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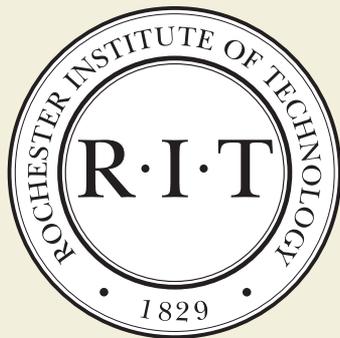
The University Magazine

Winter 2014-15

A new hand for Lucas

RIT scientist launches
global network to put
3D-printed prostheses
into the hands of
those without





RIT: The University Magazine

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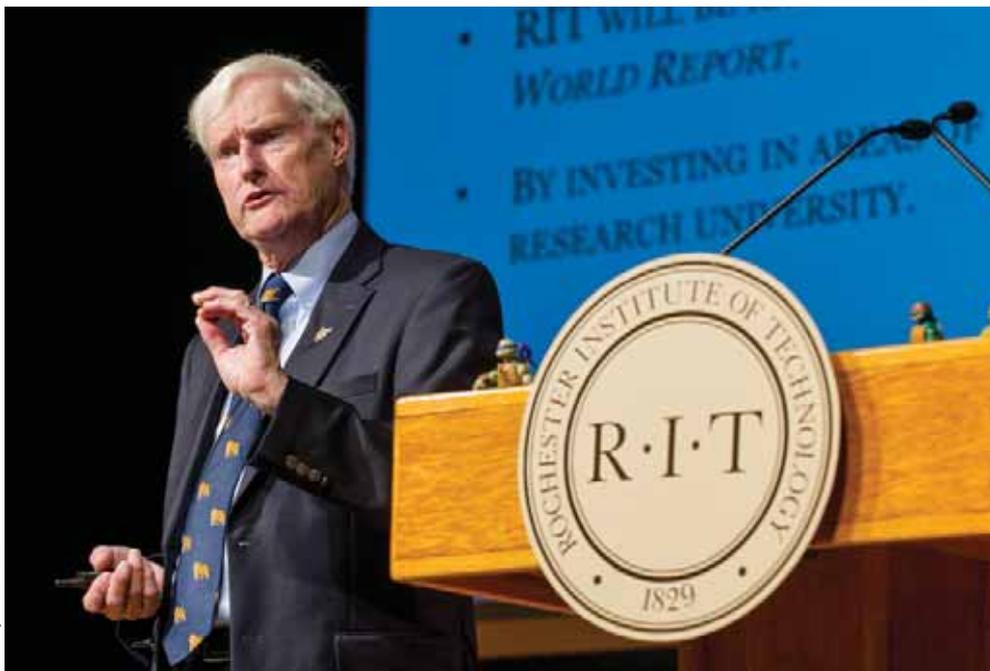
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Vol.16, No.3, 105M-P1662-11/2014-LANE-JSA
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FROM THE PRESIDENT

The RIT Advantage: Greatness Through Difference



Photos by A. Sue Weisler

RIT President Bill Destler talks about the 2025 strategic plan to faculty and staff.

***Editor's Note:** The editors of *The University Magazine* recently interviewed President Bill Destler about RIT's new strategic plan, "Greatness Through Difference." The plan, which was scheduled for approval by the Board of Trustees in November, will guide the university through 2025. The full plan can be viewed at rit.edu/president.*

***Coming this spring:** We will publish a comprehensive report on the strategic plan, illustrating examples of the RIT advantage into the next decade.*

Where is RIT today in the spectrum of great global universities?

RIT is a unique, very good, comprehensive university with a growing national and international reputation. We have several distinctive programs: our co-op program, the National Technical Institute for the Deaf, imaging science, the School for American Crafts, industrial design, photography, film and animation, sustainable manufacturing and computational astrophysics, to name a few. It should be noted that none of these is in a traditional academic discipline. This year, we also produced 29 Ph.D. degree recipients—a record high—and thus eventually we will be moving into the prestigious "national research university" category.

Describe RIT's new vision to our stakeholders.

RIT will become an internationally distinguished university by exploiting its differences and better meeting the needs of a rapidly shrinking world. Or, more succinctly: RIT will achieve greatness through difference.

Explain what you mean by "greatness through difference."

RIT is an internationally significant career-focused university with unique character and programs. We belong in the category of the world's great universities, not because we seek to replicate the great universities of the 20th century, but because we are already practicing what the future universities must provide.

What defines an internationally significant university? What do you think the public is looking for?

The public is looking for institutions that are responding to their concerns about traditional higher education. These concerns include:

- Affordability and the return on investment of an RIT degree. The RIT advantage: 96 percent of our students are



RIT held its largest career fair on record this fall with more than 250 companies visiting campus. The new strategic plan focuses on career education, student success and return on investment.

2. The student-centered research university:

- RIT's research enterprise will be a national model of inter- and trans-disciplinary and inter-generational collaboration based upon the principle that diverse teams formed from members of diverse experience levels and diverse disciplines drive good questions, good processes and good solutions.
- RIT will enlarge its graduate portfolio through adding professional and research-focused programs in STEM fields, the humanities, social sciences and arts.

3. The power of difference and inclusion:

- RIT will be the most globally engaged private university in the U.S. as measured by the breadth and size of its international, student and alumni populations served both in the U.S. and abroad.
- RIT will eliminate the achievement gap between minority and majority students.
- RIT will be the largest producer of female and minority STEM graduates among all private universities in the nation.

4. Affordability, value and return on investment:

- RIT will be the university with the best placement rate and return on investment of all private universities in the nation.
- RIT will become the university that best utilizes educational technology to reduce costs, improve access and achieve learning outcomes.

5. Organizational agility:

- RIT will develop a university culture that is less risk-averse and less bureaucratic. It will streamline compliance measures and empower local decision-making.
- RIT will diminish the negative effects of academic and administrative silos.
- RIT's curricular, administrative and organizational structures will serve, not impede, discovery and collaboration among students, faculty and staff.

How do we turn all this into reality?

RIT has all the ingredients to realize the goals we have set. While the future holds surprises for us, we are confident that the route mapped within this strategic plan will allow us to emerge as a world-class university.

employed or accepted into graduate school within six months after graduation.

- Career-focused curriculum. RIT advantage: We offer education in fields with high employer demand and integrate design, management, and critical and innovative thinking into them. An RIT education includes considerable time learning outside the classroom ranging from a paid co-op position to designing new products and businesses in the Simone Center for Student Innovation and Entrepreneurship to participating on interdisciplinary research teams.
- Accessibility and diversity. RIT advantage: We have a history of serving low-income students. We also serve 1,200 deaf and hard-of-hearing students.
- A focus on STEM (science, technology, engineering, math) that is integrated with design, business, social sciences and humanities. RIT advantage: Among private universities, RIT graduates the second highest number of STEM undergraduate students in the U.S.
- Robust, well-funded and interdisciplinary research that contributes to the advancement of human knowledge. RIT advantage: We have seven interdisciplinary Ph.D. programs: engineering, imaging science,

microsystems engineering, sustainability, computing, astrophysics and color science.

- Global reach. RIT advantage: We have four international campuses, nearly 2,000 international students from 100 nations in Rochester, and multiple opportunities for student and faculty exchanges.

What are the key themes and tangible goals you want to see accomplished in the plan?

During the strategic conversations of the past year involving all stakeholders, five intersecting spheres of effort have surfaced.

1. Career education and student success.

- RIT will educate students at the intersections of technology and the arts, imagination and application, and rigor and curiosity, all designed to meet the demands of future careers in the ever-expanding global economy.
- One hundred percent of RIT undergraduate students will have experiential learning relevant to their degree program and designed to provide skills and competencies of growing importance to employers.
- Students and their advisers will develop multi-dimensional plans to ensure on-time graduation.



Photo by Mike Bradley

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Cover

Lucas LeMay, 10, was born without fingers on his right hand. RIT students made him a 3D-printed mechanical hand that helps him ride his bike. (Photo by A. Sue Weisler)



Find the free RIT: The University Magazine App in the App Store.



Photo by A. Sue Weisler



Joseph C. Miller is an assistant professor of marketing in Saunders College of Business. He holds a Ph.D. in marketing from Michigan State University, an MBA in marketing and finance with a graduate concentration in economic development from Wayne State University and a bachelor's degree from Grand Valley State University.

Some tips on tipping

Having recently done research regarding “tip jars” (jars typically posted in the area of cash registers in fast-casual restaurants) with my students in marketing research classes, I have become acutely aware of some of the pervasive attitudes and cultural norms as applied to tipping in the general sense, as well as the special application of tip jars. Because of my work in that arena, I would like to give six tips on the nature of tipping—five geared toward the tippers (the customers), and one big one toward the tipped (the service workers).

Customers

1. Recall the ideal, recognize the reality

—Ask people what their general philosophy is on tipping and the vast majority of responses will reflect that people believe that tipping is done in response to appreciating the server's efforts or for excellent service quality. To a lesser degree, however, fewer people will recognize that tipping is something that is done because it is part of our cultural norms—and those people would be correct. Tipping is an act that is deeply embedded in the American service industry. Be aware that many in the service industry rely on tips as part of their income. Recent research indicates that up to 40 percent of coffee barista salaries are generated from tips, hotel bellmen and valets up to 75 percent, and for restaurant wait staff and bartenders, money from tips represents 85 to 100 percent of their income.

