to lead the Yale University Library. —Susan Hagen

### Simon School Ranked Among Top 25 in Business

The Simon School of Business ranks 22nd among the top 25 business schools in the United States, according to an annual ranking of the world's best business schools by the *Financial Times of London*. In the Jan. 30

issue, Simon also places 49th among the top 100 business schools in the world. In the newspaper's specialty rankings, Simon was third in the world for finance and fourth in the world for economics. Simon is

also ranked seventh in the world for accounting. Simon has been ranked among the top 25 schools in the United States for 11 of the 14 times that the newspaper has conducted the survey.

—Charla Stevens Kucko

### New Center Focuses on Respiratory Pathogens

A new national center established by the National Institutes of Health to protect people against bacteria and viruses that take aim at the respiratory system has been established at the Medical Center.

Part of a potential \$35 million to \$50 million effort funded by the National Institute of Allergy and Infectious Diseases, part of the NIH, the new center puts University scientists “on call” in the realm of respiratory infections. In times of national need, center personnel are available at the request of federal officials to take on urgent projects to inform public health needs.

Established with an initial award of \$4.7 million, the Respiratory Pathogens Research Center will be directed by David Topham, an influenza researcher who also directs the University's new Health Sciences Center for Computational Innovation, an emerging partnership between the University and IBM to establish an array of IBM supercomputers on campus with the capacity to analyze huge amounts of information quickly.

—Tom Rickey



**MLK ADDRESS:** Scholar Michael Eric Dyson told a campus audience that King saw promise in America.

## King's Legacy Is Alive and Vital: Michael Eric Dyson

The legacy of Martin Luther King Jr. is alive and vital today, noted political analyst and author Michael Eric Dyson told a Strong Auditorium audience during a January visit to deliver the annual Martin Luther King Jr. Commemorative Address. In a talk that drew from King's life, the history of the civil rights movement, the election of President Barack Obama, as well as from hip-hop artists such as

Kanye West, Dyson, a professor of sociology at Georgetown University, said that while King created opportunities for African Americans, he would not have been satisfied with the nation's continuing difficulty in dealing with race relations, poverty, inequity, and international conflict. He urged young people, in particular, to remember that King saw promise in America. "Martin Luther King didn't just

change black people, he changed America. He made white people more human, he made white civilization more tolerable. And he brought the humanity of black people to bear. But he refused to give up on white brothers and sisters and said there is something dignified and beautiful in the consciences of America when we can appeal to those consciences to transform America."

—Melissa Greco Lopes

## Eastman Circle: 2,000 and Counting

The University's annual giving leadership society started 2012 with more than 2,000 members, the second time in five years that the George Eastman Circle has surpassed its goals. Ending 2011 with 2,021 members, the society was established in 2006 with an initial goal of 250 charter members. After 1,087 people signed up during the charter phase, the membership goal was increased to 2,000 by December 31, 2011. Jim Thompson, senior vice president for Advancement, notes that the giving society has been the catalyst for greater involvement and engagement with University supporters. The group's accomplishments include record-breaking growth of the University's Annual Fund. "The rapid growth of the George Eastman Circle has put us on par with some of our most successful peer institutions with well-established and more mature programs," says Nathan Moser '75, University trustee and chair of the Eastman Circle. "Our membership now extends to 42 states and 11 countries." Members in the society pledge to make unrestricted annual contributions ranging from \$1,500 to more than \$50,000 for five years. All gifts made through the Eastman Circle count toward the *The Meliora Challenge: The Campaign for the University of Rochester*. For more about the campaign, visit <http://campaign.rochester.edu>.

**"Creative destruction will continue to wreak havoc across the global economy. The experience of Rochester, San Diego, Pittsburgh, and other cities in surviving offers several lessons. The first is to make better use of local intellectual capital, starting with universities."**

—Duncan Moore '74 (PhD), vice provost for entrepreneurship and the Rudolf and Hilda Kingslake Professor of Optical Engineering, writing in the *New York Times* about the ability of the economy of the Rochester area to thrive despite the decline of Kodak.

## Q &amp; A

# The Plight of Public Pension Programs

**Do state and local governments have a handle on their future obligations? A Simon School expert is not at all confident.**

Interview by Kathleen McGarvey

ROBERT NOVY-MARX HAS BECOME SOMETHING of a canary in the coal mine when it comes to understanding the potential for a budgetary explosion caused by state and local public employee pension programs. Novy-Marx, assistant professor of finance at the Simon School, and his colleague, Joshua Rauh of Northwestern, have been widely called upon to help policymakers understand the magnitude of pension obligations faced by states from New Jersey to California. In January, they were awarded the American Finance Association's Smith-Breeden Prize for their 2010 study, "Public Pension Promises: How Big Are They and What Are They Worth?"

## How deep in the hole are state and local pension funds?

Joshua and I have analyzed data from about 190 individual plans—116 state plans and another 70 local plans. And they're not standardized in any way, but we've done a lot of work to try to back out what the liabilities really are year by year, and calculate what the economic magnitude of the liabilities are. Plan managers claim the plans are maybe \$1 trillion underfunded. My view is they're more like \$3 trillion underfunded. The states themselves are maybe \$2 trillion underfunded, and sub-state government entities are another half a trillion more underfunded than their own claims.

