

PEDIATRICS

A New Blueprint for Children's Care

With a \$20 million gift, Tom Golisano kicks off plans for a new children's hospital.

By Kathleen McGarvey

A \$20 MILLION GIFT FROM ROCHESTER ENtrepreneur and philanthropist B. Thomas Golisano has kicked off the Medical Center's plans to build a new, \$134-million Golisano Children's Hospital.

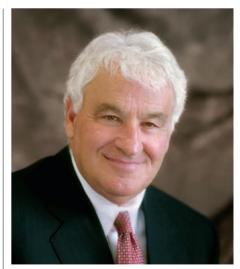
"A new facility is necessary to keep pace with medical and technological advancements and to meet the modern standards of a children's hospital," says Golisano, who founded Paychex Inc., a payroll and human resources service provider, in 1971.

The University's most generous individual living donor, Golisano has given a total of \$34 million to the children's hospital that bears his name, and the Golisano Founda-

tion has given an additional \$1.6 million to the Strong Center for Developmental Disabilities to establish the Institute for Innovative Transition.

Golisano Children's Hospital, which was named in 2002, today occupies the fourth floor of Strong Memorial Hospital, while the Neonatal Intensive Care Unit is on the third floor. Limited space requires that many patients share a room—not an ideal arrangement for family involvement, infection control, or privacy. The hospital, the only pediatric hospital in the Finger Lakes region, cares for 74,000 children each year.

With Golisano's latest donation, the Medical Center plans to create a modern, dedicated children's hospital. Pending state approval, the University will build a six-story, 200,000-square-foot hospital on Crittenden Boulevard, adjacent to the Strong Memorial Hospital lobby and facing the James P. Wilmot Cancer Center. The new



NAMESAKE: Rochester entrepreneur Tom Golisano (above) announced a \$20 million gift this summer to build a new Golisano Children's Hospital (top, in a conceptual rendering) at the Medical Center.

building will be financed through a combination of philanthropy, operating equity, and external debt.

"The new Golisano Children's Hospital is the ideal setting in which to practice patient- and family-centered care for our youngest patients," says Medical Center CEO Bradford Berk '81M (MD/PhD). "This amazing facility will ensure that children will not have to leave our community for care and that families can always remain with their hospitalized children."

The new hospital will hold a 60-bed neonatal intensive care unit, pediatric imaging, and 56 private pediatric rooms. Those rooms will be a third larger than current private rooms, offering greater comfort for patients, families, and caregivers. The design will also allow patients to be grouped by disease or injury, giving the hospital better opportunities to train nurses and other staff members to become experts in common ailments such as asthma.

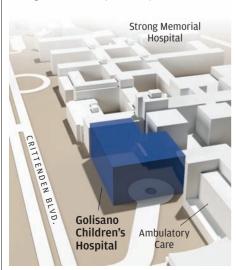
In a similar spirit, the Pediatric Intensive Care Unit and Pediatric Cardiac Intensive Care Unit, as well as the Ronald McDonald House-within-the-Hospital, will move to the new facility.

"When I came to Rochester in 2006, we had top-notch faculty and staff with expertise unparalleled in communities our size," says Nina Schor, Golisano Children's Hospital pediatrician-in-chief. "What we were missing was the facility to match, and now, thanks to Tom, we're going to have a hospital built expressly around the needs of our patients and families."

©

Dedicated Space

The new Golisano Children's Hospital building will be adjacent to the south entrance of the Strong Memorial Hospital lobby.





ENTREPRENEURIAL INITIATIVE: A \$3 million gift commitment from Mark '67S (MBA) and Carolyn Ain (above) will help "educate the George Eastmans of the future," says Mark Zupan, dean of the Simon School.

SIMON SCHOOL

An 'Eastman' Education—in Business and Entrepreneurship

Gift commitment from Mark '67S (MBA) and Carolyn Ain supports entrepreneurship at the Simon School.

By Charla Stevens Kucko

THERE'S MORE THAN LUCK INVOLVED IN getting a good idea off the ground.

Mark Ain '67S (MBA), a University trustee and cofounder and chairman of Kronos Inc.—a workforce management company based in Chelmsford, Mass.—knows that well.

So he and his wife, Carolyn, have made a \$3 million gift commitment to support entrepreneurship education and scholarships at the Simon School as well as to support the University's Technology Development Fund.

"The power of human capital and the ideas that are generated out of that creativity and drive are the future for our economy," says Mark Zupan, dean of the Simon School.