2. Not a global phenomenon

—Anyone who has ever read or heard insights from foreign travelers to the U.S. knows that our standard of tipping is confounding to many outside observers. Be sure to research local customs when travel-

ing abroad. Instead of our norm of tipping, restaurants in South America and some European nations often tack on service charges to customer tabs. In other European nations, the norm is a 10 percent tip. China typically has no cultural norm of tipping at all, and in most restaurants in Japan, tipping is often seen as insulting to the server—a message indicating that the server needs money because they are so bad at their job they will soon be terminated. And virtually no nation save the U.S. extends the tipping norm to taxicab drivers, hairstylists or delivery workers.

3. Reward specialization—Typically, you will want to tip people particularly well (perhaps even above and beyond the accepted cultural norm of 20 percent for good service) when they take time out of their normal work operations in order to make something special for you, such as the bartender who arranges a fancy mixed drink, or a waitress who serves you a delicious dessert to your exact specifications, or a taxicab driver who sacrifices other fares while helping you with your bags. The delivery guy giving you that toner cartridge from Amazon could probably do without a \$5 tip, but the deliveryman who sets up your new armoire in your boudoir needs to be recognized well.

4. Factors other than quality—Some of the previous research by tipping expert Michael Lynn seems to support the notion that how good a service customers think they were provided in a transaction is a poor predictor of how much money they leave for a tip. That's an important takeaway for consumers, because they have to realize that their propensity to tip is predicated often not on the service received, but how connected they might feel to the person performing the service. Research reveals that servers who are the opposite gender

of the customer and those who lightly touch the customer tend to receive greater tips, for instance. It's important for customers to be aware of their propensity to ascribe a bias to their tipping behavior.

5. Restaurant tips affect workers you don't see

—One thing restaurant patrons often don't realize is that when they leave a tip for restaurant wait staff, that server must then “tip out” other staff like bartenders, busing staff, hosts and others. So if you find yourself dissatisfied with a service, it's probably the best policy (unless your bad service was personal) to tip the standard amount and then speak to the manager. Also, if you leave no tip, or a very sparse tip, please do the courtesy of explaining to the server why. Communication with the people who serve you is a part of the new social bargain.

Service workers

Provide memorable experiences

—Having said that, when you ask people to recall a time in which they have donated to a tip jar (an act that is not as ingrained in the social rubric as traditional tipping), they will not hesitate to describe a time in which they were treated to a special kind of service experience. Making each customer feel as if they are individuals instead of monolithic buyers will go a long way toward boosting the experience component of the transaction. Reports from wait staff indicate that some rock-solid means of increasing tips are to: Introduce yourself by name; sit or squat to get at eye-level with customers when they place their order; and bring candy when you present them with the bill.

Oh and by the way, thinking about the customer experience isn't just for wait staff and bartenders. We can all get better results in all of our relationships, be they firm-client, buyer-seller, or spouse-to-spouse, when we take into account the perceptions of the other. Invoking a little emotional intelligence into our relationships will provide us with “tips” in perpetuity.



NOTEBOOK

National recognition

RIT's Division for Diversity and Inclusion received the 2014 Higher Education Excellence in Diversity award from *INSIGHT Into Diversity* magazine.

RIT was selected based on its diversity and inclusion initiatives and ability to embrace a broad definition of diversity on the campus. This is the first time RIT has been named as a HEED Award recipient.

The magazine is the oldest and largest diversity-focused publication in higher education.

Tops online in N.Y.

A report from The-BestSchools.org has named RIT the top online college in New York. According to the article "The Best Online College in Each of America's Fifty States," rankings were based on academic excellence, faculty strength, online teaching methods, reputation, awards and the number of online degree programs offered.

Cited in the report was RIT's modular approach to curriculum, which allows students to choose building blocks from several disciplines to create a program suited to their personal or professional goals.



RIT's Golisano Institute for Sustainability, Louise M. Slaughter Hall and surrounding quad basked in a sea of light in early September, helping make RIT's 30th Big Shot photograph a success. More than 2,900 volunteers, including nearly 1,500 students and 130 alumni, provided the primary light source for the Big Shot image while RIT photographers shot an extended exposure of RIT's "living lab" dedicated to sustainability, Center for Integrated Manufacturing Studies and quad. This year's final image was a 30-second exposure at f11.

Destler, Johnson pledge \$1 million endowment

A \$1 million endowment gift to the Rochester City Scholars program means RIT will be able to help fund the education of deserving city public school students for years to come.

The gift was made by the program's founders—RIT President Bill Destler and his spouse, Rebecca Johnson. Rochester City Scholars, launched in 2010, provides free tuition to the university for Rochester public school graduates who are admitted as freshmen to full-time study in baccalaureate programs at RIT, and meet income eligibility requirements.

"Lack of finances should not prevent a talented student from getting a college education," Destler

said. "We have been so impressed with the students who have come through the program so far that we wanted to ensure that future students had the same opportunities."

Added Johnson, "Our City Scholars are a source of pride to RIT and to the entire community. The world needs the kind of talent and leadership that these students offer."

Kevin McDonald, vice president and associate provost for diversity and inclusion, said the City Scholars program has enriched the campus community through the addition of some of the city's best and brightest students. The diversity that each student brings to campus enhances RIT's living and

learning environments, he said.

"The Rochester City Scholars program helps to create additional avenues of access for city public school students who wish to attend RIT," McDonald said. "More importantly, RIT has established support mechanisms to help ensure that each City Scholar is provided with the academic and social connections necessary for academic achievement, persistence and graduation."

Since 2010, almost 100 students have participated in the program. In May, the program's first cohort of students graduated from RIT, and 15 students entered in August. The program is funded through private donations and institutional support.



Photo by Big Shot team

NOTEBOOK

Classroom of future

Moveable furniture that allows for quick reconfiguration and group work. High-tech interactive white boards on the walls that when connected to the professor's laptop create easy sharing of information. Large monitors around the room that present clear sightlines, making every seat in the classroom.

Those are just some of the features in a remodeled classroom in George Eastman Hall that was made possible through a partnership between the university and Steelcase Education, a company focused on creating effective, inspiring learning spaces that encourage active learning.

Product lab opens

RIT opened a \$3 million high-tech lab designed to help companies and independent innovators convert their ideas into prototypes and ultimately new products.

The Digital Manufacturing and Product Realization Lab on the fourth floor of the Golisano Institute for Sustainability features state-of-the-art equipment and leverages the extensive resources and experience of research scientists and sustainability experts.



Napa Valley legend Margrit Mondavi recently visited RIT's University Gallery and Sands Family Studio as a guest of James Watters. Mondavi, artist, philanthropist, cookbook author and wine expert, and Watters, RIT's senior vice president of Finance and Administration, met at an alumni event hosted at Mondavi Wineries and sponsored by Richard Sands, RIT trustee and chairman of Constellation Brands. During her visit, Mondavi was invited to create a show of her work at an RIT gallery and also discussed with School for American Crafts Professor Len Urso the commissioning of a sculpture of her late husband, Robert Mondavi, for display at the California winery. Pictured during her visit from left to right are Associate Professor Thérèse Hannigan, Watters, Mondavi, Sands, Constellations Brands Vice President Ginny Clark '08 (service leadership and innovation) and Mondavi Assistant Wendy Darneal Carols.

About Students

Members of the co-ed a cappella group Proof of Purchase performed during the 2014 First Niagara Rochester Fringe Festival in September. RIT students, faculty and staff participated in more than 20 performances, including poetry readings, dance, film, theater, music, gaming and visual arts.



Hundreds of students in September competed in Mud Tug, an annual tug-of-war fundraiser and one of the most popular events held on campus each year. While the tournament may be dirty, it's for a good cause, with \$11,500 going to Hillside Family of Agencies, an organization that provides support, counseling, education and housing services for children and families. RIT's Phi Kappa Psi and Zeta Tau Alpha Greek organizations host the event.



Photo by Michael Owens

BY THE NUMBERS ABOUT CAMPUS RECREATION

504,311

Visitors to the Hale Andrews Student Life Center last academic year.

1,200

Approximate number of towels used daily at the Student Life Center.



Photo by A. Sue Weisler

Global festival unites students

RIT's inaugural One SpiRIT: Global Hockey Festival attracted more than 1,600 Tiger fans outside of the Gene Polisseni Center.

The event on Oct. 11 linked RIT's main campus with its international campuses in Croatia, Dubai and Kosovo via Cisco Telepresence videoconferencing technology.

Additionally, festival-goers were treated to an assortment of carnival games, live music, food, T-shirts and more prior to the women's hockey game.

"We wanted to make the world smaller and make RIT bigger," said John Moore, assistant vice president for Facilities Management Services.

More than 700 international RIT students celebrated at pubs, clubs and their own campuses.



Students play human foosball during the inaugural Global Hockey Festival.

Photo by Michael Owens

20

Loads of laundry done daily at the Student Life Center.

2,416

Intramural games played by more than 24,000 participants last academic year.

24,263

Participants at the Red Barn rock climbing facility last academic year.



