FERRIS WHEEL FEVER

NEW BOOK CHRONICLES THE LIFE AND TIMES OF THE MYSTERIOUS AND ICONIC 19TH CENTURY ENGINEER GEORGE FERRIS
The Curtis R. Priem Experimental Media and Performing Arts Center was alive with celebration Dec. 4-5 when alumni, students, and members of the campus community came together to commemorate the first decade of the successful implementation of THE RENSSELAER PLAN, the 10th anniversary of the tenure of President Shirley Ann Jackson, and the successful completion of the $1.4 billion capital campaign. To read more, see page 2.
Major League
The new East Campus Athletic Village is the latest stage in the physical transformation of Rensselaer.

Living and Learning
The recently launched CLASS initiative represents a new vision for student life.

Circles in the Sky
The life and times of George W.G. Ferris.
Tribute to the Transformation of Rensselaer

A standing-room-only concert by the inimitable Aretha Franklin was among an array of events celebrating the transformation of Rensselaer Dec. 4-5. The program chronicled the first decade of the implementation of The Rensselaer Plan, the 10th anniversary of the tenure of President Shirley Ann Jackson, and the successful completion of the $1.4 billion capital campaign.

At a breakfast event for the Rensselaer community, President Jackson shared her thoughts during a multimedia presentation titled “The Renaissance at Rensselaer: A 10-Year Retrospective.” The event also featured the premiere of a new Institute video celebrating the decade of transformation and a donor recognition ceremony acknowledging the philanthropic support of the many individuals who helped make the success of the plan possible.

The weekend also included a performance by violin virtuoso Joshua Bell, as well as presentations that focused on Rensselaer’s academic and student life programs.
Enhancing the Undergraduate Experience

The CLASS initiative will foster a full-fledged living-learning environment at Rensselaer

While much attention to the transformation of Rensselaer has focused on changes to the physical plant, the intention of The Rensselaer Plan always has been a comprehensive enhancement of the university, including the undergraduate student experience.

To create the environment which will foster a full-fledged living-learning environment at Rensselaer, we have put into place a transformational program that we call CLASS—Clustered Learning, Advocacy, and Support for Students.

The CLASS initiative creates a new paradigm which establishes a residential college model for undergraduates within a great technologically rooted research university. It elevates the breadth and quality of support, providing students with a greater sense of community and belonging, and it ensures that every student receives the best leadership development and growth opportunities available.

CLASS involves the intentional leadership and guidance of students living in groups of residence halls—residential clustering—and pursuing their overall Rensselaer student experience as a distinct undergraduate class—time-based clustering.

In the residential clustering, clusters of residence halls, or Commons, are supported by live-in Commons assistant deans—who are student life professionals—as well as upper-class and graduate student assistants, who live in the residence halls. Faculty Deans of the Commons—who are tenured professors—will live in university-owned houses near the Residential Commons. They will be responsible for overall leadership in guiding the intellectual, cultural, and social life of students in the Residential Commons, in partnership with student life professionals.

The “time-based clustering” aspect extends our award-winning First-Year Experience, to phase in a Sophomore Year Experience, in which all sophomores (beginning with the class of 2013) will live on the Troy campus, or in fraternities or sororities that meet stringent university standards, and that have signed a Greek Commons Agreement with the Institute.

Class deans will take over each rising sophomore class from the dean of the first-year experience, and will work with that class until it graduates. They will be class advocates, and the connectors and facilitators for that class with all aspects of the Institute, and beyond. They will partner with the Dean of Undergraduate Education, Faculty Deans of the Commons, live-in Commons Assistant Deans, the Dean of Students, and others, to provide a broader panoply of intellectual, cultural, and leadership experiences, and to bring the Institute’s mentoring, counseling, learning assistance, and career planning services closer to students.

As important as scholarship and research are to a major research university—and they are our raison d’être—a university, also, must be a place of intellectual and personal growth and development.

CLASS involves the intention to encourage all students to participate in international tours and experiences, and to bring the Institute of thought, and experience.

Already, campus dialogue is burgeoning. We have engaged speakers as diverse as the chairman of the New York Stock Exchange Group, an ESPN radio and TV personality, political leaders, and artists and musicians—both celebrated and innovative. We have lecture series, classical concert series, speakers’ fora, and 17 student performing groups which develop and showcase student talent and interest.

The CLASS initiative will integrate these and the other sectors and experiences of campus life, through an ongoing dialogue that examines meaning and context for what we do at Rensselaer, and for the larger national and global issues of our time. The goal is to enhance community, experiential learning, and individual growth; to expand intellectual rigor and sophistication; and to help our students develop a nuanced and thoughtful global outlook.

When it is complete, the CLASS college model will integrate and unify other aspects of campus life. We, also, have begun the process to “internationalize” the student experience with student internships abroad, athletic team participation in international tournaments, and performing arts trips abroad, as well.

Eventually, we also will create a Center for Off-Campus Students, to extend the continuity of the undergraduate experience to those who are living in off-campus, non-Institute-sponsored housing.

CLASS will make the undergraduate experience richer, more intentional, and more seamless. By creating a residential college model, the CLASS initiative makes Rensselaer Polytechnic Institute unique among technologically based major research universities.

The environment of a university must foster a stimulating overall intellectual, cultural, and social milieu—where ideas are expressed, where contemporary events are examined for meaning and context, where the mind is enlarged through discourse, diversity of thought, and experience.

CLASS will make the undergraduate experience richer, more intentional, and more seamless. By creating a residential college model, the CLASS initiative makes Rensselaer Polytechnic Institute unique among technologically based major research universities.
Change for the Good at the ’Tute

I must comment on the photo and accompanying text that appear on pages 2 and 3 of the September 2009 Rensselaer alumni magazine. That brief two-page entry demonstrated several changes for the good that appear to have taken place since my time at “The Tute.”

First of all was the appearance of the 8th Street Approach. As freshmen in the fall of 1965, my class was warned to stay away from “The Approach.” It was in such poor condition that climbing down it was dangerous and if you did not injure yourself on the climb, you would be entering an area of Troy with at best a dubious reputation.

Secondly, I can assure you there were no Welcome Festivals hosted by the “communiversity,” except perhaps for Happy Hour promotions at some of the local bars. Remember, in 1965 the legal drinking age in New York state was 18.

Thirdly, I recall our freshman class consisted of approximately 1,000 men and only 32 women. For both social and societal reasons, it is good to see the male/female ratio at what is still predominantly an engineering institution has improved as much as it has.

Finally and most impressively, I wish to commend President Jackson for taking the time to personally greet each incoming student. I frankly do not recall the name of the gentleman who was president during my stay at RPI and I believe I saw him only twice—once for opening statements during freshman orientation and then again at commencement four years later. I know I never had the opportunity to shake his hand. BRAVO, President Jackson!

Richard Jerzyk ’69
Coraopolis, Pa.

Times Have Changed!

I was very impressed to read about the new ECAV facility at RPI. It looks great, as does the football field. It led me to consider how times have changed since I was at RPI in the 1960s.

I entered as a freshman in September 1961, graduated with a B.ChE in 1965 and continued on to receive my Ph.D. in 1968. During those seven years, the RPI football team did not win one game—yes, not one. They lost every one of them until their last game in 1967 when they were playing a little-known college, whose name I have forgotten. It was added to our schedule, I think, to ensure that we would finally win one game.

With about two minutes left in the game, we were ahead by 16 points with our team lined up for a field goal. That kick was blocked and run back for a touchdown. The two-point conversion was successful, as was the subsequent onside kick. Our opponent then drove down the field and scored a touchdown and the 2-point conversion to tie the game. Our certain victory turned into a terrible tie, but we tore down the goal posts anyway.

It was the closest the team ever got to a victory in those seven years I was there. But at least the hockey team was great, and the student body had enough sense to vote to retain football even during the height of those down years. From the recent past successes of the football team, that seems like a great decision.

If you find my facts difficult to believe, just look it up. We usually made the Saturday football scoreboard on national TV those seasons as the longest losing streak in the country continued each week.

Jack Cholette ’65
Rochester, N.Y.

Kudos on Fall Reunion Weekend

I want to comment on a great Reunion Weekend [Staying Connected, March 2009]. To reiterate the thought with which I started at the Class of 1959 Reunion dinner, “WOW!” Not only did that describe the dinner, but I believe that it describes the entire weekend. I have received many e-mails expressing the same thought, that it was a great weekend.

Apart from the efforts of our committee, I believe the success of the weekend was attributed to the great assistance provided by Kathy Kinsey and the Alumni Office. Also of very great significance was having this weekend in the fall with a live campus, including interaction with students in clubs, athletic teams, fraternities and the like, and attending all of the usual campus activities including sporting events.

I was told that just the idea of this fall reunion was enough to increase the attendance this year. Interestingly, the one downside which was discussed was the weather. Quite frankly, I’ll take a beautiful fall day over a hot June day anytime. In other words, the one perceived downside is in my view an upside.

I must admit that I approached this weekend as the last great hurrah for our class, without much thought of the future. But after this weekend, I have a completely different state of mind. I’m already thinking ahead to a great 55th reunion in five years.

Marvin Petry ’59
Potomac, Md.

We’d love to hear from you! To provide space for as many letters as possible, we often must edit them for length. Address correspondence to: Rensselaer Magazine, Strategic Communications and External Relations, Rensselaer Polytechnic Institute, Troy, NY 12180; e-mail to alum.mag@rpi.edu; or call (518) 276-6531.
The Rensselaer community gathered to celebrate and honor the academic achievements of faculty and students at the 2009 Honors Convocation Oct. 24.

"To be counted among the best at Rensselaer requires talent, commitment to excellence, imagination, daring, perseverance, and countless hours of hard work," said President Shirley Ann Jackson. "The scholars whom we applaud today—more than 350 outstanding men and women—have brought honor and distinction to themselves, and to Rensselaer. In so doing, they have raised the bar for all of us, set new examples to emulate, and elevated our aspirations for the future.

Parents, family, and friends on campus for Family Weekend looked on as Founders Award winners, students with a 4.0 GPA, graduate fellowship awardees, and faculty members were honored during the ceremony.