## Is that because state and local governments are not funding their pension plans appropriately?

We're primarily interested in valuing the liabilities. Whether these things should be fully funded is a separate issue. Some other pension plans in other countries are operated as pay-as-you-go plans, which means that they're not funded, and that's not necessarily a bad thing. What I think is a bad thing is having an extra \$2 trillion in off-balance sheet unrecognized debt, which the states have.

## What does that represent to the average taxpayer?

We estimate that without policy changes, to achieve full funding for public employee pension systems over the next 30 years, each U.S. household would see a tax increase of about \$1,398 each year, above and beyond what they would pay because of expected economic growth. In many states, the increases would be higher.

## How has it gotten to this point?

The problem with state and local government pension plans is that they're using an accounting methodology that violates basic tenets of common sense. In particular, one absolutely necessary aspect of an accounting methodology is that if you have two plans that have the exact same liabilities, and Plan A has some assets and Plan B has those assets and some more assets, you should view Plan B as better funded. And it's better funded by the amount of extra assets it holds. Under the Government Accounting Standards Board (GASB) methodology, it could easily be that Plan B, which has the exact same assets plus more assets and the exact same liability, could have a worse funding status under the government plan.

## How does this square with other budgeting and accounting practices in government?

One thing that state governments do is they use these plans very much to circumvent their own balanced budget requirements. Almost every state—I think all the states with the exception of Vermont—have their own balanced budget requirements; they're not allowed, like the federal government, to run a deficit. They have to pay for what they spend every year. If you're going to be compensating your workers, you should be paying them for it. And for deferred compensation, you should be putting that money away. By using GASB, which undervalues these liabilities, they're able to put away significantly less money than they would if they recognized the full extent,

the full magnitude of these liabilities they have. So there's been a way in which they've circumvented their own rules by borrowing and not recognizing that borrowing.

## But isn't a liability always a liability?

State and local governments have their obligations, and they're told how to fund these obligations—by putting money away—but the GASB methodology makes the obligations look very cheap. And not only does it make them look cheap, but it encourages state and local governments to take on lots of investment risk, because the more in-



**PENSION PLANNING:** An accurate account of public pensions is important, Novy-Marx says: “Not so that public workers can be compensated less, but so that we can appropriately value what the cost of a worker is, what the costs of these plans are, and plan for them going forward.”

vestment risk they take on with the assets they hold, the smaller their liabilities get under GASB. They don’t really get smaller—they are what they are—but the recognized magnitude of liabilities under GASB gets smaller the more risk they take on.

#### **What happens when the obligations—“the recognized magnitude of liabilities”—come due?**

Government is a pass-through entity: if the governments come up short and have to meet their liabilities to their current workers and retired workers, it just means high-

er taxes or fewer services. Those are the only two possible ways, apart from defaulting on their municipal bonds—provided they don’t default on their obligations to their workers. Another way to look at this is, there are a few trillion dollars of unrecognized liabilities on the table. And it’s a distribution issue at that point. The \$3 trillion deficit people don’t want to deal with has to get eaten by someone—and it’s about apportioning it between different groups. So the possible groups are to the taxpayers, either through higher taxes or less services, the beneficiaries through lower

benefits, and holders of other public debt through default.

#### **What do you hope happens with your research?**

What I want to do, my primary goal, is to get everyone to recognize what the real costs of these plans are, not so that public workers can be compensated less, but so that we can appropriately value what the cost of a worker is, what the costs of these plans are, so we can plan for them going forward. Otherwise, they’re distortionary. I’m most interested in transparency. 

## GOLF

# Matching Hole for Hole

**With a new match play format in the Liberty League championship, the Yellowjackets set their sights on an NCAA berth.**

By Scott Sabocheck

ROCHESTER GOLFER NICK PALLADINO '14 IS used to competing on a hole-by-hole basis on the golf course, having participated in local match play tournaments near his native Cleveland home for many years.

The 2011 NCAA tournament qualifier's experience will come in handy this spring as the Yellowjackets face off with golfers from three other schools for the Liberty League championship. For the first time, the league tournament will use a match play format, in which golfers earn points against their opponents based on their score for each hole rather than how few strokes they take during a full round of 18 holes.

"It's important that my teammates learn to take it one hole at a time," says Palladino, a chemistry major. "You can make an eight and your opponent can make a three and you will still only be one down."

The first round matchups for the league championship feature host Skidmore College against Clarkson University and Rochester against Rensselaer Polytechnic Institute at Saratoga State Park Golf Course in Saratoga Springs on April 28 and 29. The winners of day one will meet on day two for an automatic berth in the NCAA tournament in Howey, Fla., marking the first time that the league champion has been guaranteed to move on to the national team tourney.

"We know it's in our hands," says coach Dan Wesley. "We control our own destiny."