Fourth-year physician assistant students spend countless hours practicing their interview and examination skills before seeing their first patients. Here, Stephanie Ellis, right, checks Jean Kelly's carotid arteries.



Fourth-year physician assistant student Alexandra Williams practices her physical examination skills with her practice partner Vivian Nguyen.



Rachel Triassi '16 and Professor John Oliphant discuss ongoing clinical research from a recent trip to Haiti.

Medical program matures to fill national need

Rachel Triassi thought she would go to medical school until a chance meeting with a physician assistant unexpectedly broadened her career options.

“I had never heard of PAs before,” said Triassi, now a fourth-year student in the BS/MS physician assistant program at RIT. “That sparked my interest.”

Triassi and her cohort in the physician assistant class of 2016 are training to be nationally certified, state-licensed medical professionals who practice medicine on health-care teams with physicians and other providers. The U.S. Bureau of Labor Statistics ranks physician assistants as the 13th

fastest-growing occupation in the country, with faster-than-average increases expected to reach 38 percent by 2022. The median annual wage as of 2012 was \$90,930.

The numbers reflect a critical time in health care. The de-



Heidi Miller

mand for medical professionals is increasing as baby boomers age, medical doctors retire and people gain coverage through the Affordable Health Care Act.

“I don’t think there’s any question that PAs are definitely part of the solution to the current health-care problems,” said Heidi Miller, director of the physician assistant program

since its inception at RIT in 1993. “The tremendous employability of our graduates has been just phenomenal. There are close to 500 alumni, and I’m not aware of anyone not working as a PA who wants to be.”

The class of 2016 is the first to go through the five-year BS/MS degree and represents a new phase of the physician assistant program at RIT.

Triassi and her peers are also the first PA students to remain on campus for a fourth year. Students in the former BS program spent their senior year gaining clinical experience in five-week blocks in 10 different practice areas and health-care settings. The graduate students will begin their clinical internships in June 2015, after an additional year of classroom education.

“We graduated the last group of BS students this past May,” Miller said. “As a result of this transition, we don’t have students on clinical rotations this year for the first time ever in the 20-year history of the program. This is a planned and predicted transition and one-year only.”

The PA degree, formerly housed in the College of Science, is one of the foundational programs of RIT’s College of Health Sciences and Technology.

RIT’s ninth college opened in 2011 as the academic prong of the Institute of Health Sciences and Technology, part of the alliance and collaborative partnership between RIT and Rochester General Health System, now known as the Rochester Regional Health System.

The class of 2016 arrived at a pivotal time in the PA program’s history, starting as

first-year students in the new college and entering the third year—the professional phase and medical education—during the first fall semester at RIT. Miller had timed the third year of the BS/MS curriculum to coincide with the university’s switch to the semester system during the 2013–2014 academic year.

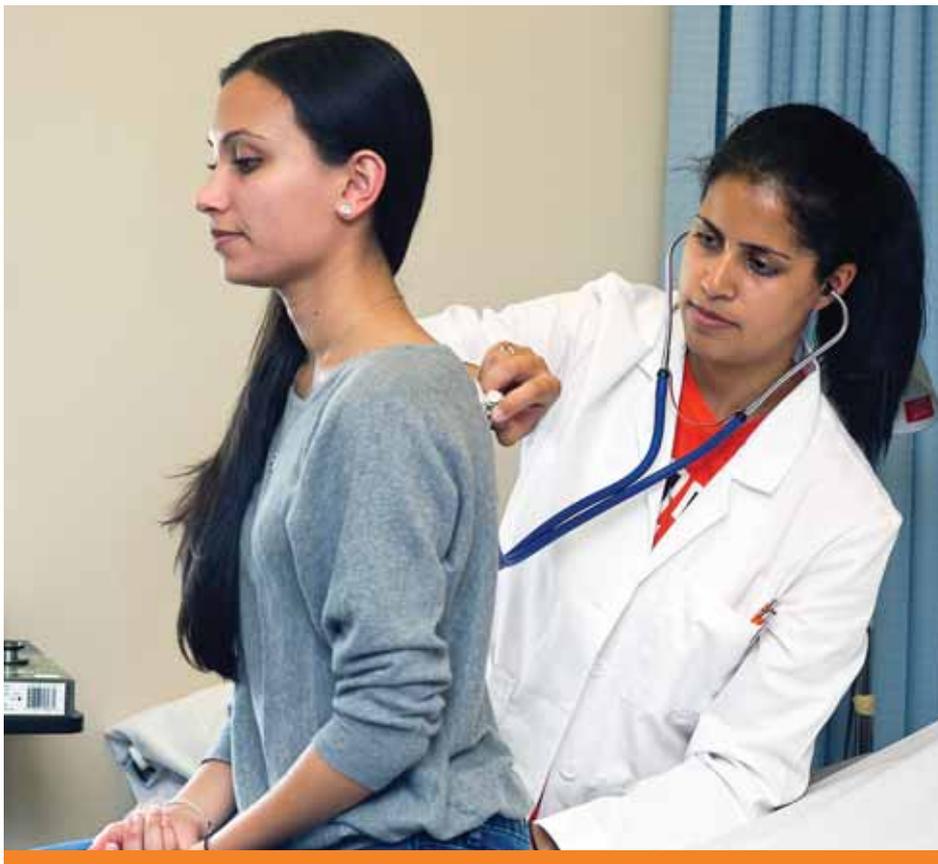
The BS/MS degree gives fourth-year students more time to delve deeper into their medical education through new classes like hospital practice, clinical integration and clinical epidemiology. Courses on research methods will prepare students to complete a graduate project on topics pertaining to patient education, best practices or community resourcing, for instance, during their year of clinical experience.

Evolution of PAs

Miller and Nancy Valentage, associate director, have a long history with the physician assistant program. Miller was a practicing PA at Rochester General Hospital in the late 1980s when RIT’s then-Department of Allied Health Sciences approached the hospital about starting a physician assistant program. She joined RIT to run the program and was soon followed by Valentage, a practicing PA at the former Genesee Hospital. The PA educators have watched their program and their profession mature in the last two decades.

“The terminal degree for physician assistants used to be a certificate, then it moved to a bachelor’s degree, now by 2020, all physician assistant programs must be at the master’s level,” Valentage said.

The PA profession has a reputation for



Fourth-year physician assistant students Jaynah Mistry, right, and Priya Vyas practice their clinical skills. They've been trained by Drs. Cara Calvelli and Patricia Newcomb and other core faculty members.



Third-year physician assistant students wondered why their orientation to the professional phase of their education included a stop at the Memorial Art Gallery. Changing the context from medicine to art forced the students to focus on the process of collecting facts without jumping to conclusions and to listen to each other's reasoning. After a year of medical training, the PA cohort will retake the class with a new perspective. The two-hour program was taught by Dr. Stephanie Brown Clark, director/associate professor, department of medical humanities and bioethics at the University of Rochester Medical Center School of Medicine and Dentistry.



Download The University Magazine app to see a video about the Art of Observation.

flexibility. After passing their national boards, practitioners can diagnose and treat patients as part of a medical team in any state in the country. The profession demands a commitment to lifelong learning and offers variety—PAs can move between practice areas throughout their career.

Alumna Erin Stafford '08 has worked as a hospital internal medicine physician assistant at the Mayo Clinic Hospital in Phoenix for the past six years and enjoys a variety of responsibilities.

"I have the opportunity to sit down and have meaningful conversations with patients and their families about serious medical conditions," Stafford said. "I am also able to treat acute cases that require emergent intervention. You get to see it all in hospital medicine—you see patients in the ER, ICU, post-anesthesia care unit and on the medical/surgical floors."

Highly competitive

RIT's PA program launched in 1993 with the professional phase. Students who met the prerequisites began as juniors. Seventeen students earned their BS degrees

in 1995. RIT's young program gained accreditation and grew at a controlled pace. Twenty-seven PA students in the class of 2014 graduated this past May with the program's final BS degrees. This year's incoming class of 2019 began with a record 36 students.

The program's emphasis on academics and leadership yields top-notch candidates from the several hundred applications received every year.

Winning a seat in the program is highly competitive. The program depends upon available training sites in the region for students to fulfill their required clinical experience. Increased competition for clinical sites between other PA and medical programs in the region limits RIT's program size, Valentage said.

Miller and Valentage take pride in pairing their students with clinical sites that will enhance their training.

They conduct quality assurance to verify the level of acuity, caseload and supervision, and run criminal background checks on potential preceptors.

"We are asking people in the medical

community to take our students and train them, spending time with them for five weeks," Miller said. "That challenge has increased in the last 21 years. It's become more competitive. Those are things that keep us up at night."

Many alumni also serve as preceptors. Stafford is a physician assistant educator at the Mayo Clinic who works with students from a variety of programs. Stafford shares with them wisdom she learned from Valentage before beginning her own clinical experience.

Valentage's advice is a mantra for student and professor.

"I say the exact same thing to every class, year after year when preparing them for the start of clinical rotations," Valentage said. "Be the first on your team to arrive in the morning, the last person on your team to leave at night, read constantly, and embrace all rotations even if it may not be your favorite. You never know when a caveat of clinical knowledge you learned on a rotation you thought you wouldn't like will pertain to a future patient of yours."