In addition, 229 members of the Class of 2013 who are Rensselaer Medalists also were honored. The Rensselaer Medal was first presented in 1916 with two purposes: to recognize the superlative academic achievement of young men and women, and to motivate students toward careers in science, engineering, and technology. It is awarded to promising secondary school juniors who have distinguished themselves in mathematics and science, and to the top math and science juniors at nearly 4,000 high schools around the world.
FOR MORE THAN 25 YEARS, BENEFACORS Betty and Howard Isermann ’42 have been visionary supporters of biotechnology at Rensselaer. On Oct. 2, the faculty, staff, and students of the Howard P. Isermann Department of Chemical and Biological Engineering gathered to honor their lifetime of philanthropy.

A morning symposium began with remarks by Jonathan Dordick, the Howard P. Isermann Professor of Chemical and Biological Engineering and director of the Center for Biotechnology and Interdisciplinary Studies. Department chairman Shekhar Garde detailed the impact of the Isermanns’ generosity, which has supported more than 250 graduate students over the past 25 years, many of whom have built influential careers in industry, laboratories, and classrooms across the nation. The symposium featured presentations by two past recipients of the Isermann Graduate Fellowship: Kaushal Rege, Ph.D. ’04, an assistant professor in the Ira A. Fulton School of Engineering at Arizona State University, and David Wood, M.S. ’97, Ph.D. ’00, a visiting research scholar in chemical engineering at Princeton University.

A longtime member of the Board of Trustees, now serving as honorary trustee, Howard Isermann expressed his support of the remarkable advances in the department over the years. “To see all of this happening in our lifetimes is a thrill difficult to put into words,” he said. “My fondest hope is that in the coming years, Rensselaer will be renowned for its contribution to the world of biotechnology.”

The symposium was followed by a luncheon attended by members of the Board of Trustees, and faculty and students of the Isermann Department of Chemical and Biological Engineering—the only academic department on campus named in honor of a major benefactor. In her remarks, President Shirley Ann Jackson said, “The effect of their generosity ripples, like a pebble dropped in water, farther than one could have imagined.” She called attention to Isermann’s early and emphatic support of biotechnology, saying, “It is essential that we develop our capabilities in the biological sciences, in biochemical and biomedical engineering, in nanotechnology—and in the new fields developing across these realms.”

In closing, President Jackson said, “On behalf of all of us at Rensselaer, and from the bottom of our hearts, thank you for a lifetime of support.”

In honor of their support of biotechnology and The Rensselaer Plan, Rensselaer has named the Howard P. Isermann ’42 Biochemical Engineering Laboratory in the Center for Biotechnology and Interdisciplinary Studies.
Marcella Szablewicz, a doctoral candidate in the Department of Language, Literature, and Communication in the School of Humanities, Arts, and Social Sciences, has spent much of her life immersed in Chinese language and culture. Her father is a high school professor of East Asian studies, and she started studying Chinese in high school and is fluent in speaking and writing Mandarin Chinese. Recently, Szablewicz was awarded a Fulbright U.S. Student Scholarship to China in the field of communication. She will use the grant to conduct research related to the "online and offline practices of everyday life in Chinese Internet cafes."

"In China, people are using the Internet for many different reasons. Over the years, I have witnessed the pace and growth of Internet cafes in China," says Szablewicz. "I first traveled to China when I was 15, and at the time, e-mail was just starting. When I visited China in 2002, one could see Internet cafes all over the country filled with young people and others who were either playing games or chatting online."

According to an annual report developed by the China Internet Network Information Center, by the end of 2008, roughly 298 million people in the country were using the Internet. Szablewicz says that the technological transformation sparked her continued interest in the country, and offered an opportunity to explore the social and cultural impact that Internet use was having on the lives of young people living in China. Using the Fulbright award, she will focus on investigating the societal dimensions of Internet technology used within the context of government and mass media disapproval.

Much of Szablewicz's research will be carried out in urban China, and includes a mixed-methods research strategy that incorporates archival research to document how Internet use has been portrayed over time and how the government has responded.

Szablewicz is one of more than 1,500 U.S. citizens who will travel abroad for the 2009-2010 academic year through the Fulbright U.S. Student Program. Established in 1946 under legislation introduced by the late Senator J. William Fulbright of Arkansas, the program's purpose is to build mutual understanding between the people of the United States and the rest of the world.

A group of ambitious Rensselaer students sailed up the Hudson River this fall, propelled by pollution-free hydrogen fuel cells and a clear vision for a cleaner, greener future.

Their boat, the 22-foot New Clermont, is fit with a pair of 2.2-kilowatt fuel cell units. The group of engineering, science, and management students sailed the boat from New York City to Troy, recreating the famous voyage made 200 years ago by Robert Fulton. While Fulton used his boat, the Clermont, to prove the viability of steam power to the world, the New Clermont aimed to highlight the potential of hydrogen as a viable fuel for transportation.

"At its core, the New Clermont Project is about awareness. It's a fun way to teach people about hydrogen energy," says doctoral student William Gathright. "We're high-tech environmentalists. We want to share our vision of a time when people can take a pleasure cruise on their boat, or drive to the store, without leaving a trail of pollution and toxins behind them. We hope to inspire and challenge them to think of ways of making that vision a reality."

Gathright, a doctoral student in the Department of Materials Science and Engineering and a National Science Foundation IGERT Fellow who is also pursuing a master's degree in management from the Lally School of Management & Technology, assembled a volunteer team of undergraduate and graduate students from a wide spectrum of academic disciplines.

The team's only physical asset, at first, was the boat itself—a neglected vessel that Gathright promptly renamed the New Clermont. The 40-year-old sailboat is a Bristol 22, sometimes called a Bristol Caravel, and measures 22 feet from aft to bow.

Along with major repairs, maintenance, and scrubbing away two decades worth of grime, Gathright and the team used their engineering know-how to prep the New Clermont to support a pair of fuel cell units. The units, which are GenDrive class 3 systems on loan from Latham, N.Y.-based fuel cell developer Plug Power, each weigh about 500 pounds and stand three feet wide by three feet tall.

"Just as Robert Fulton wanted to prove to the world that steam was a viable, economical means to power boats and unleash the economic potential of our waterways, we want to open people's eyes to the viability of hydrogen and fuel cells as a way to power boats, and one day maybe even our cars, trucks, and homes," says Lally School MBA student Leah Rollhaus, who helps lead the New Clermont Project.

For more information on the New Clermont Project, visit www.newclermont.org.
New York Stock Exchange Chairman Delivers Reinert Lecture

This fall, the Lally School of Management & Technology hosted a weekly dialogue series exploring new and emerging ideas in the world of management and business. The series focused on “Doing Business in an Era of Significant Change” and showcased innovation in diverse fields, including finance, technology commercialization, energy, information technology, healthcare, publishing, and ethics.

Kicking off the series on Sept. 2 was the Jerome S. Reinert ’56 Visiting Executive Lecture delivered by Marshall Carter, chairman of the New York Stock Exchange (NYSE) Group and deputy chairman of the parent company NYSE Euronext. Carter shared his thoughts on “Navigating a Perfect Storm—Regaining Our Bearings After the Global Financial Crisis.” More than 300 people, including Rensselaer students, faculty, staff, and alumni, attended the lecture. Carter also met with Lally and ROTC students while he was on campus.

Carter was chairman of the board of directors of the New York Stock Exchange for two years prior to the merger. He has served as a director of the NYSE since November 2003. Most recently, he served as a lecturer in leadership and management at the Sloan School of Management at Massachusetts Institute of Technology and Harvard’s Kennedy School of Government.

Carter is a former Marine Corps officer who was awarded the Navy Cross and Purple Heart during two years’ service as an infantry officer in Vietnam. He also served in 1975-76 as a White House Fellow at the State Department and Agency for International Development.

The annual Jerome S. Reinert ’56 Visiting Executive Series brings distinguished speakers from academia and business to Rensselaer to share their research, views, and academic and career experiences with members of the campus and surrounding community.

Researchers at Rensselaer have received a $1 million grant from the U.S. Department of Defense (DOD) to model how different metals are affected by neutron irradiation.

The new three-year study, awarded by the DOD’s Defense Threat Reduction Agency and led by Suvranu De, associate professor in the Department of Mechanical, Aerospace, and Nuclear Engineering, could lead to more effective, more predictable performance of electronic shielding materials in satellites and structural components in submarines and nuclear reactors.

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"When satellites are exposed to radiation in space, neutrons impact the atoms of the satellite components, dislodging them from their original positions. These atoms then collide with others, starting a cascade that could ultimately lead to the metal becoming brittle,” De says. “You don’t want a brittle wall on a nuclear submarine, or the electronics in a satellite to be exposed to radiation, so we’re looking very carefully at how the mechanical properties of metals change over time when exposed to radiation. This should allow us to accurately predict the expected lifespan of these metals, and then design better devices.”

De and his team will build complex computational models to simulate the irradiation of different metals at the atomic level, and then scale up to see how the phenomena at the atomic level impact the overall mechanical properties of the material and device.

The model will look at the cause-and-effect of atomic events that last mere picoseconds—or one-trillionths of a second. The nanoscale model will inform a microscale model, which measures events in microseconds and nanoseconds, or one-millionths to one-billionths of a second. Similarly, the microscale model will feed into a larger model, which in turn will feed into the life-size model, which measures the irradiation of metals in terms of seconds, days, and years.

The trick, De says, is developing code that allows the different models to “speak the same language” and correctly share information, in order to create the larger, self-consistent, multiscale model.
Ultrathin Nanoblades for Hydrogen Storage

Rensselaer researchers have grown magnesium crystalline nanoblades that facilitate diffusion, allowing fast hydrogenation and dehydrogenation. The blades are grown by chemical vapor deposition at an oblique angle. The nanoblades have high surface area structures and a thickness as small as 15 nanometers so that hydrogen can quickly diffuse through the blades. Spacing can accommodate 30 percent volume expansion between magnesium and magnesium hydride during cycling. Theoretically, the nanoblades can store up to 7.6 weight percent of hydrogen. International patents are pending.

New Drug Library of Opiate Analogues Treats Drug Addiction and Other Conditions

These latest compounds for drug discovery are the development from Chemistry and Chemical Biology Professor Mark Wentland’s carboxamido-containing opioids (U.S. Patent 6,784,187). Activities of the compounds have been determined in vitro and can be used to treat: pain, seizure disorders, diarrhea, anorexia, respiratory depression, and several other health issues. A family of similar compounds by Professor Wentland was licensed and is currently undergoing clinical trials. International patents are pending.