Ain is a longtime supporter of entrepre-

neurship at the University. Since 2007, the Mark Ain Business Model Workshops and Competition have been open to students at all levels of study, University-wide.

Ain's support of the Center for Entrepreneurship has enabled students to contribute to economic development in the Rochester region through internships designed to bolster small businesses and the community.

"Mark Ain is a perfect example of the success that is born from hard work and the entrepreneurial spirit," Zupan says. "Thanks to his and Carolyn's generosity, we'll be able to educate the George Eastmans and Bill Gateses and Oprah Winfreys of the future—and for that, we are immensely grateful." •

Kucko is director of marketing and communications for the Simon School.



REEL STORIES: The Winner, a 2011 film directed by Wieslaw Saniewski (above), will be screened at the Polish Film Festival, sponsored by the Skalny Center for Polish and Central European Studies. Other films include Joanna, All That I Love, and Erratum (below, top to bottom).





Reel Time

The University celebrates film and filmmaking with two notable festivals this fall.



THE FILM IMAGE IS AN IMPORTANT PIECE OF the city of Rochester's history—celebrated this fall in two film festivals the University will host. On November 10, the Skalny Center for Polish and Central European Studies—along with other sponsors, including the Polish Film Institute and the Polish Filmmakers Association—will raise the curtain on some of the most highly acclaimed recent Polish cinema. More domestic adventures will be screened on October 15, when Rochester takes part in Home Movie Day, an event honoring amateur moviemakers and their films.



Polish Film Festival

The Skalny Center sponsors the annual, five-day festival, a survey of new trends in Polish cinema. This year, the festival will spotlight two recent films by acclaimed director Feliks Falk—*Joanna* (2010) and *Case Unknown* (2009). Falk and actor Pawel Szaida, a star of Wieslaw Saniewski's new film, *The Winner*—which is also on the festival program—are sched-

uled to attend the event. For more, visit www.rochester.edu/college/psc/CPCES/.



Home Movie Day

Family favorites and found films are in the spotlight for Home Movie Day, an international celebration of amateur filmmaking. The event—locally, a collaboration between the University and the George Eastman House International Museum of Photography and Film—salutes amateur movies as an irreplaceable source of cultural history and offers guidance on ways to care for and preserve home film collections. Visit the website at www.homemovieday.com. ③

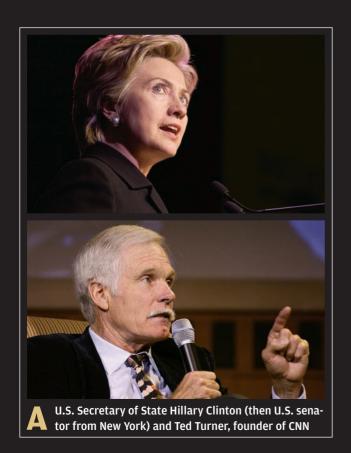
MELIORA WEEKEND, OCT. 20-23

Meliora Match Game

President Bill Clinton, the keynote speaker for the 10th anniversary Meliora Weekend, Oct. 20-23, adds to an illustrious line of high-profile guests who have addressed alumni, students, faculty, and friends since the weekend was founded in 2001.

See if you can match the annual celebration's keynote speaker to the year in which he or she was on campus for the weekend's first decade. For more about Meliora Weekend 2011, visit www.rochester.edu/melioraweekend.

2001	2006
2002	2007
2003	2008
2004	2009
2005	2010

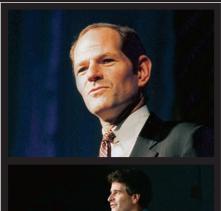






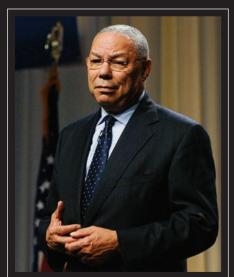








Former New York Gov. Eliot Spitzer (then state attorney general) (top) and Dean Kamen, inventor of the Segway



Gen. Colin Powell, former chairman of the U.S. Joint Chiefs of Staff, ambassador to the United Nations, and National Security Advisor



Political consultants and commentators Mary Matalin (above) and James Carville (top right) and David Neeleman, founding CEO of Jet Blue Airways (right)









Bill Bradley, former U.S. senator from New Jersey (top left), then U.S. Secretary of Transportation Norman Mineta (above), and Jeane Kirkpatrick, former ambassador to the United Nations



- 3010 E
- Z008 D
- 5 Z00Z
- 3 200C
- 2002 C
- H 1/00Z
- 3003 F
- A S00S
- I 100Z
 - Answers

Discovery

The Ups and Downs of Coming Out

Coming out as lesbian, gay, or bisexual increases emotional well-being even more than earlier research has indicated, but the psychological benefits of revealing one's sexual identity—less anger, less depression, and higher self-esteem—are limited to supportive settings, says a study coauthored by **Richard Ryan**, professor of psychology, and published in *Social Psychology* and *Personality Science*.