Physician assistant professor Nancy Valentage observes Jesslyn Doody's examination techniques on fellow fourth-year student Margaret Kolb.

Photos by A. Sue Weister

Years later, Valentage's words still resonate with Stafford. "That always stuck with me," she said. "Even when I was on a rotation that wasn't my favorite, I gave it my all. I think that attitude prepared me well for clinical practice."

Working together

A focus on team unifies physician assistant students and practitioners.

"The core philosophy of this whole program has always been about team because you don't practice medicine in a vacuum," Miller said. "PAs are known to be exceptionally good at the concept of team medicine, keeping the patient at the center of care."

RIT's program has a reputation for rigor and intensity of course material. The pressure is high: PA students on rotation are expected to have the same foundation of clinical knowledge as first-year residents, Triassi noted.

"They teach that we are a team," Triassi said. "We work together. We're not competing against each other for grades or to be the best. We're helping each other get through.

The person who is struggling the most—that's where the whole class is going to be because the whole class helps push them along. They may be struggling now, but you may be struggling next week."

Triassi and the class of 2016 will begin their clinical rotations in summer 2015. They will not be present when the physician assistant program moves, in the fall, into its new quarters in the Clinical Health Sciences Center. Its former home, the Center for Bioscience Education and Technology, will remain headquarters for the dean's office and the non-clinical programs in the College of Health Sciences and Technology.

RIT broke ground this past spring on the new home for the college's clinical programs and a primary care clinic that Rochester General Hospital will operate.

The PA suite in the 45,000-square-foot facility expansion at the north end of Louise M. Slaughter Hall will nearly double the program's current space and provide simulation rooms and storage for its growing collection of patient-care models.

Medical programs across the country are

turning to simulation manikins to prepare students to work with real patients in a safe environment.

"Medical simulation is part of the future of the program," Valentage said. "Our students can train on the static models and learn the basic skill sets of suturing, IVs, medication administration. We can program a heart arrhythmia in a computerized manikin. This is great for team training before they see patients during their clinical year of training."

Susan Gawlowicz '95

Attention PA alumni

No plans are in the works at the moment for a stand-alone master's degree in physician assistant studies at RIT, according to Heidi Miller, director of the physician assistant program. Alumni seeking graduate education are encouraged to consider the online master's degree in health systems administration offered by the College of Health Sciences and Technology, Miller said.



RIT



GENE POLISSENI CENTER OPENS WITH A

ROAR

Wanda Polisseni didn't want to see RIT's new state-of-the-art arena until it was complete so she could get the full experience.

"I am blown away," said Polisseni, the widow of Gene Polisseni, the arena's namesake. "This is a dream come true for my husband because of his love of hockey and RIT."

Polisseni and the RIT community got their first look at the Tigers' new \$38 million den on Sept. 18 during a dedication ceremony. The first games were played in late September and early October.

The reviews of both the facility and the teams who now call the arena home have been gushing.

"I could talk today about RIT's march to national hockey prominence and decades of great competition," said RIT President Bill Destler before the first puck was dropped. "But there's a different story I want you to hear about how these teams have built RIT pride and spirit around the world."

Popularity of both the men's and women's hockey teams has skyrocketed in recent years, resulting from the men's team's historic run to the 2010 NCAA Frozen



Four and the women's team winning the 2012 NCAA Division III Championship.

As interest rose, RIT quickly outgrew Frank Ritter Memorial Ice Arena, the Tigers' home for the last 46 years. A lack of amenities at Ritter Arena and limited seating made hockey night a test of patience and endurance. Spectators would cram into the building sometimes standing three-deep behind the railing. Those with seats often had to arrive two hours before game time to claim them.

The Polisseni Center, which sits on the

south side of the Student Alumni Union, boasts 4,000 seats, and with standing room, has a total capacity of 4,300 complete with a student/Pep Band/Corner Crew section. Other seating options include reserved chair-back seating and a special club section with buffet meals and cash bar. Six corporate suites are available—four on the club level, one on the media level and a unique bunker suite at ice level.

The naming of the facility resulted from a \$4.5 million partnership between the

Polisseni Foundation and RIT Trustee B. Thomas Golisano, founder and chairman of Paychex Inc. and lifelong Polisseni friend.

Gene Polisseni served as vice president of marketing at Paychex until he died in 2001. Most of his professional life was devoted to helping build the payroll services company, but hockey always remained his personal outlet. He organized youth and adult amateur leagues throughout the area and he regularly attended professional hockey games.

At the dedication ceremony, Golisano



The women's hockey team helped open the Gene Polisseni Center by throwing T-shirts to fans during the dedication ceremony. The team won its regular-season opener against Union College 2-1 on Oct. 3.

Amenities

- 4,000 seats and additional standing room for a total capacity of 4,300 fans. The majority of the seating is reserved and there is an expanded student section that is general admission seating.
- Exclusive seating, which includes club seating behind RIT's bench, six luxury suites—four are attached to the club lounge, an upscale full-service hospitality area—and a VIP “player experience” box located next to the RIT bench where nine fans can feel like they are sitting on the bench.
- Two full-service concession stands and multiple mobile kiosks throughout the venue with additional food options.
- A new RIT Athletics Hall of Fame highlighting the hall's inductees and RIT's athletic history.
- A Barnes and Noble store where fans can purchase Tiger gear.
- Two high-definition video boards.
- 13 restrooms.

Parking

For after-hours events, visitors are encouraged to park in D, S and R lots, which can accommodate roughly 1,300 vehicles. A campus map is available online at <http://maps.rit.edu>.

Tickets

Season and single-game tickets can be purchased at www.rithockey.com or by calling the Box Office at 585-475-4121.

Gene Polisseni Center donors

The Gene Polisseni Center wouldn't be possible without the generous support of the RIT and local communities.

Here are the donors whose gifts made it possible to name several rooms, areas and items in the arena:

- Gene Polisseni Center
- Marty and Dolly Schultz Memorial RIT Sports Hall of Fame
- Trans-Lux Video Boards
- Wilmot Family Atrium—First level concourse on the east and north ends
- Davenport-Hatch Mezzanine—Third level
- Zeke '73 & Jane '03 Duda Family Plaza
- Bruce Bates Men's Team Suite
- Hall-Thompson Alumni Terrace
- Masaschi Family Locker Room
- Louis W. Spiotti, Jr. Hockey Fitness Center
- J. Roger Dykes Media Suite—Third level
- Tom '74 and Nan Hildebrandt Training Room
- Green B. Williams Seat—Lone orange seat
- Paychex, Inc. Home Team Bench
- Rochester Regional Health System Visiting Team Bench
- Corner Crew Bell
- Michael and Victoria '93 Griffith Home Penalty Box
- Phi Kappa Psi Fraternity Visiting Team Penalty Box

Donations are still being accepted. To pledge a gift to Tiger Power Play—The Campaign for RIT Hockey, go to rit.edu/powerplay.

called Gene Polisseni the soul of Paychex. “He instilled the moral integrity and character into our company.” He added that the arena is a great tribute to his friend.

For Neil Guertin, a clarinet player and president of the RIT Pep Band, the new arena means bigger sound and more dancing. While the band was limited to 65 members per game in Ritter Arena, that will no longer be an issue in the bigger Polisseni Center.

“When I first saw the Pep Band playing during an RIT open house, I knew I wanted to be a part of it,” said Guertin, a third-year computer science and mathematics major from Cornwall, Vt. “I'm glad to be a part of this huge moment at RIT.”

In addition to more dancing from the tuba section, crowds can also look forward to a few new songs that have been added to the Pep Band repertoire.

The new arena also will improve the performance of the RIT Corner Crew. Their corner is located at the southwest end of the rink and has been outfitted with a new cast bronze church bell that will be rung after every RIT goal.

“Loving hockey is just a natural part of being at RIT,” said Diana Tubman, a fifth-year psychology and marketing major who has been a part of the Corner Crew for two years. “And the best part about being in Corner Crew is that you get to be extra loud about it.”

Steve Schultz '89 (computer science) and Vicki Schultz '92, '94, '99 (photography, business administration, MBA), kicked off the fundraising for the arena in 2010 with a gift of \$1 million.

Steve Schultz, who as a student pulled together multiple cheering sections to lead the Corner Crew, visited the arena every two weeks to watch it being built.

He said that he likes that the new arena has the closeness of Ritter with the amenities Ritter was lacking.

The Polisseni Center is among the few new arenas without a center-ice scoreboard. Instead, two 23-foot-by-13-foot high-definition video boards—a gift from J.M. Allain '03 (multidisciplinary studies), who is president and CEO of Trans-Lux Corp., a leading supplier of programmable electronic information displays—are located on each end of the ice, complete with full captioning.

“With the Corner Crew and student section, it's going to be a great place to play,” said sophomore forward Garrett McMullen, a packaging science major from Churchville, N.Y. “It's great to see everyone come together to support a top-notch facility.”

Mindy Mozer and Joe Venniro



Photo by A. Sue Weisler

The single orange seat in the new arena is directly behind the net that RIT will defend twice. The seat honors Green B. Williams '78, a former RIT goaltender.

Orange seat reminder of former goaltender



When fans walk into the Gene Polisseni Center, they will notice one orange seat among the 3,999 black and gray seats. That seat is in honor of Green B. Williams '78 (business administration), a former RIT goaltender.