High-Efficiency Solar Panel

Electrical, Computer, and Systems Engineering Professor Partha Dutta has invented a low-cost, high-efficiency, solar photovoltaic panel that, unlike traditional systems, need not be continuously rotated to face the sun during the day. An array of spherical concentrators aggregate light independent of the angle from which it enters. Behind the simple façade of the Web site will rest billions of pages of data all semantically tagged and ready to be accessed and interpreted by the computer. The user needs only to type a question and it will be answered using data input by other users around world.

The team sees the technology helping to lead a revolution in the citation and, possibly, review of scientific data. Much like Wikipedia, the data on their Web sites and technologies will be viewed and used by a wide range of users, from leading scientific experts to elementary school teachers, and all reviewers will be able to comment and cite the data.

To learn more about these and other Rensselaer technologies, go to www.rpitechnology.com or contact Natasha Sanford at sanfon@rpi.edu.
**NETWORK SCIENCE**

**Rensselaer To Lead Center for Social and Cognitive Networks**

With $16.75 million in funding from the Army Research Laboratory (ARL), Rensselaer will launch a new interdisciplinary research center devoted to the study of social and cognitive networks.

The Center for Social and Cognitive Networks is part of the newly created Collaborative Technology Alliance (CTA) of the ARL, which includes a total of four nationwide centers focused on different aspects of the emerging field of network science.

The Rensselaer center will be headed by Boleslaw Szymanski, Rensselaer’s Claire & Roland Schmitt Distinguished Professor of Computer Science. Rensselaer will receive $8.6 million of the $16.75 million in total funding to lead the new center for its first five years. An additional $18.75 million is anticipated from the ARL for a second phase, which would bring the total funding for the interdisciplinary center to $35.5 million over 10 years.

“Together with other centers of the CTA, we are creating the new discipline of network science,” says Szymanski. “The centers will be in the leading position to define this new discipline in all its complexity. Rensselaer researchers are very pleased to be a leading part of this transformation.”

The Center for Social and Cognitive Networks will link together top social scientists, neuroscientists, and cognitive scientists with leading physicists, computer scientists, mathematicians, and engineers in the search to uncover, model, understand, and foresee the complex social interactions that take place in today’s society. All aspects of social networks, from the origins of adversarial networks to gauging the level of trust within vast social networks, will be investigated within the center.

Szymanski will be leading the interdisciplinary team that includes James Hendler, senior professor of the Tetherless World Research Constellation and head of information technology; Wayne Gray, professor of cognitive science and acting dean of the School of Humanities, Arts, and Social Sciences; Sibel Adali, associate professor of computer science; Malik Magdon-Ismail, associate professor of computer science; Mark Goldberg, professor of computer science; Chjan Lim, professor of mathematical sciences; William Wallace, professor of decision sciences and engineering systems; Gyorgy Korniss, associate professor of physics, applied physics, and astronomy; and Michael Schoelles, research associate professor of cognitive science.

The center will study the fundamentals of social and cognitive networks and their roles in today’s society and organizations, including the U.S. Army. The goal will be to gain a deeper understanding of these networks and build a firm scientific basis in the field of network science.

To read more about the center’s research focus, go to [http://news.rpi.edu/update.do?artcenterkey=2647](http://news.rpi.edu/update.do?artcenterkey=2647).

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**RENSSELAER AT HARTFORD**

**International Scholars Program Goes to Rome**

Rensselaer at Hartford Vice President and Dean John Minasian traveled with members of Rensselaer’s International Scholars Program (ISP) Class 2 to Rome this summer as part of the ISP’s 10-week summer program.

The International Scholars Program is a one-year accelerated master’s degree program that includes a 10-week summer semester abroad. It is designed for recent college graduates and young working professionals who are looking for a competitive edge to jump-start their careers and to get the jobs best suited to their skills and credentials.

The 22 students in ISP Class 2 earned 40 percent of the requirements toward either a Rensselaer M.S. in management degree or an M.S. in information technology degree during the summer program. The group sailed aboard Cunard Line’s Queen Mary 2 for a transatlantic journey from New York to Southhampton, England. The students traveled next to Rome to study for four weeks, and then continued on to Shanghai for another four weeks.

The 10-week summer semester abroad is designed to immerse students in the cultures, social environments, and day-to-day living experiences of Rome and Shanghai, as well as provide an intense learning experience centered around those cities’ business and economic societies. Students of the program met and were taught by leaders in industry, and visited major corporations in both cities.

Of the 22 students in ISP Class 2, 19 of them are continuing their studies at Rensselaer to finish their master’s degrees. Applications are currently being accepted for ISP Class 3. A new Energy Systems curriculum has been developed as part of earning an M.S. in engineering science. For more information, visit: [www.ewp.rpi.edu/isp](http://www.ewp.rpi.edu/isp).
A NEW TRADITION BEGAN AT RENSSELAER this fall, when more than 2,000 alumni and guests returned to campus for Reunion & Homecoming Weekend, Oct. 2-4. The move to the fall was applauded by attendees. “Our alumni welcomed the opportunity to be part of active campus life,” says Jeff Schanz, assistant vice president for alumni relations. “The interaction among current students and our returning guests was a key to the success of the weekend.”

In addition to classes ending in 4 or 9 and the Class of 1952 who enjoyed traditional Class Reunions, many other alumni groups also returned to celebrate (see Class Notes for more photos).

Greek organizations that held events for their members included Alpha Gamma Delta, Alpha Phi, Delta Tau Delta, Chi Phi, Delta Phi, FIJI, Lambda Chi Alpha, Phi Iota Alpha, Phi Mu Delta, Pi Beta Phi, Pi Kappa Alpha, Phi Sigma Sigma, Phi Sigma Delta, Rensselaer Society of Engineers, Sigma Phi Epsilon, Tau Kappa Epsilon, Theta Chi, and Theta Xi.

Athletic teams who held events for their former members included women’s soccer, men’s lacrosse, baseball, women’s lacrosse, rugby, softball, football, and swimming and diving.

Special interest groups also participated in the weekend, with a reception for graduate degree holders, a Phalanx reception, and a bowling night for young alumni, and music alumni returned to dedicate the Joel Dolven Conductor’s Suite in the Curtis R. Priem Experimental Media and Performing Arts Center.

The highlight of the weekend was the grand opening of the East Campus Athletic Village. The ribbon-cutting ceremony was followed by the Celebration of Classes inside the new arena. President Jackson and her panel of judges were presented with “bribes,” as classes vied for spirit awards. FanFest featured food, music, and games for the kids.

Other events included: President Jackson’s State of the Institute address, presented to a packed house in the EMPAC concert hall; “Back to Class,” which gave alumni the opportunity to sit in on a live classroom; an all-class buffet followed by live comedy acts; and a performance by Per Tengstrand, world-renowned concert pianist.

The numbers prove that the move to the fall was a good one. More than 50 percent of those who came were attending their first Reunion and/or Homecoming event, and nearly 23 percent of attendees were participating in their first Rensselaer alumni program. According to Schanz, “it was especially exciting to welcome back nearly 500 of our young alumni (members of the Classes of 1999-2009).”

Mark your calendars now for Reunion & Homecoming 2010, scheduled for Oct. 15-17.
SAM CHIAPPONE, manager of the fabrication and prototyping facility in the School of Engineering, has received the 2009 Pillar of Rensselaer Award, the highest honor given to a Rensselaer staff member. The Pillar Award is presented annually to a staff member who understands the Institute’s mission and history, has been a role model for other employees, has shown concern for students and their welfare, and has added to the human dimension of the school, and has played an active role in his or her home community. Chiappone was cited for his demonstrated understanding of Rensselaer’s mission and history, and was praised as a role model and mentor for other employees and students, and his active role in the community.

FENGYAN LI, assistant professor of mathematical sciences, has won a Faculty Early Career Development Award (CAREER) from the National Science Foundation (NSF). Li will use the five-year, $582,112 award to design, analyze, and implement computer algorithms for solving complex mathematical problems arising in sciences and engineering. The CAREER Award is given to faculty members at the beginning of their academic careers and is one of the NSF’s most competitive awards.

JAMES HENDLER, senior constellation chair in the Tetherless World Constellation and assistant dean for information technology, has been named to the Air Force Scientific Advisory Board (SAB), a 52-member federal panel of the nation’s top scientists from academia, industry, and national laboratories. Hendler was tapped for the SAB, in part, for his expertise in cybersecurity, network security, military information systems, and Web science. The SAB advises the Secretary of the Air Force and the Chief of Staff on scientific and technical issues. Hendler also serves as a director of the international Web Science Research Initiative.

FRANCINE BERMAN, vice president for research, has received the inaugural Ken Kennedy Award from the Association for Computing Machinery and the IEEE Computer Society. Berman was recognized for her efforts to build a national cyberinfrastructure. She was cited for “her influential leadership in the design, development, and deployment of national-scale cyberinfrastructure.” Berman is a leading advocate for the development of a national-scale cyberinfrastructure for the access, use, stewardship, and preservation of the digital data that form the foundation of the Information Age.

JOEL GIEDT, assistant professor of physics, has won an Outstanding Junior Investigator (OJI) award in high-energy physics from the Department of Energy (DOE). He is the first from Rensselaer to receive this honor. The five-year, $484,000 award will fund Giedt’s research in lattice field theory beyond the standard model of particle physics. DOE established the OJI program in high-energy physics in 1978 to identify exceptionally talented high-energy physicists early in their careers and to support their research. Awards are extremely competitive, with only five to 10 proposals receiving funding each year.

WAYNE GRAY, acting dean of the School of Humanities, Arts, and Social Sciences and professor of cognitive science, has been elected a fellow of the Cognitive Science Society. Gray was honored for “sustained excellence and ... sustained impact on the cognitive science community.” Gray’s primary research interests include integrated cognitive systems, computational cognitive modeling, and cognitive engineering.

JOEL PŁAWSKY, professor of chemical and biological engineering, was recently named a fellow of the American Institute of Chemical Engineers. A recognized thin-film expert, Pławsky was commended for leaving a unique mark on the academic field and for “significant contributions to the chemical engineering profession.” Pławsky’s primary research interests are in the fields of thin films, interfacial phenomena, and transport phenomena. One of his thin-film experiments has been installed on the International Space Station.

ROBERT HULL, the Henry Burlage Jr. Professor of Engineering and head of the Department of Materials Science and Engineering, was recently named a fellow of the Materials Research Society. Hull was recognized “for advances in fundamental understanding of semiconductor thin films and nanostructures, and for distinguished leadership in the materials community.” Hull is best known for his research into fundamental growth mechanisms of semiconductor films and the self-assembly of nanostructures, and for his work in exploring potential applications of these films and structures to future nanoelectronic devices.