The study, which included participants from 18 to 65 years old, found that age made no difference in who comes out, nor did gender or sexual orientation.

Instead, the key determinant for revealing a minority sexual orientation was the supportiveness of the environment.

"The vast majority of gay people are not out in every setting," says Ryan. "People are reading their environment and determining whether it is safe or not."



Brush and Floss for a Healthy ... Heart?

Scientists have discovered the tool—a collagen-binding protein called CNM—that bacteria normally found in our mouths use to invade heart tissue, causing a dangerous and sometimes lethal infection of the heart known as endocarditis.

A bacterium best known for causing cavities, *Streptococcus mutans* lives in dental plaque, churning out acid that erodes the teeth.

A dental procedure of even vigorous flossing can allow the bacteria to enter the bloodstream. Although the immune system usually destroys them, occasionallyand within just a few seconds-they can travel to the heart and colonize its tissue, creating a potentially deadly infection. Microbiologist Jacqueline Abranches, a research assistant professor, is corresponding author of the study, published in Infection and Immunity.

The research raises the possibility of creating a screening test to gauge a dental patient's vulnerability to the condition.

Doves and Hawks, Hatched by Stress

Is your child a "dove," cautious and submissive when confronting new environments? Or perhaps you have a hawk, bold and assertive in unfamiliar settings? Those basic temperamental patterns are linked to opposite hormonal

responses to stress—differences that may provide children with advantages for navigating threatening environments, researchers report in *Development and Psychopathology*.

"Divergent reactions-both be-

haviorally and chemically—may be an evolutional response to stress," says **Patrick Davies**, a professor of clinical and social psychology and lead author of the study, noting that each technique may work better in certain family conditions. "When it comes to healthy psychological behavior, one size does not fit all," says coauthor **Melissa Sturge-Apple**, an assistant professor of clinical and social psychology.

Changing a Genetic 'Red Light' to Green

In a study published in the journal *Nature*, scientists discovered an entirely new way to change the genetic code, overriding an errant form of genetic signaling for the first time.

The findings, though early, are significant because they may ultimately help researchers alter the course of devastating genetic disorders such as cystic fibrosis, muscular dystrophy, and many

forms of cancer. The genetic code is the set of instructions in a gene that tells a cell how to make a specific protein.

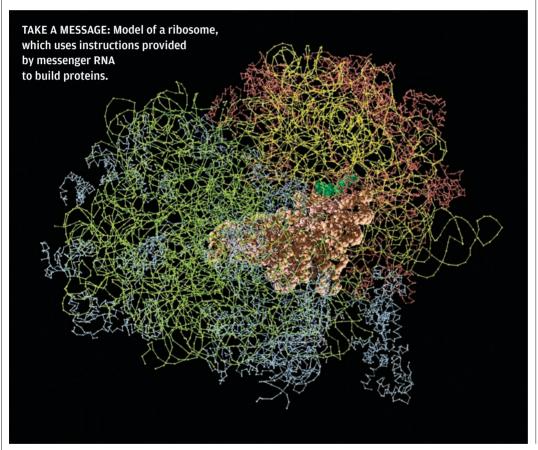
Central to the body's protein production process is messenger RNA, which takes instructions from DNA and directs the steps necessary to build a protein. For the first time, researchers modified messenger RNA and in doing so changed the original

instructions for creating the protein. The end result: a different protein than originally called for. **Yi-Tao Yu**, an associate professor of biochemistry and biophysics, is lead study author. **Robert Bambara**, chair of the department, says that the "ability to manipulate the production of a protein from a particular gene is the new miracle of modern medicine."