Williams was as committed to his country as he was to RIT. A native of Amherst, Mass., Williams played 50 games in goal for RIT from 1973 to 1977. While at RIT, Williams received the RIT Coaches Award for Outstanding Contributions to the program in 1976 and the RIT Hockey Outstanding Senior Award in 1977.

After graduating, Williams enlisted in the U.S. Air Force, where he served with distinction. Tragically, he was killed in a

pilot-training accident on March 21, 1984, just six days shy of his 28th birthday. Tom Keene '75 (biology) and Jeff Begoon '78 (business administration) began a movement to honor Green B. Williams' memory.

With support from Williams' family, an effort to raise money for the Polisseni Center was started with a specific goal to make the one seat, located in Section 107, Row K, Seat 8, orange. The seat is directly behind the net that RIT will defend twice every game. The single orange seat is a reminder of Williams' commitment to excellence and his Tiger Pride. The seat will be available for purchase on a game-by-game basis for both men's and women's games.

Joe Venniro

ENGINEERING A NEW

Ph.D. program

Engineering doctoral student Mariela Rodriguez Adames, who is from the Dominican Republic, works on improving the processing capabilities in print technologies, specifically for 3D printing applications. She is part of the first class of students enrolled in the new Ph.D. in engineering program.



Mariela Rodriguez Adames is improving electrophotography, a core technology for 3D printing, paving the way for better systems to produce wearable sensors or even human tissue engineering.

Bret Minnehan is trying to get computers to “see” the world through object tracking, and his work could give rescue workers an advantage as they search through debris in disaster areas.

Pruthvik Raghupathi is studying bubbles—the serious work behind fluid dynamics associated with fuel cells. Managing this means higher performance in electronic devices well beyond the automotive industry.

All three are in the first class of RIT’s seventh and newest doctoral program, a Ph.D. in engineering. Approved by the New York State Department of Education last spring, the Ph.D. was one of the first new degree programs green-lighted after the university completed its semester conversion process. The Kate Gleason College of Engineering launched its newest doctoral program this fall with three women and seven men, a group of researcher-entrepreneurs who will focus on solving problems of national and global significance, specifically in the crucial areas of health care, communications, energy and transportation.

“What else can you think of that is a big picture, societal problem that doesn’t fall into one of those areas?” said Harvey Palmer, dean of the Kate Gleason College of Engineering. “More and more often now the areas of greatest significance are crossing boundaries of the traditional disciplines.

“When it comes to research, you are looking at areas that are the greatest interest, that require perspectives coming from a variety of disciplines. We want our students to recognize that whatever they are choosing to do, it cannot be thought of in a narrowly-defined way,” he said.

The global problems the doctoral students will tackle are as varied and multi-dimensional as developing alternative energy resources, improving transportation and communications infrastructure and advancing medicine. The latter includes advances from an equipment or systems perspective to biomedical breakthroughs like tissue for replacement organs “engineered” with an individual’s own cells, cultured in a lab, then “built” using a 3D printer—breakthroughs that could be seen in this lifetime.

“We have a unique opportunity to redefine doctoral education in engineering in the U.S. and globally,” said Edward Hensel, the college’s associate dean of research and graduate studies and program director for the Ph.D.



Photo by A. Sue Weister

As a graduate student in RIT’s computer engineering program, Bret Minnehan began developing an autonomous system for unmanned aircraft. In the Ph.D. program, he’ll continue this work to provide high-resolution imagery in areas where there is limited mapping information, such as in disaster zones.

“We can’t solve all the world’s problems, but if we can solve problems in these four domains, we are going to have an impact. We talked to many of our industry partners. Just like we have strong industrial partnerships at the undergraduate and master’s levels, we’re maintaining that at the doctoral level.”

Big picture

One of the things Hensel and the degree development team learned from industrial partners is even though companies are hiring promising Ph.D. graduates with a remarkable depth of knowledge, these experts in their narrow field of research often fail to effectively communicate what they are doing with either other members of their research group or corporate management. They also can’t adequately explain the importance of their work to other people, such as policymakers.

Core courses in the program will start to address those needs. Initial course work in interdisciplinary research methods will guide students in managing their research scope and provide this new breed of doctoral student with insights into some of the big-picture questions they will encounter as they begin their research.

This is the foundation of what the American Academy of Arts and Sciences calls “transdisciplinary” work: The intersection of engineering disciplines—electrical, mechanical or industrial engineering, for example—with comprehensive subject matter such as business and public policy.

“We’ll be partnering with the College of Liberal Arts and the public policy program to explore how public policy impacts what engineers do, and how do engineers influence public policy,” Hensel said.

Becoming a research university

The creation of the doctoral program in engineering marks the seventh Ph.D. program at RIT. This past spring, 29 graduates earned their doctorates—the most in RIT’s history. This increase will soon elevate RIT from a “master’s university” to a “national research university” by the Carnegie Foundation. The other Ph.D. programs are:

- **Imaging science (1990).** Imaging science uses fundamental physics and mathematics to address questions about every aspect of systems and techniques that are used to create, perceive, analyze, optimize and learn from images.
- **Microsystems engineering (2002).** The program provides a foundation to explore future technology through research in nano-engineering, design methods and technologies and their integration into micro- and nano-scaled systems.
- **Computing and information sciences (2006).** The program is designed to produce independent scholars, educators and researchers in computing and interdisciplinary academic, industrial or government environments.
- **Color science (2007).** Color science research at RIT encompasses fields such as medical data visualization, computer graphics and animation, art conservation, spectral and spatial measurements of materials and color printing.
- **Astrophysical sciences and technology (2008).** The program focuses on the underlying physics of phenomena beyond the Earth and in the development of the technologies, instruments and data analysis that will enable the next strides in the field.
- **Sustainability (2008).** The program focuses on sustainable production systems—systems that create goods and services using processes that are non-polluting, conserving of energy and natural resources.

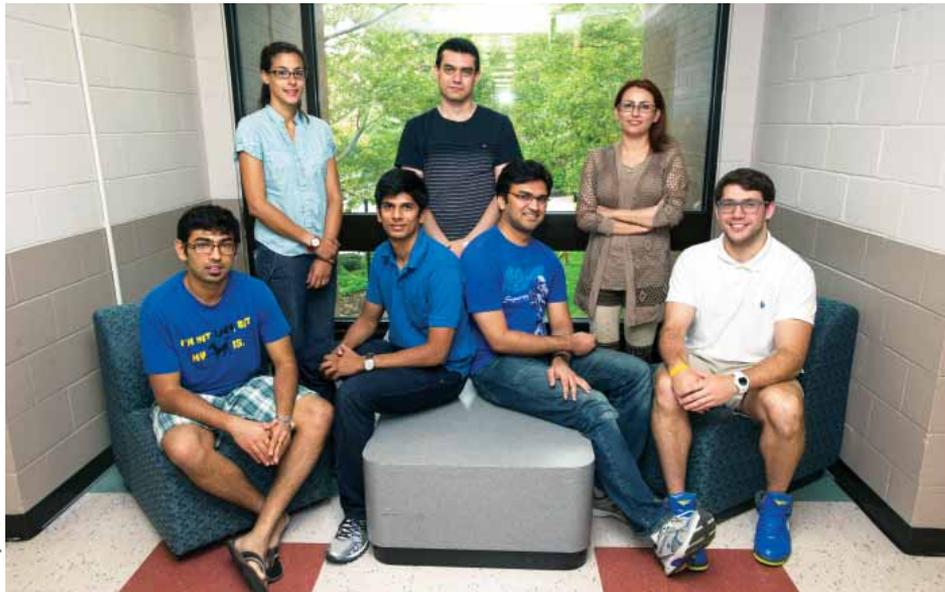


Photo by A. Sue Weisler

The first class of students in the new Ph.D. program came to RIT from all over the world. Pictured above seated left to right are: Shitij Kumar, India; Chaitanya Mahajan, India; Pruthvik Raghupathi, India; and Bret Minnehan, New Hampshire. Standing left to right are: Mariela Rodriguez Adames, Dominican Republic; Behzad Bahrami, Iran; and Fatemeh Shah Mohammadi, Iran.

Students in the application domains will be translating discovery into practice in energy, transportation, communications and health care and looking at these practices through the lens of national and global perspectives of what’s important to that domain.

Part of the coursework includes reviews of the strategic plans for the U. S. departments of transportation, energy and health and human services.

“These are the greatest minds at the top of our nation’s government that are saying, this is the future of where the nation needs to go,” Hensel explained. “Our students are going to understand those documents are what set the agenda in the future for the National Science Foundation and the National Institutes of Health. Our students are going to understand, as government evolves, that’s where policy comes from.”

Throughout their studies, the students also will consider how their solutions and information could be turned into products or services.

They’ll have access to the National Science Foundation’s I-Corp program, an entrepreneurial initiative to support faculty in bridging research to product development.

RIT’s program, led by Richard DiMartino, director of the Simone Center for Student Innovation and Entrepreneurship, will be just one of the many ways the students will wrap traditional research around innovation.

In a world where daunting problems will not be solved in one-dimensional silos or departments, unparalleled technical strength

in one’s discipline will be enhanced by being familiar with the contributing roles of other disciplines, understanding how to solve those problems in the context of public policy and having a clear commitment to professional ethics.