HOWARD LITTMAN, fluid mechanics expert and professor emeritus in the Department of Chemical and Biological Engineering, was recently named a fellow of the American Institute of Chemical Engineers. Littman was lauded for significant contributions to the field of chemical engineering. He is widely published, holds several patents, and consults on fluid dynamics and other topics for more than 15 industrial organizations and governmental agencies.

MYLES BRAND ’64, a Rensselaer trustee and a national leader in the worlds of academe and college athletics, died Sept. 16. A former university president, Brand became the fourth president of the National Collegiate Athletic Association in 2003, the first college president to hold the title. From 1994 through 2002, Brand was president of Indiana University. He served as president of the University of Oregon from 1989 to 1994. Brand was inducted into the Rensselaer Alumni Hall of Fame in 2004. He is a recipient of the RAA Fellows Award, the Rensselaer Alumni Association Albert Fox Demers Medal, and an Honorary Doctorate of Humane Letters. Brand served as chair of the board of directors of the Association of American Universities, as a member of the board of directors and executive committee of the American Council on Education, and a member of the board of directors of the National Association of State Universities and Land Grant Colleges. He served as a board member of the American Philosophical Association and of the University Corporation for Advanced Internet Development, the umbrella organization of Internet2. He earned his B.S. in philosophy from Rensselaer in 1964, and his Ph.D. in philosophy from the University of Rochester in 1967.
The new East Campus Athletic Village is the latest stage in the physical transformation of Rensselaer
EVEN THE APPROACH TO RENSSELAER’S NEW EAST CAMPUS ATHLETIC VILLAGE IS MAJOR LEAGUE.

The suspended walkway that crisscrosses the west wall is slow-building and wide. The views are generous: of the Harkness Track and Field, the Renwyck Field, the Houston Field House, and the expanse of cities and hills beyond. It is easy to envision the procession of fans who make this climb together on a big game day in red face paint and oversize Engineers jerseys.

But this day, a quiet Wednesday morning, the impact on arriving at the top of the 5,200-seat stadium is no less eye-popping. From this height a viewer takes in 120-by-90 yards of dark green FieldTurf emblazoned with the red “RPI” emblem at the 50-yard line, cushioned by red seating and a glass wall. A lone athlete is doing a series of timed sprints, crossing in and out of faint mist for the better part of an hour. This might well be a motivational video for Rensselaer and the expansive experience it provides its students. But it is instead varsity soccer center midfielder Cate Harvey, working out in the grandest of settings.

“I usually go there every morning. It’s a stress reliever, to tell you the truth. I go there and leave everything else behind,” says Harvey, a sophomore chemistry major who has maintained a 4.0 GPA. “It is really dramatic to be on a field this big and new. You feel like you are packing down brand-new turf.”

By Jane Gottlieb
This is the East Campus Athletic Village, which officially opened Oct. 3, the latest stage in Rensselaer’s transformation into a university whose students can realize their full potential in and outside the classroom.

The $92 million facility brings an unprecedented level of quality to Rensselaer athletics, and promises to have a major impact on the student experience almost overnight. With the refurbished Houston Field House hockey arena and the glass and steel East Campus stadium as its anchors, the East Campus Athletic Village (ECAV) is an elaborate but comfortable complex that also includes three turf fields, two basketball gyms, deluxe locker rooms for 10 varsity teams, locker rooms for recreational users, a café, an Athletic Hall of Fame, athletics offices, two VIP areas, and two floors of press seating. Add to that professional-class training facilities with a sports medicine suite and a 4,800-square-foot strength and conditioning center.

But the implications spread well beyond its sunken hydrotherapy tub and aerated locker rooms with teaching walls.

The ECAV is an engine driving change across the community. With it, Rensselaer can welcome home more alumni, strengthen recruitment of promising students and student athletes, and enrich Troy and its environs.

Most of all, ECAV will leave a profound mark on the vast majority of Rensselaer students who already take part in sports, ranging from the Division I hockey player to the occasional jogger.

“It is often said that it is on the playing fields—and in other athletic venues—that leaders are made,” said President Shirley Ann Jackson in her grand-opening remarks. “But at Rensselaer, athletics are only part of the equation, because Rensselaer already attracts students who have demonstrated leadership potential. Rensselaer develops that potential through the totality of the student experience, so that our graduates are prepared to become leaders in technologically rooted fields. This is our Rensselaer heritage. This is who we are.

“With this addition to the Troy campus, we continue to transform the student experience, to go beyond the standard, to excel—across the board, in all endeavors—and to do even more to create leaders. At the same time, with the initiation of the village concept, we bring our Rensselaer community together in a new way. Our goal—as with all that we are doing to transform Rensselaer for the 21st century—is to create a unique residential undergraduate college, within a world-class technological research university.”

“The East Campus will transform the athletic experience for all of our students as well as the staff and faculty and everyone else involved with Rensselaer,” says Athletics Director James Knowlton. “It gives outstanding intercollegiate athletes more field time and superior facilities, but also opens up space for our intramurals and club athletes and provides open recreation for the entire student body.”

On any given night in the fall, the East Campus stadium and adjacent fields light up with several hundred students engaged in a dozen or more matchups of intramural soccer, field hockey, and lacrosse. With varsity, intramural, and club teams able to play there, the Alumni Sports and Recreation Center, the ’86 Field, Anderson Field, and Mueller Center are more available for pickup basketball, an impromptu Frisbee toss, or a relaxed workout.

“It could be a little bit overwhelming trying to lift weights at the Mueller Center next to one of our varsity football players,” says Grand Marshal Michael Zwack ’11. “Now, with the East Campus Athletic Village, everything opens up. We’re planning a review of all the facilities to see how we can continue improving the student life experience.”
EN YEARS AGO, Rensselaer President Shirley Ann Jackson laid out a decisive vision for transforming the Institute. Rensselaer would push ahead in the areas of research, technology, and cultural innovation. And student life would be enriched.

The resulting Rensselaer Plan expanded the Institute’s research portfolio with the opening in 2004 of the Center for Biotechnology and Interdisciplinary Studies, which brings together renowned faculty from a variety of disciplines. That was followed in 2007 with the opening of the Computational Center for Nanotechnology Innovations, which is based at the Rensselaer Technology Park and is among the most powerful university-based supercomputers in the world.

Looming high over Troy, the Curtis R. Priem Experimental Media and Performing Arts Center, opened in 2008, showcases experimental arts while blurring the boundaries between science and art. With these centers of learning and the collaborations they make possible, Rensselaer is leaving its mark on the world as well as its own students.

President Jackson’s goals always extended as well to sports and fitness.

"Since the Rensselaer Plan was initiated in 2000 and trustees approved it, improving our athletic facilities, both for varsity and non-varsity athletes, has been a part of the platform," says Eddie Ade Knowles, vice president for student life. “With all parts of the Plan, we are transforming and elevating the overall Rensselaer experience. In this case, it’s the student experience.”

Construction of the first phase of the Athletic Village began two years ago. Athletics Director Knowlton said halting work as the economy weakened would have been easy to do. Instead, President Jackson and the Board of Trustees committed to a decision and stayed the course.

The decision to build ECAV even in difficult times was a blend of vision for the future and the knowledge of the practical reality of today. More than 600 students are involved in intercollegiate sports. The roster also includes 40 club teams (which play other colleges), on the field, reaching out to our alums, and running a top-class program,” says coach Cord Farmer.
and an ever-growing list of players who take part in 24 intramural sports—that is 75 percent of the undergraduate population.

And the 75 percent figure does not include recreational joggers, swimmers, and weight lifters, the sports spectators, Pep Band members, WRPI radio broadcasters—or anyone who might now be drawn to sports or fitness thanks to the top-of-the-line facilities.

Until now, intramural games often stretched past midnight because of the limited availability of fields. Varsity athletes usually carried their clothing back and forth to their residences and braved soggy playing conditions. The modest fields and bleachers did not support the philosophy of college life extending beyond academics.

"Competitive students looking at highly selective universities want to see an active life outside the classroom," says Paul Marthers, vice president for enrollment and dean of undergraduate and graduate admissions. "We just met a young man who is on his cross-country team at an elite private high school. He wants to be a scientist and doesn't want to make the commitment of time for varsity track at college. But he does want to be able to stay involved in athletics. And what we can now show him is a symbol of the overall emphasis on athletics."

The correlation between athletic facilities and academic caliber is clear, Marthers says, with highly talented students having their pick of colleges that are both rigorous and well-appointed. The biotech center, EMPAC, the Athletic Village, and related improvements make a significant difference. In addition, ECAV should stretch Rensselaer’s geographic reach.

"The culture of the big schools in the Midwest, South, and West is one of big sports facilities," says Marthers. "Students from those regions are going to question a missing athletic complex. When they see ours, they are going to understand that we are on a par with all the top schools."

Another crucial demographic: moms and dads, whose influence looms ever larger in their child's college selection. Marthers says that parents want a college visit that includes great sporting events—whether or not their child is an athlete. Rensselaer’s new impressive Athletic Village is already playing well with them and the reviews are reaching high school guidance offices.

"We are running 7 to 9 percent ahead in applications, on track to set a new record," said Marthers. "I can't pin it on the East Campus Athletic Village alone, but put that together with EMPAC, the biotech center, the CCNI, and all our facilities improvements, and I'd say the word is out that this is a fully realized top 50 research university."

The sheer scale of ECAV gives Rensselaer long-needed space for large gatherings. Commencement in May is scheduled for the new stadium. The month before, accepted students, who number 3,000 to 4,000, will converge at a single venue instead of spreading across campus auditoriums and relying on simulcast. Community sports events are also in the works, another chance to showcase Rensselaer before prospective students.

More than 2,500 alumni gathered Oct. 3 for the Reunion & Homecoming celebration that included the East Campus Athletic Village grand opening.

After ribbon-cutting ceremonies and before the 1 p.m. football game, the alumni, their families, current students, and Rensselaer faculty and staff spilled across the complex. They walked through the glass-enclosed corridors along the Robison Athletic Hall of Fame, whose photos and artifacts were previously locked away in a room.

Alumni also toured the two new gyms, and strolled a grassy outdoor walkway furnished with inground seating, where they could catch action on the Renwyck and Harkness fields. They mingled in the Ned Harkness Team and Community Room, with its premier view of the football field, named for the coach who led Rensselaer to the '52 lacrosse and '54 hockey national championships.