A Potent Illusion

Scientists have come up with new insight into the brain processes that cause an optical illusion. Jump off a treadmill and everything seems for a moment to be in motion; similarly, as a dartboard design moves, with the lines seemingly moving toward the center, an interspersed image of Rochester mascot Rocky seems to loom forward. But it's an illusion, caused by the way our brains have adapted to the inward motion of the background, which becomes a new status quo. Called the Motion Aftereffect, and first documented by Aristotle-minus Rocky-the phenomenon is caused by neural processes that occur whenever we see moving objects, according to brain and cognitive sciences doctoral student Davis Glasser. A study he conducted with advisor Duje Tadin, an assistant professor of brain and cognitive sciences, and colleagues at the Montreal Neurological Institute, was published in the journal Proceedings of the National Academy of Sciences.



Diabetes and Obesity Are a Daunting Duo for Pregnancy

Type 2 diabetes and obesity in pregnancy together raise a major red flag, according to new research published in the *Journal of Maternal-Fetal and Neonatal Medicine*. The study shows that both conditions independently contribute to higher risks, open-

ing the door to a wide range of pregnancy, delivery, and newborn complications. Obesity and type 2 diabetes are skyrocketing in women of childbearing age; the Journal of the American Medical Association reports that between 2007 and 2008, the

prevalence of obesity among adult women in the United States was more than 35 percent, while the Centers for Disease Control and Prevention say that about 11 percent of women over age 20 had diabetes in 2010. "We've never seen the degree of obesity and type 2 diabetes in women that we are seeing right now, because for a very long time diabetes was a disease of an older population," says senior study author **Loralei Thornburg**, an assistant professor of obstetrics and gynecology.





UNIVERSITY HISTORY

Eastman School: 90 Years Young

WAITING IN THE WINGS: As students arrived for the first day of classes at the Eastman School on Sept. 19, 1921, work was progressing on what would become Eastman Theatre at the corner of Gibbs and Main streets in downtown Rochester. Established by George Eastman as the first professional school of the University, the school is marking its 90th anniversary during the 2011-12 year. Over nine decades, the school has grown from two buildings to include the Annex, Student Living Center, Miller Center (including Sibley Library), Messinger Hall, and the Eastman East Wing, which opened in 2010-11. PHOTOGRAPH: UNIVERSITY LIBRARIES/DEPARTMENT OF RARE BOOKS, SPECIAL COLLECTIONS, AND PRESERVATION



Saying Farewell to a 'Tick-Tock' World

What does it mean when you tell someone the time? More than you might think.

By Adam Frank

WHAT TIME IS IT? IT SEEMS LIKE SUCH A simple question. But with just a little reflection—historical and cosmological—we can see that there's really nothing simple about time. Our ideas and our experience of time have changed again and again. And we seem poised to see them change once more in our lifetimes.

Ask a friend what time it is, and he might look at his watch and respond that it's 1:17 p.m. But what is 1:17 p.m.? What is the meaning of such an exact metering of minutes? There's nothing innate, objective, or Godgiven about this kind of time. Mechanical clocks didn't appear until the 14th century, and they had no minute hands-an invention that would take approximately another 300 years to appear. Did 1:17 p.m. even exist a thousand years ago for peasants living in medieval Europe, Song Dynasty China, or the central Persian Empire? Was there such a thing as 1:17 p.m. in the long millennia before the vast majority of human beings had access to any form of timekeeping device?

No. The moment 1:17 is a product of our own era, born in the industrial revolution when society found it had a use for minutes. Since then we've been building devices that can meter time into ever smaller units and building a society that makes ever-greater demands for every one of those time demarcations.

The last decades of the 20th century brought another revolution in human temporal experience. Everyone over the age of 20 has a foot on either side of the divide as human culture and human time stepped from the analog era into the digital domain. Many of us can still recall a world unmediated by silicon microcircuit chips.

Remember when you had to be home to get a call? Remember when you had to order a map from AAA to plan a trip? Remember when your calendar was something that hung on the wall?

Before the advent of cell phones, we were fundamentally more alone with our

thoughts and more present in the lives directly before us. There was nowhere else to be. Urgent or nonurgent communication had to wait until we could find a device connected by a wire to the wall. Now we communicate on a whim, filling time simply because we're bored or responding to a thought that crossed our mind. The simple act of walking down the street and calling a friend to check in is as profound and radical a shift in the experience, use, and

The last decades of the 20th century brought another revolution in human temporal experience.

Everyone over the age of 20 has a foot on either side of the divide as human culture and human time stepped from the analog era into the digital domain.

conception of time as anything that passed before, from the Neolithic age to the industrial revolution.