“Policy is what informs research, so if as engineers we want to influence what’s happening in 2040, we better make sure our voices are heard by those policymakers today,” said Hensel. “Engineers influence policy in the very long term, and in the short term, policy influences engineers and what we do today.”

Solving problems

Rodriguez Adames ’08, ’10, who is from the Dominican Republic, has master’s degrees from RIT in industrial engineering and print media.

When she is not juggling family responsibilities, including raising a 4-year-old and 2-year-old twins, Rodriguez Adames is in the Printing Research and Imaging Systems Modeling Laboratory in the College of Imaging Arts and Sciences, working on the intricacies of electrophotography.

She sees the degree program as a way to expand her knowledge of this evolving industry and her opportunities for a career in it after graduation.

“This degree has a broader scope. It also means I can be interdisciplinary, more creative and more me in terms of what I am interested in,” said Rodriguez Adames. “This will get me more into the R&D area that I like.”

Her current work is in 3D printing by

electrophotography, the underlying technology used in laser printers and copiers. Her work on improving the processing capabilities and system configurations in print technologies could impact and further the growth of these systems in the field of 3D printing, also referred to as additive manufacturing.

In traditional printing, ink particles are fused onto paper. But with 3D printing, new materials are being sought to print wearable sensors, consumer products, medical devices and in tissue engineering, for example.

“It’s interesting how your skills, your knowledge and your research and interests can be applied to different industries,” said Rodriguez Adames. “Trying to explain research to people about 3D printing is hard. What I explain to people is, I want to make a difference, and right now this is the place that is offering me that opportunity. My research could be the basis for tissue engineering, things like that. And those are things that can make a difference.”

Minnehan also wants to make a difference, but with unmanned aircraft, or drones. His work, which he started as an undergraduate, involves using unmanned aircraft to build a map in disaster areas to enable turn-by-turn directions for people on the ground trying to get through debris.

Eventually, Minnehan would like to teach at a university, but he expects to go into industry for several years and participate in a company’s research and development department.

“One of the exciting things about this degree program is that there are all sorts of different engineering majors in the program that we can work with,” he said. “It’s not a competitive atmosphere.”

All of the doctoral students are working with the engineering college’s most prominent faculty. Raghupathi’s work with Satish Kandlikar, professor of mechanical engineering and a top researcher in the field of fuel cell technology, involves developing a fundamental understanding of boiling mechanisms to help create surface enhancements, which improve heat transfer.

This has applications in many fields, including power generation, cooling of high heat flux devices used in space, cryogenic heat exchangers and water desalination.

He said he chose the engineering Ph.D. program for its focus on application-based, collaborative research.

“Developing sustainable, environmentally-friendly energy sources is one of the biggest challenges of the current generation,” he said, “and I hope to contribute toward the solution in the future.”

Michelle Cometa '00

Meet the faculty

Several engineering faculty will coordinate the student work being done and act as advisers in the four application domains:



Andres Kwasinski will lead the communications domain. The associate professor of computer engineering is an expert in the area of electrical power

generation, distribution systems, wireless networks and signal processing. His current research project is in alternative energy resources for wireless base stations, primarily on how to adapt the cellular traffic going through a base station and increase the use of renewable energy to power the base station. Students in the communications (telecommunications) track will leverage and expand ongoing research in wireless communications, signal processing and control, high performance and reliable architecture, resilient and secure systems and global networks, and emerging multi-media systems.



Brian Landi '02, '06 (chemistry, microsystems), associate professor of chemical engineering, will lead the energy domain. He also is group leader in the Nano Power

Research Lab, and his work focuses on lithium ion batteries, particularly energy conversion, transmission and storage capacity for this next-generation technology. Students in the energy track will be engaged in both basic and applied research to realize sustainable solutions to society’s energy needs, including technology challenges in the area of energy collection, conversion, storage, distribution, control and consumption.



Iris Asllani, assistant professor of biomedical engineering, heads the Integrated Neuro-Imaging Lab and focuses on the development of multi-modal fMRI

methods for applications in neuroscience and clinical research. She also has a focus on incorporating biomedical engineering applications to improve health-care

delivery in the developing world. Students in the health-care track will apply fundamental knowledge of their respective engineering disciplines to advance technological boundaries essential to improve care for the aging, develop enhanced imaging systems and create assistive technologies and new methodologies to diagnose and treat diseases and to optimize the delivery and quality of health-care processes and services.



Agamemnon Crassidis is an associate professor of mechanical engineering. His experience is in aeronautic navigation and sensor systems. He is also RIT’s representative on

NUAIR, a consortium of universities and companies recently selected as one of six test sites for unmanned aircraft systems in the U.S. Students in the transportation track will address issues including next-generation vehicle systems, transportation infrastructure, innovative distribution systems for goods and people, safety and security and optimal strategies for vehicle routing and logistics.

The engine of new ideas

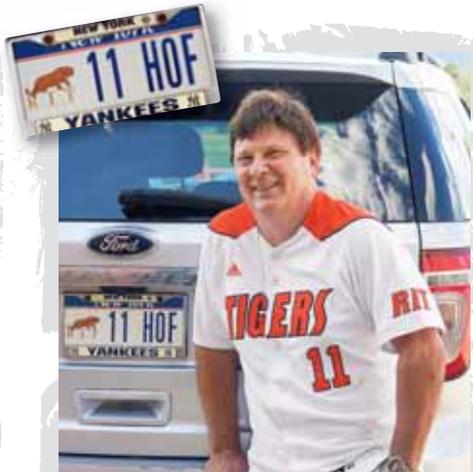
Businesses need new ideas for products or services to remain competitive. Universities and their research facilities, faculty and students remain businesses’ chief resources for new ideas. Obtaining funding for these new products often comes from a variety of sources, including research grants and corporate research and development support.

Prior to the launch of its Ph.D. in microsystems in 2002, the engineering college had less than \$500,000 per year in external grant support. By comparison, from 2009-2012 the college averaged more than \$6 million per year in external grant support. Today, the Kate Gleason College of Engineering is responsible for more than 15 percent of RIT’s total external funding, compared to only 4 percent in 2001. The Ph.D. program in microsystems marked a shift in the mission of the engineering college to better integrate research and knowledge creation as a key component of its academic portfolio. A similar shift is expected with this newest Ph. D. program.

PROUD GRADS GET LICENSE TO BOAST



Alexis Blondrage '07 (environmental science) teaches science research and biotechnology on Long Island. She got the plates to commemorate her time at RIT and to show her love for science.



Phil Ferranti '79 (business) is a former baseball outfielder who is in RIT's Sports Hall of Fame. His jersey number was 11. The license plates are a way for him to show his Tiger pride.



Paul Mosakowski '80 (marketing) ordered a Tiger plate in 1994 and was assigned the number 127. Tiger plates are the only ones representing a Rochester-area college.

Although five states away in Cary, N.C., Michael Pail '98 (electrical engineering) and Suzanne Traynor Pail '98 (mechanical engineering) think of RIT every time they see their car.

The Pails, who are the Raleigh-Durham, N.C., chapter leaders of the RIT Alumni Association, ordered "RIT RIT" plates about seven years ago. RIT

is repeated because both are graduates. Suzanne, who played four sports at RIT, excelled in soccer and was inducted into the RIT Athletics Hall of Fame in 2005.

"Every once in a while, someone will say what a great school RIT is, or that they went there," Michael said.

The Pails and other RIT alumni have found a creative way to show their RIT identity to others—on their license plates.

Alexis Blondrage '07 (environmental science), who teaches science research and biotechnology on Long Island, drives a car with "RITDNA" plates.

"I decided to get the plates because I thought it would be a fun way to com-

memorate my time at RIT and also my love for studying DNA," she said. "I feel like RIT has become a part of me. My experiences at RIT are what caused me to pursue a career in education after I graduated."

Blondrage put RITDNA on custom Tiger plates, which are special plates sold in New York that include a picture of the RIT tiger logo.

Former RIT baseball outfielder Phil Ferranti '79 (business) also drives a car with personalized Tiger plates that read "11 HOF"—he's in the RIT Athletics Hall of Fame and 11 was his jersey number.

"I look at RIT as part of my family," said the Rochester-area resident. "I'm proud of my alma mater. They've really grown."

Paul Mosakowski '80 (marketing) ordered an RIT Tiger plate back in 1994. He was assigned "127RIT," which is now on his Chevy Blazer.

"What sold me on the plate was the shiny tiger," he said. The plates got some national exposure when he drove across the country on a trip with his family. "You can't put a price on that for marketing."

Once when he was in Indiana attending a Notre Dame football game, a car parked next

to him with "126RIT" on it.

"There were probably 10,000 cars in the parking lot," he said, but he doesn't know who the other driver was. "What are the odds?"

Greg Livadas



Put a Tiger on your plate

New York's Department of Motor Vehicles began offering RIT Tiger plates in 1994. The plates are assigned a three-digit number by the state followed by "RIT." Or they can be personalized for an extra fee.