Alumni came out early with their support, with the Rensselaer Alumni Association contributing a lead gift in 2004 and individual donors following by dedicating seating areas, locker rooms, and coaches’ suites. Fund-raising was led by Myles Brand ’64, a Rensselaer trustee who was president of the National Collegiate Athletic Association. Brand died in September, just weeks before the grand opening. A video tribute at the celebration recognized his contributions, including his insistence on promoting the strong connection between intercollegiate athletics and education.

First-time Athletic Village visitors got the message right away. "The addition of this Athletic Village shows how you can have top..."
academics and athletics all together," notes Florence Suraci ’84, who graduated with a degree in chemical engineering. “The potential was always there. This really brings it all together. Rensselaer feels more like a real university.”

This year, Cate Harvey lives in Stacwyck, a cluster of apartments just above the Athletic Village. In place of a trek or shuttle bus ride to get her gear at the Alumni Sports and Recreation Center, she has a 30-second walk to the soccer locker room in the East Campus stadium. She may choose to train at Renwyck Field or in the stadium.

“Knowing that the facility would be available to me fairly early in my college career was definitely a factor,” she says of her decision to come to Rensselaer from Portland, Ore. “This school had by far the most turf fields. But I still never knew how cool it was going to be. We are all really excited.”

The difference between her soccer experience this year and last, as for most every Rensselaer varsity player and coach, is enormous. Until now she needed to lug her soccer clothes to practices and back to her residence after play. Now, varsity soccer, football, basketball, lacrosse, and field hockey teams use stylized locker facilities where one could easily imagine spending extra time. (Locker rooms for the men’s and women’s ice hockey teams have also been renovated in the Field House.)

The open wood lockers, at about 35 inches wide, hold gear and leave a locked compartment for laptop computers. Players may sit in at the floor of their locker while coaches play game videos on flat-screen televisions. There will be no locker room smell, either, thanks to a ventilation system that exchanges all the air.

These teams will not be moving out in the off-season to accommodate other teams. Team locker rooms are theirs for the year, a more-than-subtle hint that Rensselaer expects training to continue. The 4,800-square-foot strength and conditioning center and professional caliber sports medicine suite, like the lockers and soft field turf, far exceed usual Division III standards. A sunken hydrotherapy tub, for instance, allows a trainer to walk down a ladder to zero in on a player’s injury.

“Every day I go into the building, I just shake my head. I can’t believe it,” says head football coach Joe King. “You’re still trying to coach and be an educator. We’re not really changing what we’re doing, but now we can begin to work at a new level.”

Among other things, King believes the facilities will allow all parties, including coaches and trainers, to show their talents. He also envisions a new unity among athletes, who for the first time are based in a single setting.

Cord Farmer, the head women’s soccer coach, sees promise in both the quantity and quality of the fields and facilities. Already, practice times have opened up because players have fewer teams to share with, resulting in a schedule that makes it easier for players to balance their classes and team responsibilities.

“The new locker room has given the team a home we never had before and we have really taken some pride and energy from the atmosphere,” he says. “The facility makes it possible for us to dream of being great in everything we do…in the classroom, on the field, reaching out to our alums, and running a top-class program.”

Rensselaer will take this equation to the top high school players, including those considering Division I schools. What this all adds up to, in addition to a better Rensselaer, are better Rensselaer athletics.

“We now have the ability to look nationally and internationally for the best athletes who can handle our academic rigors,” says Knowlton. “If you look at our football roster this year, we have freshmen from 12 different states. On our soccer team, which was ranked sixth in the nation, we have players from England and Arizona and California. The facilities help us expand our reach. We want to be a national power in athletics and we will do it.”

ECAV is an engine driving change across the community. With it, Rensselaer can welcome home more alumni, strengthen nationwide recruitment of promising students and student athletes, and enrich Troy and its environs.
When Shawna O’Neal ’13 entered her first class this year, she already felt like a member of the Rensselaer community. The 18-year-old, who came to campus a week before course work began, hoisted up sheetrock with fellow students for a new Habitat for Humanity home a few blocks from the university. She also participated in a photo scavenger hunt to familiarize herself with downtown Troy and attended a seminar about green roof technology, among other activities.

At the end of the first two days, she stayed overnight at the Chapel + Cultural Center on the east side of campus, where she spent time and played games with other freshmen, student life staff, and upperclassmen.

“All of these events really made me feel at home. I got to meet a lot of new people,” says O’Neal, a double major in physics and electrical engineering, adding, “I enjoyed getting to work with power tools!”

The events and activities that O’Neal participated in all fit under the umbrella of Rensselaer’s award-winning FirstYear Experience (FYE) program. With its weeklong range of orientation activities and the subsequent support that helps freshmen navigate through their first year of college, the student life program is packed with ways for students to make connections with each other and with the university while engaging in their interests and hobbies.

Since FYE’s initiation in 2001, Rensselaer’s emphasis on enhancing the quality of life for its students has been a huge success. Last fall, Rensselaer’s freshmen-to-sophomore retention rate hit a new all-time high of 95 percent.

To sustain this momentum and build on the success of the student life experience at Rensselaer, the Division of Student Life has launched a new vision of what it will mean to be a student living on campus. Called Clustered Learning, Advocacy, and Support for Students, or CLASS, the initiative represents the commitment to a new paradigm for campus living and learning.

“CLASS will be built on the successes of FYE. It will expand and add similar student life programming to reach all undergraduate students and will serve graduate students, too,” says Eddie Ade Knowles, vice president for student life. “This initiative will truly enhance support for all our students and engage the broader Rensselaer community on their paths to success.”
"As an alumna, I understand the importance of a student's experience outside the classroom and how it can help to foster a sense of belonging and a greater drive to excel at Rensselaer."

SHANNON HITCHCOCK '05, ASSISTANT DEAN BLITMAN COMMONS
“CLASS creates a residential college model that’s unique to Rensselaer. It is a model in which the university embraces Rensselaer students regardless of where they live—on campus, in Greek life houses, or in off-campus privately owned residences.”

Eddie Ade Knowles, Vice President for Student Life.
A New Residential College Model. “Rensselaer campus life is transforming into a residential college model for undergraduates within a great technological research university,” says President Shirley Ann Jackson. “This residential program will elevate the quality of support for undergraduates. It will provide them with a greater sense of community and belonging and ensure that every student receives the best counseling, mentoring, and personal attention possible.”

In a nutshell, CLASS is a new residential college model that encompasses a comprehensive, campuswide living and learning community that supports students in a multitude of ways.

“CLASS creates a residential college model that’s unique to Rensselaer. It is a model in which the university embraces Rensselaer students regardless of where they live—on campus, in Greek life houses, or in off-campus privately owned residences,” Knowles says.

Clusters of residence halls, called residential commons, are a central feature of the initiative. The university is developing six of these commons to create smaller, more tightly knit communities for students that blend the academic, social, and residential aspects of university life in a way that fosters relationships not only among students, but also between students and the university’s faculty and professional staff. Beginning next fall, all incoming freshmen and sophomores will live in one of these commons, which will be supported by faculty, student life professionals, and upperclassmen and graduate student assistants.

“Learning is about relationship-building and sharing on many different levels. The residential commons model will provide opportunities to share and learn not just as an academic exercise, but as a life experience,” says Tom Tarantelli, director of the Career Development Center. Tarantelli was appointed acting assistant vice president for student life last summer to oversee the Office of Residence Life.

Statistics show that in addition to a quality academic program, students look for such positive life experience opportunities in their search for a quality university. This year, more than 12,350 students applied for the 1,340 slots that make up the Class of 2013, representing a growth of more than 135 percent since 2003. The university also continues to attract more women and minorities. Women now constitute close to 30 percent of the student population at Rensselaer, a notable figure among major STEM-based (science, technology, engineering, and math) American universities.

“The rising application and student diversity and quality trends have run parallel with the exciting transformation that has occurred at Rensselaer over the last decade,” says Paul Marthers, vice president for enrollment. “It is clear that an unwavering focus on student quality of life on campus and beyond has been part of Rensselaer’s transformation process that continues to make the Institute that much more attractive to prospective students.”

CLASS will provide what Knowles refers to as a “multiple-touch” approach, one that through a supportive network of faculty, staff, and upperclassmen addresses the needs of the whole student. It’s an approach that offers overlapping support on multiple fronts, from academic and career counseling to helping students find the right student club and assisting them with campus living and in times of crisis.

“All of these elements taken together will ensure that every student knows where to turn for help at all times,” Knowles says. “It also will allow them to integrate work, their personal interests, residential living, and their leisure activities in a more holistic way.”

To Michael Zwack ’11, the student Grand Marshal who is spending his third year in a residence hall, CLASS puts into perspective why he chose to live on campus.

“I live in eastern Rensselaer County, so I had the opportunity to commute. But I chose to live on campus,” says Zwack. “College isn’t a 9-to-5 thing. It goes beyond just classes. Socializing with students, day trips, and attending football games are all part of the equation. So living on campus has been something that I really have enjoyed.”

Supporting a Living and Learning Community. Over the past year, Rensselaer has enhanced and built the necessary infrastructure to support a seamless living and learning community that allows students to study, dine, socialize, and find all the support they need at their fingertips.

In May, the university unveiled the Howard N. Blitman, PE ’50 Residence Commons situated at the bottom of the Approach, the century-old granite staircase that symbolizes the connection between the city of Troy and the Institute. This special commons is designed to house upperclassmen.

“When we open the doors to this brand-new commons, we set into motion our new vision for student life at Rensselaer,” President Jackson said during the grand-opening ceremony. “Within this hall commons, we are building a complete living and learning community—a place designed to foster a sense of belonging and a feeling of community.”

The building, which underwent a complete renovation, houses 148 double rooms for students, an apartment for live-in professional staff, and four rooms for resident assistants (RAs). All of the rooms have private bathrooms, and there is an on-site fitness center and dining facility. The building also contains multipurpose spaces for events. Rensselaer provides continuous shuttle bus service to campus.

On-campus residence halls, including Crockett and Hall, also are being refurbished and enlarged to ensure an environment that is conducive to a more interactive campus culture between faculty, students, and staff.