Given our proximity to this tectonic surge of cultural re-creation, it's impossible to know how long the digital age will last. The agricultural revolution reshaped human experience for many thousands of years. The industrial revolution created cultural forms that extended across centuries. Will the digital revolution simply lead us to a dead end, or will it drive sustainable forms of culture that cross genera-

tions? While we can't answer that question now, we're close enough to the dawning of the electronic era to see firsthand how new forms of technology directly reshape the human experience of time.

More remarkably, reflecting on the last 50,000 years of cultural transformation, we can expect that the changes in human time manifested through digital technology should mirror changes in cosmological time. That expectation has been fulfilled.

The introduction of mechanical clocks shifted the organization of the European day and eventually provided a new metaphor for the heavens-a precise, cosmic clockwork set in motion by God's hand. Centuries later, the introduction of steam power started the industrial revolution's new machine age and drove the rhythms of its workers' punch-clock lives. The science of thermodynamics, emerging from those steam-powered machines, advanced a new understanding of time and transformation in terms of energy, entropy, and evolution. Thermodynamics yielded its own metaphors and conceptual tools that reshaped cosmological thinking. Then, just before the dawn of the 20th century, trains and telegraph wires created new experiences of simultaneity across vast distances. Einstein's theory of relativity used its own new vision of simultaneity as a pivot point for merging space and time into space-time. Once a fully relativistic account of spacetime and its flexible geometry was available, cosmology was given its first complete language. Always and again, transformations in cosmic and human time surged back and forth, each one supporting the other in metaphorical and material realms.

By the last decades of the 20th century, silicon technology dominated our material engagement with the world. Machines made possible by silicon microcircuits—computers, personal digital assistants, cell phones, and GPS devices—were accelerating the immediate and very personal movement through daily life. These silicon "machines" moved at speeds so fast their cadence was



far more native to atoms than to humans. By building culture timed to their clock cycles, we've compressed our own time and experience in ways both thrilling and exhausting. In our working and personal lives we're expected to do more because these machines make it possible. And so we've entered a new time whose contours are as closely felt and intimately lived as the tick-tock world of our great-grandparents or the sun-parsed days of our distant ancestors.

At the same time, the scientific capacities unleashed in the computer age pushed our cosmic narrative of the Big Bang to its limits. Computer simulations, massive data-gathering projects, and space-based telescope platforms revealed new challenges to any cosmology that would begin with a beginning. In the closing years of the last century, the pace of life, time, and cosmic evolution all were set in a permanent state of acceleration.

Now with astronomers recognizing the reality that the entire universe is accelerating—expanding at ever faster rates as cosmic time moves forward—they are left trying to imagine new possibilities for cosmic origins. Was there really a Big Bang, or has the universe been moving through cycles of birth and death forever? Is there just one universe or does an infinite number of universes—a multiverse—exist, each perhaps with its own laws of physics?

Thus cosmic time and human time are set to change together once again, as they have so many times in the past. The stage is set, and we can only watch in wonder as the drama of human and cosmic time enter their next act.

Adam Frank, a professor of astrophysics, is the author of About Time: Cosmology and Culture at the Twilight of the Big Bang (Simon and Schuster, 2011), from which he adapted this essay. Frank is also a regular contributor to 13.7: Cosmos and Culture (www.npr.org/blogs/13.7), a website of NPR that explores the connections between science and culture.

UPDATE

Report on Student Death Released

Task force: Response was 'appropriate and consistent with the University plan for dealing with emergencies.'

By Kathleen McGarvey

THE DEATH OF JUNIOR JEFFREY BORDEAUX Jr. last winter was not something the University could have foreseen or prevented with information possessed at the time, according to a report commissioned by President Joel Seligman from the University's Office of Counsel.

The 36-page report, submitted to Seligman this summer, notes that the systems and policies in place at the time of the tragedy were similar to those at other universities and that the University's response was "appropriate and consistent with the University plan for dealing with emergencies."

Bordeaux died in January following a fight with junior Daren Venable on the Fraternity Quad. Venable was found not guilty of second-degree murder charges at a nonjury trial in April, when a Monroe County judge ruled that he had acted in self-defense.

In January, Seligman asked Sue Stewart, senior vice president and general counsel for the University, to review the University's policies related to the incident and submit a report to him.

The task force she led included three University attorneys and a University-retained law firm that specializes in higher education issues and that had no prior relationship with the University. The external law firm was asked to review the report and its methodology.