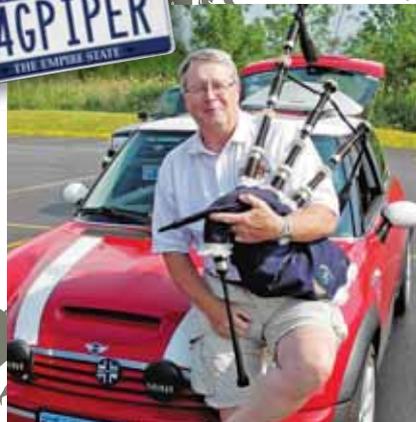
RIT President Bill Destler's personalized Tiger plate is "1 RIT."

The plates cost \$60 to order and \$31.25 a year to renew. Personalized theme plates cost \$91.25 to order and \$62.50 a year to renew. The fees are in addition to the normal vehicle registration renewal fee.

To order an RIT plate, go to: <http://dmv.ny.gov/custom-plates/rochester-institute-technology>.

Plates on campus

Many cars parked on campus have personalized plates that are intended to cause a chuckle, start a conversation or reveal the driver's pastime or occupation. Here's an inside look at just a few of the RIT faces who are taking creative license with their rides.



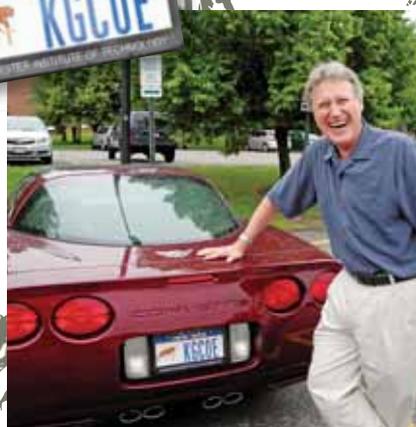
Lex Sleeman, associate director of athletics, is well known for playing his bagpipes at special events on campus. His plate, "B4GPIPER," attached to his 2003 Mini Cooper, "definitely draws attention," he said. "People ask, 'Do you play? Are you a bagpiper?'"



Roy Berns, professor of color science, appearance and technology, got his "ROYGBIV3" plates as a gift from his wife. "ROYGBIV," "ROYGBIV1" and "ROYGBIV2" were already taken. "It's a great choice because it is Newton's spectral colors and my first name," he said.



Peter Hauser, a research faculty member at RIT's National Technical Institute for the Deaf, was surprised to find "DEAF" available when he checked the state's DMV website in 2000. He ordered the plate as a form of self-identification and pride, not to alert others that he is deaf.



People parking near **Harvey Palmer** should have no trouble figuring out which college at RIT he's associated with. In 2003, Palmer, dean of the Kate Gleason College of Engineering, put a license plate of "KGC0E" on his 50th Anniversary Corvette.



Not only does TPS represent **Tyler Paul Schindel's** initials, it also stands for "Testing Procedure Specification," a term familiar to people who have seen the film *Office Space*, where it was a running joke. Schindel '09, '14 (information technology) works as a systems analyst for NTID.



Brian Milburn '08 (international studies), an English lecturer at NTID, sits on the NTID sustainability committee and bought an electric motorcycle a few months ago, which bears the plate "CYA OIL." He can ride 75 miles before needing to recharge.

A young boy with short dark hair is shown in profile, holding a brown basketball with his right hand. He is wearing a black t-shirt with a colorful graphic and light-colored cargo shorts. His right hand is replaced by a blue and black prosthetic device. The background is a grassy lawn with trees and a house in the distance.

A new hand for Lucas

RIT scientist launches global network to put 3D-printed prostheses into the hands of those without

Lucas LeMay had three wishes for his 10th birthday. He wanted to grip a full hand of cards when he plays Uno with his family. He wanted to press the brakes on his bike. But most importantly, the fifth grader wanted to hold a taco.

As he nervously walked into a lab at RIT, standing firmly between his parents, he spotted his birthday gift resting on the table. It was his favorite color—blue, just as he asked for. It was even his size. In fact, it was custom made for him.

Lucas, who was born without fingers on his right hand, went home that day with the gift of a new 3D-printed mechanical hand. Using 3D printers, open source designs and a little bit of ingenuity, a group of students and a research scientist at RIT are helping to advance the quality of prosthetic devices and make them available to everyone.

In the past four years, the emergence of affordable 3D printers and the do-it-yourself Maker movement have sparked a revolution in prosthetic devices. Just as a painter uses layers of paint and specific brush strokes to create art, a 3D printer uses specific digital instructions to lay down layer upon layer of plastic to create a finger or palm.

The customized parts are then assembled using string, bolts and nuts from an everyday hardware store. The total cost is less than \$50, nowhere near the tens of thousands of dollars people pay for traditional prosthetic devices.

“This is an inexpensive process that can be completed by almost anyone, especially now that many schools and libraries have 3D printers for people to use,” said Jon Schull, a research scientist in RIT’s Center for Media, Arts, Games, Interaction and Creativity (MAGIC).

In 2013, Schull created the online community e-NABLE, a group that aims to advance the development of these affordable devices and connect 3D-printing hobbyists and professionals with people in need of prostheses. Today, the popularity of e-NABLE has exploded with more than 2,000 volunteers helping at least 100 people around the world.

At RIT, a dozen students have joined Schull for cooperative education experience

and as volunteers. Using their design and biomedical engineering skills, they hope in the future to take these assistive devices beyond children with birth abnormalities to help people who have lost limbs due to war and violence, natural disasters or disease.

In May, RIT students developed a prototype and design for e-NABLE’s first 3D-printed mechanical forearm, which they donated to two recipients in Buffalo. The students and Schull are working to create exoskeleton devices and arms that use motors to augment or replace muscles. They also are collaborating with a Johns Hopkins University research lab to create a shoulder-powered harness.

“I think that the technologies and practices that Jon and the students at RIT are helping to create could significantly improve millions of lives worldwide,” said Dr. Albert Chi, a trauma surgeon at Johns Hopkins Hospital and world-renowned researcher on state-of-the-art prostheses. “Now is the time to bring e-NABLE’s collaborative approach to design and democratization of 3D-printed prostheses into mainstream medicine.”

Professional matchmaker

Born in Shanxi, China, a mining area about 300 miles southwest of Beijing, Lucas would wake up every morning to streets covered with inches of coal dust. He was living in a province that saw a rate of birth defects six times higher than the national average.

But in 2008, everything changed. Jim and Kim LeMay traveled to the city in search of a son. They fell in love with the shy but clever 4-year-old boy and decided to adopt him. Lucas was still adjusting to life with a big sister, Lindy, and his dog, Chance, in Walworth, N.Y., when the first 3D-printed hand was created in 2011.

As the story of that first hand goes, after a South African carpenter named Richard Van As sawed off most of his fingers in an



1 Research scientist Jon Schull created the online community e-NABLE to connect 3D-printing hobbyists with those in need.

2 Jascha Wilcox, a biomedical engineering student, pours cast plaster into a mold of Lucas's hand. Lucas rested his arm in InstaMold goop for 10 minutes to create a plaster cast of his hand that would be 3D scanned into the computer.

3 Schull and multidisciplinary studies student Jade Myers hold a plaster cast of Lucas's hand and measure where Lucas's wrist will bend.

4 Farrukh Mohiuddin, a biomedical engineering student, creates a silicone rubber mold inside the forearm cup of a prosthetic arm using a pre-existing plaster cast of a hand. This will create a silicone sleeve inside the forearm cup for a comfortable and custom fit.

5 Mohiuddin explains how objects are placed into 3D-printing software and how the 3D printer is set up in order to create the perfect part.

6 Wilcox uses a computer-aided design program to create and scale a 3D-printed hand.

7 The palm and forearm segment of the RIT Arm, with the newly installed interlocking mechanism for an adjustable grasp with a full range of rotation.

8 An in-progress print of the Cyborg Beast hand with an infill of 50 percent. Infill density can affect the weight and strength of a printed part.

9 The completed 3D-printed components of a hand. Parts include the fingers, phalanges, palm, tensioners and the gauntlet, which helps to stabilize and attach to the wrist. Later, string and elastic will be added to bring the hand to life.

accident, he became determined to get back to work. Because he couldn't afford a prosthetic device, he turned to the Internet to learn how to make one.

He connected with Ivan Owen, an American prop maker who had created a mechanical puppet hand, and together the pair from halfway around the world designed and produced a working hand for the carpenter. By flexing his wrist, Van As was able to control the fingers, which were attached to cable "tendons" that would tighten and relax the hand's grip.

They also created a hand for a 5-year-old in South Africa, who like Lucas was born without fingers on his right hand due to a congenital condition called Amniotic Band Syndrome. ABS is the result of fibrous bands

that wrap around a hand or a foot in utero and cut off circulation. About one in 1,200 children born every year has underdeveloped fingers and limbs as a result of the condition.

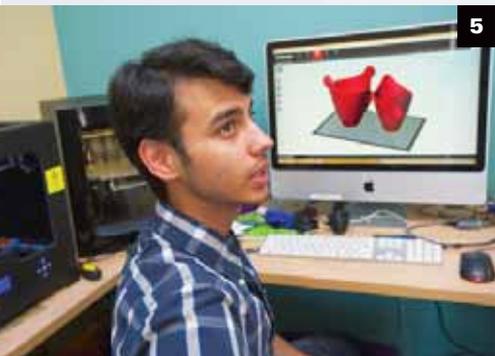
Although the first hand was designed with aluminum, Owen decided that using plastic parts created by a 3D printer would save time and money. Calling it the Robohand, they posted the design and an instructional how-to video online for anyone to use.