Setting the Stage. In the broader picture, CLASS consists of a two-pronged strategy. The first part is based on “time-based clustering” in which class deans will build on the successes of FYE by helping undergraduate students create a healthy and meaningful experience at Rensselaer and a sense of class identity.
Freshman students already have a class dean as part of FYE. To capitalize on this approach, beginning with the sophomore year, a dean for each class will stay with the same group of students all the way through graduation, helping them become successful in each level of education. These deans, who will serve as members of Rensselaer’s intervention team, will provide outreach services and offer counseling and academic advising. A dean for the graduate experience also will be appointed to ensure that programs and services are provided for the growing graduate student body.

Then there are the assistant deans of the residential commons, who will work to deliver high-quality experiential residence life programs that build community. They will live in apartments in the commons they serve and also provide outreach and assistance in collaboration with the class deans.

An assistant dean has been appointed for the new Blitman Commons as a result of a national search to fill the position. Shannon Hitchcock ’05, former assistant dean of residence life, joined Rensselaer in 2008, first serving as assistant director of residence life. She holds a bachelor’s degree in biochemistry and biophysics from Rensselaer and a master’s degree in higher education from Teachers College, Columbia University.

“I look forward to implementing the CLASS initiative as a way to boost the residential experience on campus,” Hitchcock says. “As an alumna, I understand the importance of a student’s experience outside the classroom and how it can help to foster a sense of belonging and a greater drive to excel at Rensselaer.”

Two more assistant deans of the residential commons joined Rensselaer in November—Mary Gleason and Christina Lowery. Gleason will reside in the Polytech Commons and Lowery will reside in Hall Hall. All of the assistant deans of the residential commons, along with the class deans, are expected to be in place by next fall and will work in conjunction with two faculty deans of residential commons. Plans are under way to conduct an internal search for the two faculty deans, who will be responsible for the overall leadership in stimulating the intellectual, cultural, and social life of students in the commons. The positions will be held by tenured faculty who will live near the residential commons in university-owned homes, encouraging increased opportunities for faculty-and-student interaction outside the classroom.

“Overall, the objective of this new model is to integrate academic and student life initiatives in support of student academic success, while enhancing mentoring, community building, and experiential opportunities for student growth and development,” says Lisa Trahan. Trahan, former dean of the First-Year Experience, has been appointed to the newly created position of assistant vice president for the student experience.

**Safety Net for the Sophomore Year.** One of the first goals of the CLASS initiative is to address the need to provide ongoing support for second-year students as they continue to acclimate to college life. Although the Institute’s freshmen-to-sophomore retention rates are remarkable, the goal is to reach 98 percent.

National studies show that students are least satisfied with college during their sophomore year and, as a result, they are most likely to drop out of school. A report released earlier this year by ACT (the nonprofit education research group formerly known as American College Testing) has found that the proportion of first-year students who returned to the same college as sophomores in 2007-08 dropped to the lowest level in 25 years, to 65.7 percent.

“Second-year students are still adjusting to their new identity as adults during a period of academic, social, and personal development and may feel at a loss without the attention and support they received as freshmen. At the same time, they are expected to know more and do more,” Trahan says. “Combine this with the push to declare a major, find an internship, and decide on a study-abroad experience—second-year students experience what is referred to as the ‘sophomore slump.’ ”

To help sophomores continue to make the necessary adjustments to college, the university will implement the Sophomore Year Experience initiative next fall. Under the plan, second-year students will have a choice of either living on the Troy campus or in fraternities and sororities that have signed on to partner with the Institute through a commons agreement in the CLASS initiative. Sophomores will still be able to pledge to a Greek life house that has not signed the Greek Life Commons Agreement, but students will not be able to live in the house until their junior year. Active Greek participation in CLASS under the agreement includes providing educational and extracurricular program opportunities to ensure that students remain connected to campus.

Dean of Students Mark Smith, who has worked with the Greek life community for more than 10 years, says that CLASS holds a number of opportunities for Greeks.

“The Greek system will still retain its identity through CLASS,” Smith says. “The intent is to broaden the reach of Greeks, providing them with a better pipeline into campus activities across the board and enhancing their sustainability as an important part of the undergraduate experience.”

**A Theme Runs Through It.** As part of implementing CLASS, Rensselaer also will highlight and enhance the smaller, theme-based living and learning environments that already exist in schools and residence halls across campus. Theme houses launched over the past several years include CAVE (Community Action through Volunteer Engagement). Students who live in Davison Hall adopt long-term service projects that lead to positive change in the community. There also are theme houses for students interested in science fiction, leadership, entrepreneurship, the arts, and wellness.

Zane Van Dusen ’07, who earned a double major in computer sci-
ence and EMAC (electronic media, arts, and communication), still revels in his experience of living in Ground Zero, a theme house based on music and culture in Nugent Hall, where organized concerts and other events are staged in the lower level.

“We created a large community of musicians and artists who all could hang out in the venue most weekends and try out different projects,” says Van Dusen, who lived there during his sophomore and junior years. “I really can’t stress enough how much I loved and needed Ground Zero. It was the highlight of my college experience.”

To expand on the theme house concept and add a strong academic component, Student Life collaborated with the Office of Undergraduate Education to establish Vasudha. The first-year living and learning community, now in its third year, focuses on the Earth, energy, and the environment.

“Vasudha offers students the opportunity to build strong friendships and develop a deeper knowledge in a specific area of study,” says Prabhat Hajela, vice provost and dean of undergraduate education. “Students also work closely with their instructors, who organize extracurricular programs and activities that might include a field trip to the Darrin Fresh Water Institute or a lecture series on such topics as global warming and climate change.”

Hajela is developing a similar community living and learning program related to arts and media that will draw support from the Curtis R. Priem Experimental Media and Performing Arts Center, which officially opened last year.

“The student life experience is a vital part of the undergraduate education, and the Office of Undergraduate Education will be working closely with faculty members involved in the CLASS initiative on many fronts to help bring intellectual content into residential life,” he says. “This includes developing both curricular and co-curricular content emphasizing student advising and support.”

Such a collaborative effort is the high point of CLASS, Knowles says. “CLASS is really an across-the-campus partnership focused on student development that includes nurturing excellence, building community, and a commitment to student success,” he says.

It’s a theme on which Rensselaer keeps building.
When the London Eye, also called the Millennium Wheel, ushered in the 21st century, it sparked new interest in the 19th-century engineering marvel, the Ferris Wheel. Since then the Eye has become the most popular paid tourist attraction in the United Kingdom and has spawned a global race to create the tallest wheel, from Berlin to Beijing and Singapore to Dubai. While the original Ferris Wheel stood 265 feet tall, the London Eye rose to 443 feet, the Singapore Flyer reached 541 feet, and the Beijing Great Wheel, scheduled to open in 2010, will top them all at 682 feet.
This race to erect the largest observation wheel began in America, 115 years ago, at the World’s Fair in Chicago, and the individual behind it all was a daring young engineer from western Nevada—George Washington Gale Ferris Jr., who graduated with the Class of 1881 and is a member of the Rensselaer Alumni Hall of Fame.

To commemorate the 150th anniversary of Ferris’s birth, ASCE Press recently published a book about his life and times—Circles in the Sky, written by Richard Weingardt. Although much had been written about Ferris’s tension-wheel creation, Weingardt said little was known about Ferris personally. Based on seven years of research, he wrote Circles in the Sky, the first in-depth look at the mysterious and iconic 19th-century American engineer.

In the book, Weingardt, himself a structural engineer, delves into Ferris’s personal and engineering life, where he came from and how he came to develop the greatest wheel ever built—and how, in the end, it consumed him. The following is excerpted from Weingardt’s book.
all, handsome, and dashing, George Ferris was an imposing figure, a legend in his own time. He commanded attention wherever he went long before he became an international figure. As the creator of one of the 19th century’s most imaginative inventions, the young U.S. civil/structural engineer experienced world recognition while still in his early 30s.

A partner in one of Ferris’s two engineering firms, Gustav Kaufman [Rensselaer Class of 1880], said of Ferris, “He was eminently engaging and social, an entertaining storyteller who often amused his friends with anecdotes. He was an optimist, always bright, hopeful and full of anticipation of good results from all the ventures he had at hand, convinced that he would ultimately overcome any troubles. These feelings he could always impart to whomever he addressed in a most wonderful degree, and therein lay the key to his success. Even in the darkest times, he was ever looking for the sunshine to come.”

Carl Snyder, a reporter with The Review of Reviews: An International Magazine, interviewed Ferris in the early 1890s and stated, “He greets you easily, his demeanor is quiet, his tones low. For a Western man, he is rather fastidious in his dress. Perhaps his most notable characteristic is his steel blue eyes of remarkable depth and clarity. After listening to his easy, unaffected talk, brilliant without effort for an hour, one feels he is in the presence of a man destined to play an important role in the industrial and mechanical advancement of his country.” Unfortunately Ferris’s career was cut short, long before his full potential was reached. He died on November 22, 1896, of typhoid fever and other complications.

George Ferris was born on a farm in Galesburg, Illinois, on February 14, 1859, the youngest son of George, Sr. and Martha (Hyde) Ferris. Young George had eight siblings—four brothers and four sisters, the youngest, Mame, two years younger than him. When George was five, his father, a relatively wealthy farmer, moved the family to Nevada—the Wild West—during the summer of 1864 while the Civil War was at its zenith. There he bought an expansive ranch along the Carson River next to the imposing Sierra Nevada Mountains, and near Carson City, soon to be named the state capital.

Young Ferris grew up on the family ranch; happy and carefree with plenty of time and open space to roam, ride horses, hunt and fish. It is rumored, he developed his inspiration for the Ferris Wheel during these idyllic years. He was fascinated by—and spent countless hours observing—the large water wheel at Cradlebaugh Bridge over the Carson River on a nearby ranch, imagining what it would feel like to ride such a moving structure.

The Ferrises moved into Carson City in 1868, when George was nine. By then, the U.S. transcontinental railroad was well on its way to connecting the country from east to west, and many young Americans, including young Ferris, dreamed of how exciting it would be to be a railroad engineer. After receiving his early education in Carson City schools, 14-year-old George left home to attend the California Military Academy in Oakland, California.
By then, he had decided to become an engineer—and when he graduated from Oakland in the spring of 1876, 17-year-old Ferris had set his sights high. He planned to attend Rensselaer Polytechnic Institute (RPI) in Troy, New York, the most respected and prestigious private engineering college in the nation. While there, his willingness to take on challenges and accept difficult assignments was manifested, both in the classroom and on the sports field. Said RPI Professor Larry Feeser, “Ferris had an admired reputation for invariably winning footraces and being able to throw a ball farther than anyone on campus.”