Seligman also charged the counsel's office to propose additional steps the University could take to provide a safe environment for all students, faculty, and staff. The report includes 23 recommendations,

and Seligman has asked Stewart to oversee their implementation.

"I do not believe that any of these recommendations would have prevented this tragedy," Seligman wrote in a Universitywide memo on the report. "All in the future may contribute, often in incremental ways, to further enhancing safety on our campus."

In acknowledging the thoroughness and persuasiveness of the report and the effort that went into producing it, Seligman recognized the anguish caused by the incident.

"Nothing in this report should detract from how painful and saddening were the death of Jeffrey Bordeaux Jr. and the subsequent criminal trial of Daren Venable," he wrote. "The pain to the family and friends of both of these young men is real and has been wrenching. My heart goes out to those who were touched so deeply and personally by this tragedy."

The full report is available online at www.rochester.edu/president/memos/2011/bordeaux-report.html. 3



Get Ready for 'The Sing-Off'

YellowJackets selected for singing competition starting September 19 on NBC

SING OUT LOUD: Tune in to NBC's reality singing competition, *The Sing-Off*, in September to see—and hear—Rochester's YellowJackets compete with 16 a cappella groups from across the country in this fall's edition of the show. The weekly competition culminates in a live season finale to name the grand prize winner.

SCOUTING REPORT

The Sporting News

What's the outlook for the Yellowjackets this year? Here's a quick rundown—by season—of what to expect from Rochester's sports teams.

Fall

Football The Yellowjackets are poised for a big year with 18 returning starters. Brendan Pidgeon '13 and Kobie Hamm '13 are both preseason All-Americans. The team plays its first home game on September 24 against Union. Catch the action a week earlier when the Yellowjackets take on St. John Fisher College in the Courage Bowl at Sahlen Stadium in downtown Rochester.

Field hockey A multifaceted attack is led by Allison Beardsley '12 and Anna Dobrzynski '12, who combined for 25 goals last year.

Men's soccer and women's soccer Both

teams are regulars in the NCAA Division III national championships. Rochester's women will be led by senior

striker **Ellen Coleman** '12 who has been an All-American for two straight seasons. Plenty of players will create offense for the men's team, including **Jake Cargill** '12 and **Max**

Eberhardt '12.

Men's and women's cross country

Watch for All-American **James Vavra** '12 and **Hillary Snyder** '12 at the head of the respective packs.

Volleyball The team has seven home dates, including the UAA Round Robin on October 15 and 16. **Casey Larsen** '12 was among the UAA leaders in kills and service aces in 2010.

TEAMWORK: Preseason All-American Kobie Hamm '13 (above) and returning UAA Player of the Year John DiBartolomeo (top right) will help lead the Yellowjackets this year.

Winter

Men's and women's basketball The

men reached the NCAA Division III Sweet 16 a year ago and return three starters, including All-American (and UAA Player of the Year)

John DiBartolomeo '13 while the women are seeking their seventh straight NCAA bid driven by an experienced senior class: Jodie Luther '12, Maddie Korber '12, Michelle Ketcham '12, and Kate Agan '12.

Men's and women's swimming and diving The women have won two straight Liberty League titles and the men have taken two of the last four.

Squash With two All-Americans returning to the lineup in Ben Fischer '13 and Andres Duany '13, look for squash to retain its top 10 ranking.



Spring

Men's and women's track and field

Rochester will host the New York State
Collegiate Track Conference outdoor championships on May 4 and 5. The men will be led
by school record-holder and graduate student
Francisco Ramirez. The women have several
defending state champions, including Claire
Crowther '13.

Men's and women's tennis The women were ranked as high as No. 20 last year, and Danielle Shreck '12 and Frances Tseng '13 will lead the way this year. The men have seven veterans returning, including seniors Brian Rice '12 and Matt Volkoy '12.

Softball Maddie Skellie '13 was the Liberty League Pitcher of the Year in 2010 while **Nina Korn** '14 was the Rookie of the Year. Both will lead softball this year.

Baseball The team has to replace four starters in 2012. **Alex Caghan** '12 was named to the *Jewish Sports Review* All-America Team in 2010 and 2011.

Golf In 2011, **Nicholas Palladino** '14 won the Phil Mickelson Award as the Division III Freshman of the Year.

Lacrosse With five March home games, the Yellowjackets are looking for a strong start to the season

Rowing Fueled by a bronze medal at the Dad Vail Championships in 2011, the team will continue to build. —Dennis O'Donnell

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