Although match play is typically a foreign situation to many golfers—among major international tournaments, only the biennial Ryder Cup follows a match play format—the Yellowjackets are getting in plenty of practice leading up to the championships. Wesley instituted a Rochester-only match play bracket last season for his seniors to have some fun, and it has carried over to this year's squad as a way to prepare the team for this spring. Wesley also allows his team to play one-on-one at other times during practice so they can get a feel for the different types of emotion that come with match play.



Under match play, golfers compete one-on-one against a player on another team, and whoever achieves the lower score on a particular hole wins that hole, regardless of the difference in the total stroke count. Golfers earn one point for each hole they win. Ties are considered halved, and the margin remains the same after that hole. The winner is decided when one player is up by any margin after the full 18 holes, or by a sudden death playoff if the score is tied after 18. Also, matches can end short of a full round if one golfer is up by a wide enough margin that the opposing player cannot catch up.

▲ **MATCH PLAY:** "It brings in another factor to the match," golfer Nick Palladino says of the match play format that will be used by the Liberty League championship in May.

Wesley says that match play comes with momentum swings after winning or losing holes, and golfers have to be mentally ready to move on to the next hole.

"You need to do everything you can to take away your opponents' momentum and then keep it for yourself when you've got it," he says.

Palladino, Rochester's only participant in the NCAA championships last year, agrees that the format requires a different approach to the game.

"In stroke play, you just worry about yourself and nobody around you," he says. "In match play, you absolutely have to consider what your opponent is doing. It brings in another factor to the match." R

*Scott Sabocheck is assistant director of Athletics Communications.*

## ATHLETICS

# Senior Recognized with Squash's 'Heisman'

SQUASH PLAYER BENJAMIN FISCHER '13 went up against the nation's top players all season in the No. 1 and No. 2 positions on a Rochester squad that finished fifth in the nation. As the season came to an end in February, the economics and business strategies major from Lucerne, Switzerland, was recognized for more than his talent on the court as he was named the College Squash Association's 2012 Skillman Award winner, an honor given annually to a top men's collegiate squash senior player.

Considered college squash's version of NCAA Division I football's Heisman Trophy, the award recognizes not only top players, but also players who demonstrate outstanding sportsmanship, leadership, and contributions to collegiate squash.

"Beni has been a model of consistency, fairness, and commitment in his work ethic, behavior on court, and demeanor off court," says Rochester coach Martin Heath. "He has accepted his wins and his losses with equal grace and has assumed his leadership responsibilities within the team with quiet assuredness and good humor."

Fischer finished his four years as a Yellowjacket with a 38–23 record, an impressive mark considering he has never played below No. 3 for the team.

A three-time All-American, Fischer earned first team honors in 2010 and 2011 and second team in 2009.

Fischer finished the 2012 team squash season by defeating Kenneth Chan of Yale



**MODEL PLAYER:** Squash player Benjamin Fischer "has been a model of consistency, fairness, and commitment," both on and off the court, says coach Martin Heath.

University at No. 1, helping Rochester earn fifth place in the Potter Cup Tournament, the equivalent of squash's national championship.

The award is named for John Skillman,

who led Yale University to 16 national titles during his 41 years as the Bulldogs head coach. Skillman won the United States professionals tournament three times in the 1930s.  —SCOTT SABO CHECK

## HIGHLIGHTS

## Winter Sports: A Brief Roundup

**BASKETBALL:** The women's team finished 19–6 overall and the men were 17–8. Both were 8–6 in the UAA. Both teams broke the single-season record for free throw accuracy. The men shot 78 percent (380 of 487), barely nipping the record of 77.9 percent (478–614) set by the 1991–92 team. The women shot 75.5 percent from the line (283–375), smashing the record of 71.8 percent (369–514) set last year. Jodie Luther '12 led the women in scoring (10.6 ppg), finishing her career with 1,077 points and eighth all-time. The men's top two scorers were John DiBartolomeo '13 at 19.1 and Nate Novosel '12 at 12.4. Novosel finished his career with

1,197 points, 11th all-time. In the season finale, a 92–73 win over Emory, DiBartolomeo scored a career high 40 points, the highest single-game total for a Rochester men's player since Chris Fite '92 scored 40 against St. John Fisher in 1992.

**SWIMMING:** Sara Spielman '13 and Rachel deLahunta '12 both provisionally qualified for the NCAA Division III diving championships on the three-meter board as February came to a close. Final selections were waiting a committee's decision in early March. The women finished sixth at UAAs, the men seventh. Rochester was ranked in the top 25 in both swimming polls.

The Yellowjackets swept the Liberty League championships in December at RPI.

**INDOOR TRACK & FIELD:** Rochester's women were third and the men fourth overall at the New York State championships at Hamilton College in late February. James Vavra '12 was voted the men's track athlete of the meet after winning the 3,000-meter and 5,000-meter races. For the women, Becky Galasso '14 won the 500-meter race, breaking a 13-year-old building record in the process and qualifying for the ECAC championships. Galasso anchored the winning 4-by-400-meter relay which also qualified for ECACs. —Dennis O'Donnell