After graduating from RPI in 1881, with a degree in civil engineering, Ferris went to work for a consulting engineering and construction firm headquartered in New York City (NYC)—General James Ledlie’s company. Ledlie had played a prominent role in the construction of the Union Pacific section of the transcontinental railroad and was prominent in railroad circles. While with Ledlie, Ferris worked on bridges, tunnels and railroad trestles throughout West Virginia.

In 1883, Ferris secured a position as assistant engineer with the Louisville Bridge and Iron Company in Louisville, Kentucky, to work on the design and construction of the Henderson Bridge. It was a tall, 27,995-foot-long structure crossing the Ohio River between Evansville, Indiana, and Henderson, Kentucky. The $2-million record-setting bridge’s longest clear span was 525 feet, which made it the longest trestle span in the world at the time.

One year later, he founded another engineering company with old RPI pal Gustav Kaufman—Ferris, Kaufman and Company (FKC)—mainly to design bridges and supplement the services of G.W. Ferris and Company. Among FKC’s main bridges were the Ninth Street Bridge over the Allegheny River in Pittsburgh and the Central Bridge over the Ohio River between Cincinnati, Ohio, and Newport, Kentucky. Both were record-making bridges when opened. By the early 1890s, Ferris had major offices in NYC, Philadelphia, Pittsburgh, and Chicago, Illinois. Chicago had secured the 1893 World’s Columbian Exposition (Fair), and Ferris and many of his colleagues were involved in testing and inspecting structural steel for the massive buildings planned for the event. Many considered the architectural designs for these structures to be outstanding. All their facades were white stucco, which resulted in the complex of buildings being labeled the “White City.”

The organizers for the Fair, however, were not impressed with the event’s engineering facilities. They expressed great disappointment that American engineers hadn’t come up with anything “novel and original” to equal the Paris Exposition’s Eiffel Tower of 1889. Architect Daniel H. Burnham, head of the Fair committee and in charge of selecting its showcase projects, complained at an engineers’ banquet in 1891 that although American architects had come up with great designs, nothing the nation’s engineers had proposed would “meet the expectations of the people.” He said what was needed was something to out-Eiffel Gustav Eiffel. Burnham’s motto was, “Make no little plans; they have no magic to stir men’s minds.”

Shortly after Burnham’s taunting speech, a personable, confident, well-dressed 33-year-old engineer from Pittsburgh—George Ferris—stepped forward with an out-Eiffel proposal—and his was
“no little plan.” George Ferris proposed building an enormous, revolving wheel—higher than Chicago’s tallest building, an awesome device that would carry passengers to breathtaking heights and yet be absolutely safe.

Ferris said he struck upon his idea one night after an engineering society dinner, saying, “I got out some paper and began sketching it out. I fixed the size, determined the construction, the number of cars we would run, the number of people it would hold, what we would charge, the plan of stopping six times during the first revolution for loading, and then making a complete turn. In short, before the evening was over, I had sketched out almost the entire detail and my plan never varied an item from that day on.”

At first, people thought Ferris’s proposal for such a colossal people-carrying, steel-tension wheel outrageous—and him to be a wild man—especially when he stated he could not only design but build the huge contraption in the short time left before the Exposition’s opening. Some called him “the man with wheels in his head.”

Bruce Geno, a Pennsylvanian civil engineer and Ferris historian, was quoted in the Pittsburgh Post-Gazette as saying it was truly amazing that Ferris got the Ferris Wheel “designed and fabricated in such a short time. He used his connections in the steel industry to get steel. Just as impressive, though, was that he was able to convince people it was a good idea to build this monster.”

The charismatic Ferris proved he not only had an inventive mind but also the ability to engineer and build. The Ferris Wheel was completed on time and within its $400,000 budget—and it, indeed, proved to be the highlight of the Exposition. As the icon of the Fair, it was America’s answer to France’s Eiffel Tower.

The Ferris Wheel, along with the Brooklyn and Eads bridges, showed that American civil/structural engineering had arrived. American engineers were seen as a force to be reckoned with worldwide. Ferris had pushed the envelope on how high moving structures could reach and opened the public’s mind to the versatility and capabilities of steel, the newly emerging structural material of the future.

Ferris’s wheel, which had a diameter of 250 feet, was raised 15 feet off the ground and stood 265 feet tall. It was supported by two 140-foot steel towers connected by a 45-ton axle—the largest single piece of forged steel in the world at the time. Thirty-six streetcar-sized cabins—with plush, crushed velvet interiors—held 60 people each. A 1,000 horsepower reversible engine provided the power. Fully loaded, the 1,200-ton Ferris Wheel could carry 2,000-plus people, a passenger capacity still not exceeded even by today’s mammoth wheels.

On the Wheel’s debut in June, 1893, reporters and many notables took the first rides, several highly apprehensive at being so far above the ground. They were put at ease soon after the festivities began. At the top of the ride (as reported in the Pittsburgh Commercial Gazette in 1893), a “little woman, looking wonderfully pretty in a dainty gown of black trimmed in gold stood on a chair in a car swaying 265 feet above earth, raised a glass of champagne to the others in the car and toasted her husband.” In this toast, a beaming Margaret Ferris said, “To the health of my husband and the success of the Ferris Wheel.”

Over the years, Ferris’s invention has been replicated often and everywhere. Currently, the largest Ferris Wheel is the 541-foot-tall Singapore Flyer. Prior to 2008, the 443-foot tall, $56.5 million London Eye, opened in 2001 and turning above the Thames River, held the record. A number of wheels in the 600-foot range are opening in places like Dubai, Berlin, Germany, and Orlando, Florida. Next year the Beijing Great Wheel in China will become the world record holder at 682 feet.

Ferris gained much fame but little fortune with his Wheel. And its notoriety, unfortunately, so overshadowed the rest of his engineering accomplishments that he has only been remembered as the inventor of one thing and not for his many other engineering accomplishments. His ingenuity and daring engineering skills, though, are confirmed and honored every time a new tension-wheel is built anywhere.

Richard G. Weingardt, PE, is CEO of Richard Weingardt Consultants Inc. in Denver, Colo. He is the author of nine books, including Engineering Legends, which features numerous great American structural engineers. Weingardt can be reached at rweingardt@aol.com. Both of his ASCE Press books can be ordered from him or from: bkulamer@asce.org.
The RAA is transforming the alumni program to grow alumni engagement

The Rensselaer Alumni Association (RAA) is a strong and active organization of more than 90,000 members worldwide. The RAA develops events and programs of interest, provides valuable services, offers significant financial support to the Institute, and enables alumni to reconnect and network around the world.

Working in partnership with the Office of Alumni Relations, the RAA is committed to being the best alumni association in the nation. With this ambitious goal, the RAA has set forth to transform the alumni program at Rensselaer.

The Institute will soon mark the 10th anniversary of The Rensselaer Plan. As believers in President Shirley Ann Jackson, and in The Rensselaer Plan, the RAA, too, has set in motion an ambitious operating plan designed to grow alumni engagement exponentially. Following is a snapshot of the accomplishments and successes of the past year:

**Increasing Involvement**
Involvement in alumni programs over the past year has been impressive. Nearly 7,000 alumni and friends participated in regional and chapter programs across the world, standing in sharp contrast to just 2,100 attendees when The Rensselaer Plan first began in 2000.

The RAA is also engaged with students—future alumni—now more than ever. Since 2000, there has been a nearly 100 percent increase in student involvement with alumni programs. In 2009, more than 3,500 students will have participated in some type of alumni relations programs.

In fact, the RAA is now building a global footprint, with contacts and leaders in 12 cities overseas, and featuring a number of programs with deans, vice presidents, and President Jackson. In order to be the best, there must be a continued focus on the more than 3,000 alumni who live abroad.

**Honor and Recognition**
Since 2000, alumni programs at Rensselaer have been recognized 14 times with awards, including four Circle of Excellence Awards in 2009 for programs related to students and young alumni, and for the Washington D.C./Baltimore Chapter for innovative alumni programs.

The Council for the Advancement and Support of Education (CASE) has indicated that these award-winning alumni programs continue to be “models for alumni and advancement organizations.” Today, Rensselaer boasts one of America’s most recognized alumni programs.

**Responding to Challenging Times**
This past year has been difficult for many of our friends and classmates. Since 2000, there has been a nearly 100 percent increase in student involvement with alumni programs. In 2009, more than 3,500 students will have participated in some type of alumni relations programs.

In fact, the RAA is now building a global footprint, with contacts and leaders in 12 cities overseas, and featuring a number of programs with deans, vice presidents, and President Jackson. In order to be the best, there must be a continued focus on the more than 3,000 alumni who live abroad.

**Transformation**
The RAA has undergone a transformation, becoming a clear and recognized partner with Rensselaer. The RAA’s Trustee organization has been re-engineered to better prepare for the future, and has built a long-range strategic plan through 2012.

The RAA is proud to have committed nearly $5.5 million through individual and RAA endowment gifts to Renaissance at Rensselaer: The Campaign for Rensselaer Polytechnic Institute, including a $300,000 gift to the East Campus Athletic Village.

The RAA looks forward to another year of record growth in 2009-10. Your advocacy for your alma mater will make a difference! For more information on programs and services available to alumni, visit the alumni Web site at www.alumni.rpi.edu, or call the alumni office at (518) 276-6205.

BECOME INVOLVED There are many opportunities to further your involvement with Rensselaer for personal and professional growth. To learn more about the many opportunities, visit www.alumni.rpi.edu.
The RAA demonstrated its significance as a philanthropic partner to the Institute by being among the first to give a leadership gift to support the East Campus Athletic Village. Members of the RAA Board of Trustees pose at the RAA Concourse, named in honor of the RAA’s support for the project.

Events such as the Welcome Barbecue, held in August for incoming freshmen, are part of an effort to make connections with Rensselaer’s future alumni (current students) throughout their time on campus.

Working in partnership with the Office of Alumni Relations, the RAA is committed to being the best alumni association in the nation. Nearly 7,000 alumni and friends participated in regional and chapter programs across the world.

Reunion & Homecoming 2009 marked the beginning of a new tradition at Rensselaer. Reunion year alumni, including the Class of 2004 members seen here, joined with athletic team alumni, Greeks, and other special affinity groups to celebrate in the fall.

Graduate alumni and current faculty mingled at a reception held during Reunion & Homecoming 2009. More programs are being planned for the coming year for Rensselaer’s nearly 35,000 graduate alumni.

Phi Iota Alpha celebrated 25 years since the revival of their fraternity with 75 alumni and guests during Reunion & Homecoming 2009. Their partnership with the Office of Alumni Relations helped to encourage the great turnout.

The annual Big Red Freakout Ice House, held at the Hefner Alumni House, is one of the opportunities for members of the community, alumni, and current students to come together.
New Partnership with Cornell Club – New York City

The Rensselaer Alumni Association, the Office of Alumni Relations, and the New York Alumni Chapter are pleased to announce a membership affiliation with the Cornell Club in New York City that allows for any interested Rensselaer alumni (undergraduate or graduate) to join the Cornell Club at affordable rates. Rensselaer is one of only a few select university affiliations approved by the Cornell Club and the first in several years.

Benefits of being a Cornell Club member include not only access to the beautiful facility in midtown Manhattan, but access to more than 90 similar clubs located throughout the U.S. and around the world. This is especially attractive for alumni who frequently travel, even if they don’t live in the New York City area. Visit the Web site for a full list of reciprocal clubs, more details, and an application: www.alumni.rpi.edu/cornellclub.html.

Raa Visa Credit Card

Through a special partnership with U.S. Bank, we are pleased to offer the RAA Visa card, featuring no annual fee and your choice of benefits and rewards, and a percentage of every purchase goes directly to support the RAA. Visit www.alumni.rpi.edu/service/visa.html for details.

LinkedIn Rensselaer Alumni Group

LinkedIn is a free online network of more than 20 million professionals from around the world. Visit www.alumni.rpi.edu and follow the link at the bottom of the page to sign up.

Alumni Hall of Fame Nominations

The nominations process has begun for the 2011 Rensselaer Alumni Hall of Fame, designed to permanently preserve, celebrate, and communicate the long and exceptional heritage of Rensselaer. The new class of inductees will be announced in June 2011, with recognition at a public ceremony in 2011. We invite you to submit the names of worthy alumni for consideration by March 1, 2010. Details and a nomination form are available at www.alumni.rpi.edu/hof. For more information, contact Peter Pedone at pedonp@rpi.edu or (518) 276-6061.
JANUARY

11 Alumni Reception at the Transportation Research Board Meeting, Washington, D.C. Gather with alumni attending the TRB's 89th Annual Meeting. Special guest will be Dean of Engineering David Rosowsky. For more information, contact Susan Haight at haighs@rpi.edu or (518) 276-6042.

12 Alumni Reception with Dean of Engineering David Rosowsky, sponsored by the Washington D.C./Baltimore Alumni Chapter. Offices of Buchanan Ingersoll & Rooney, Alexandria, Va. For more information, contact Susan Haight at haighs@rpi.edu or (518) 276-6042.

29 Women’s Hockey Alumnae Weekend. Activities include a varsity game on Friday against Quinnipiac, and a family skate, women’s alumnae game, and the varsity game against Princeton on Saturday. For more information, contact Peter Pedone at pedonp@rpi.edu or (518) 276-6061.

FEBRUARY

5 The Legends of ‘85: Celebrating Our National Champions. Hear members of the 1985 NCAA Men’s Ice Hockey National Championship team recount tales of their winning season, and how the experience has shaped their lives. Sponsored by the RAA and the men’s hockey program. For more information, contact Peter Pedone at pedonp@rpi.edu or (518) 276-6061.

6 Black Family Technology Awareness Day. The event, in its 12th year, is designed to interest area young people and their families in pursuing occupations in the fields of science, technology, engineering, mathematics (STEM), and the arts. Free. For more information, contact Michael Gunther at (518) 276-8351.

6 25th Anniversary of the 1985 National Championship Hockey Team and Men’s Hockey Alumni Game. Activities include a varsity game on Friday against St. Lawrence at 7 p.m., and on Saturday, the alumni game at 11 a.m. and the varsity game against Clarkson at 7 p.m. The 1985 team will raffle off new jerseys during the varsity game Saturday night, and an autograph session will follow the game. For more information, contact Peter Pedone at pedonp@rpi.edu or (518) 276-6061.

19 Women’s Basketball Alumni Weekend. Activities include a varsity game on Friday, the alumnae game on Saturday, followed by another varsity game. All activities will be held in the new East Campus Athletic Village Basketball Arena. For details, contact Coach John Greene at greenj5@rpi.edu or (518) 276-8037.

20 Big Red Freakout Ice House. Join us for this annual tradition! Enjoy a buffet dinner, cash bar, a performance by the Pep Band, and face painting, along with a post-game reception featuring the hockey team and coaching staff. Shuttle service to the Houston Field House is provided. For more information, contact Peter Pedone at pedonp@rpi.edu or (518) 276-6061.

MARCH

2 An Evening with Dean of Engineering David Rosowsky, sponsored by the New Jersey Alumni Chapter. West Orange, N.J. For information, contact Suzanne Turcotte at turcos2@rpi.edu, (518) 276-4132.

9 Alumni Reception at the Game Developer’s Conference, San Francisco. Join us at this annual reception to meet other alumni in the game developer’s industry. Contact Kathy Kinsey at kinsek@rpi.edu or (518) 276-2832 for more information.

APRIL

28 RAA Worldwide Travel Program: Italy’s Amalfi Coast. Spend a week at our Alumni Campus Abroad in one of the most history-rich areas to be found anywhere in the world, Italy’s storied Amalfi Coast. Contact Michael Wellner ’64 at captmike46@alum.rpi.edu or (212) 486-3064.

MAY

10 RAA Worldwide Travel Program: The Greek Isles. Spend four nights in Crete, three nights in Santorini, and two nights in Athens. Contact Michael Wellner ’64 at captmike46@alum.rpi.edu, or (212) 486-3064.

29 Commencement 2010. Rensselaer’s 204th Commencement exercises. 10:30 a.m. East Campus Athletic Village. www.rpi.edu/academics/commencement.

OCTOBER

15 Reunion & Homecoming. Classes ending in 0 or 5, Greeks, athletes, and other special interest groups will be returning to campus to celebrate, and to mingle with current students and faculty. Mark your calendar now and plan to join us! Contact Kathy Kinsey at kinsek@rpi.edu or (518) 276-2832 if you would like to help plan your class Reunion.
I have often said that I learned to think at RPI.

Now, 50 years after my graduation, I ask myself, “What did I mean by that?”

In 50 years, I have seldom used my mechanical engineering training, the subjects I studied most at RPI.

RPI was difficult for me; technical subject matter did not come easily. When I took an aptitude/interest test in my senior year, to help me figure out what to do after graduation, it reported that I had the mechanical aptitude of a 7th-grader—but would do well as a lawyer—so I changed direction. But RPI gave me a solid technological base in physics, calculus, and chemistry that enabled me to learn and not be afraid of new technologies. Over the 45-plus years of my law practice, I have observed that almost all of my non-technical lawyer compatriots—most of whom were very smart, with honors degrees from highly regarded schools—became almost catatonic when the word “technology” was gently spoken to them in connection with a new matter. I learned not to fear technology.

My 50 years post-RPI have taken me to law school (Georgetown), business school (U. of Chicago), practicing high-tech law and related business endeavors, and none of it involved as much “heavy lifting” (intellectually) as those four years at RPI. After RPI, law school was relatively easy and so was B-school. I liken it to weightlifting; my brain muscles were so well-developed from the “heavy lifting” I did from 1955 to 1959, almost everything after that was easy lifting.

One of the lessons I learned at RPI was “be prepared for anything.” In my sophomore year, I took a course in mechanics taught by Prof. Lewis Assini, known around campus as “Laughing Lew, the walking screw.” Class was in a second-floor classroom on Sage Avenue. We had an exam every other week and a projected exam day was to be during Grand Marshal Week, when there was a tradition not to have exams. The week before GM Week, the class asked Prof. Assini whether we would have an exam the next week and he said, “If I give you an exam, I’ll climb through that window (pointing).” The next week, we were sitting in class, not expecting an exam, and heard a scraping sound. Sure enough, the window opened, the end of a ladder protruded and in climbed “Laughing Lew” who, with a hearty chuckle, proceeded to give us an exam.

I learned the analytical process for problem-solving at RPI and soon after found out its universality. “I learned the analytical process for problem-solving at RPI and soon after found out its universality.”

I learned the analytical process for problem-solving at RPI and soon after found out its universality. This approach served me very well and I used it throughout law school. Lo and behold, I realized that this is a fundamental methodology for problem-solving of all sorts and I have used it—to good advantage—all my life.

One of my lessons learned was “never miss class.” One day in October of my senior year, in a machine design class, the professor said, “I’m going to take one hour of class time and talk about the different career paths that RPI graduates with mechanical engineering degrees can pursue.” One of the things he mentioned was taking a job at the Patent Office (Clarence Kalk, RPI 1928, was head of personnel at the Patent Office; there were more patent lawyers in the U.S. from RPI in that era than from any other college, thanks to Clarence), getting an engineering scale wage, and going to law school at night. I did that and—I missed an hour of class—I might not have had 50 years of unmitigated fun and learning. I think back fondly on my years at RPI and realize how much that four-year experience has benefited my life during the ensuing 50 years. So, “Here’s to old RPI …!”

Robert Bramson ’59 is an engineer and patent attorney. He is a principal of Bramson & Pressman, a technology licensing, business, and legal services firm in Conshohocken, Pa.
The Curtis R. Priem Experimental Media and Performing Arts Center (EMPAC) is changing the culture and quality of life at Rensselaer—by widening the campus outlook and creating for our students a broader, richer sense of the world and its possibilities.

Show your support for this signature venue by having your name inscribed on a seat in the concert hall or theater. Like EMPAC itself, the leather and wood seats are characterized by exquisite detail. Manufactured by a leading Italian furniture maker, they feature a special recess in the arm for the donor’s name. A permanent plaque will recognize your gift now...and into the future.

For more information and to reserve your seat, visit www.rpi.edu/giving/empacseat.html.
Why do you give to Rensselaer?

“For decades I have given back to Rensselaer in recognition of all the Institute means to me.”

Among the many gifts he has given to Rensselaer, Byron Forster ’41 established a charitable gift annuity to fund a scholarship for members of his fraternity, Sigma Phi Epsilon. This gift to the endowment ensures that future generations of students will benefit from his support in perpetuity.

To learn more about ways to support Rensselaer, go to www.alumni.rpi.edu/waystogive.