"When I came across that video more than a year ago, I immediately got excited," said Schull. "Here was someone who shared my vision."

Schull first became interested in prosthetic devices at a National Collegiate Inventors and Innovators Alliance conference in 2012, where he learned of several engineering

classes that helped design a custom prosthetic hand for someone in need. Impressed by their work, the entrepreneur and then associate professor in RIT's interactive games and media program began to think about ways to combine his passions for innovation, collaborative technologies and invention. He knew that 3D printers and open source software could be used to collaboratively improve the design process and bring the technology to the masses.

After a year of trying to build interest by bringing together a multi-university consortium that would design and donate prostheses, he began to fear that his idea was too grandiose. Looking for inspiration, he went back to the video of the South African carpenter.



After helping student Jade Myers assemble the pinky, Lucas LeMay tried on his new hand and began flexing the fingers. He then used the hand to hold a container while he picked out a piece of candy.





1 The RIT team had to create several versions of Lusie Santangelo’s arm in order to make it the lightest weight possible. This summer, she tried on a forearm cup from the first design that made the arm too heavy.



2 Lusie returned to RIT in October after the team redesigned the arm with less infill density to reduce the weight. Farrukh Mohiuddin and other students put the arm in a box and watched as Lusie opened her gift.



3 The students 3D-printed a custom nameplate and attached it to the arm with adhesive. Lusie had asked the students to make the arm purple but the nameplate was a surprise.

“Comments on YouTube videos are rarely inspirational, so what I saw amazed me,” said Schull. “Several people were saying, ‘this is cool, I have a 3D printer and I’d do this.’”

Schull created a custom Google map and linked it to a comment of his own. He simply said, “If you’re willing to receive inquiries from people who need an assistive device, put yourself on this map. Crowd source the distribution network.”

Within six weeks, the Google community had 70 volunteers and e-NABLE had been created.

Making a difference

For the LeMays, there was never an urgency to purchase a commercial prosthetic hand. Lucas had visited a doctor when he first came to the United States, but it would have cost \$42,000. And he didn’t need one.

“He’s very clever,” said Kim LeMay. “He’s figured out his own way to play the Xbox and he’s even learning how to play the guitar.”

However, when a friend posted a link to

e-NABLE on Kim LeMay’s Facebook wall in May, she was intrigued.

As Lucas got older, he did encounter a few activities where more grip would be useful. A second hand could put more power behind his baseball swing and steady his basketball shot.

At this point, the e-NABLE community had grown to almost 1,000 members worldwide, and Schull and RIT students were playing a crucial role in its success.

When Lucas visited RIT for the first time in June, the local group had already created two arms and three hands.

As the family walked into the cluttered campus workshop filled with tools, machines and brightly colored spools of plastic string, Lucas saw a girl about his age sitting with her forearm submerged in a bucket of goop.

“Hi, are you getting an arm too?” asked 7-year-old Lusie Santangelo. “Mine is going to be purple.”

Lusie, who was adopted as a baby from Armenia, was born without most of her fore-

arm also due to Amniotic Band Syndrome. A family friend who is an RIT staff member introduced the Santangelo family to Schull.

Like Lucas, Lusie had reached an age where a prosthetic arm would help her be more active, said her mother, Kathy Santangelo. Lusie wanted to swing on the monkey bars at recess and ride a bike down her driveway.

The RIT students explained that Lusie was having a plaster mold made of her left arm, which only grew to a few inches past her elbow.

Using a digital scanner, the exact mold would be modeled on the computer and then 3D printed into a custom forearm cup that would comfortably hold her new arm in place.

“Lucas, your hand will look similar to Lusie’s except it will be attached to your wrist,” said Jade Myers, a fourth-year multidisciplinary studies student. “Are you ready to put your hand in the goop?”

For Myers, designing and building Lucas’s



As soon as Lusie put on the arm, she tried picking up objects scattered on the table, including a water bottle, plastic container and a roll of tape. The students taught her how to rotate the forearm and offered tips on how to grasp items, such as putting the pinky finger under the object. Her parents, Steve and Kathy, watched Lusie use her left hand for the first time.

Photos by A. Sue Weisler

new hand was a natural fit, even though it was the first 3D-printed hand she had ever built.

Having always had an interest in prosthetic devices, she came to RIT with plans to tailor her major toward prosthetic design, robotics and cybernetics.

“I happen to know a lot of veterans who have waited years to get a prosthetic device, and that’s just not right,” said Myers, who lives in Canandaigua, N.Y. “If we have the ability to build people an affordable alternative that can help, then we really need to be doing it.”

While building Lucas’s hand, Myers encountered a few complications. They learned that they needed to make the shell level thicker because the plastic was splitting.

“There is certainly a learning curve for building these devices, and there are always more improvements to make on your design,” she said.

It has also been a learning process for Farrukh Mohiuddin, a third-year biomedical

engineering major originally from Pakistan, and Jascha Wilcox, a fifth-year biomedical engineering major from Ann Arbor, Mich.

They have both worked to design some of the first 3D-printed transradial arms as part of their co-ops.

While much of the design is printed similar to the hand, it also incorporates PVC pipe and a rotation mechanism for the forearm, which makes it possible to emulate wrist rotation.

“Up until this summer, the hand designs available on e-NABLE have really only served people who have wrist movement,” Wilcox said. “By helping several local residents with different needs, we have created new designs that can be improved upon by other people all around the world.”

Wilcox’s initial design, which they dubbed the “RIT Arm,” was created for 6-year-old Derek Black and 40-year-old Nathan Ramsey, both of whom are from Buffalo. In fact, Derek even opted for an extra-long arm so he could easily reach things that are far away.

Mohiuddin used part of Wilcox’s design for Lusie’s arm but added his own ideas, experimenting with a silicon mold and a lighter-weight design.

“We had Lusie try on several different forearm cups, and she found that our silicon version was the most comfortable,” he said.

In addition to a hand for Lucas and an arm for Lusie, Elizabeth Jackson, a third-year mechanical engineering student from Ligonier, Pa., has been helping to create a 3D-printed exoskeleton.

The device is for a local child with limited mobility on half of his body due to brain surgery for life-threatening seizures.

Using a 3D-printed exoskeleton that goes over his arm and shoulder, the device can actuate his movements allowing him more usability with his hand.

“I hope to continue working with e-NABLE as part of graduate school next year,” Myers said. “I think that this humanitarian model and these devices are just the first step in something big in the medical industry.”



Photo by A. Sue Weisler

"3D printers are basically glue guns on steroids. There is a little nozzle that squirts out a very fine stream of melted plastic and moves back and forth, back and forth, layer by layer building a full 3D-printed object," RIT research scientist Jon Schull said.

The science behind 3D-printed prostheses

3D printing, also known as additive manufacturing, builds an object by adding material layer by layer until the printed part is finished. Printers have a frame and three axes. The X axis moves left to right, the Y axis moves front to back and the Z axis moves up and down. The extruder, which sits on the X axis, consists of a nozzle that shoots plastic at about 100 millimeters per second and a cooling fan that helps control the layer temperature. To print objects, the electronics of the printer steer the three axes so that the extruder head is at the right spot to add plastic to the printed part.

Many of the consumer 3D printers used in the RIT lab cost between \$2,000 and \$3,000 and include settings to change print speed, temperature, density, the number of shells and the addition of a support structure while 3D printing.

PLA and ABS are two popular types of thermoplastic filament used to create 3D-printed prosthetic devices. Students say that PLA creates a better looking but less durable print. A majority of RIT's prostheses use PLA because it is easier to work with the temperature settings during the print. ABS creates a stronger part but has a higher melting point, so it can sometimes be very temperature sensitive during the print, causing the

part to crack. ABS plastic can be dipped in acetone to create a glossy look that also makes the printed part more durable.

Before 3D printing, students use a computer-aided design program to create or modify the scale of a model prosthetic device and save it into an STL file. Many STL files with pre-made designs can be found on the e-NABLE website. CAD programs used by RIT students include Fusion 360, Inventor and Tinkercad. Using the CAD program and a 3D scanner, students can also collect and analyze digital data on the shape and appearance of a plaster mold of a patient's hand.

Before printing a 3D model from an STL file, it must first be processed by a piece of software called a "slicer," which converts the model into a series of thin layers and produces a G-code file containing instructions tailored to a specific printer. Several open source slicer programs exist, including Skeinforge, Slic3r, KISSlicer and Cura.

Print times vary, depending on the size of the object. The average print time for a finger is about 30 minutes. An average palm will take about nine to 10 hours to print. Creating and assembling all of the parts for an arm will take 70 to 80 hours.

Scott Bureau '11

Down the road

Schull envisions e-NABLE growing in both numbers and impact in the future.

"In the long term, I see the community working together to create a variety of assistive technologies, not just hands," he said. "E-NABLE really only works because we have so many professionals, volunteers and recipients that are willing to collaborate and help each other."

That teamwork was put on display at the Prosthetists Meet 3D Printers conference in late September at Johns Hopkins Hospital. In addition to bringing together medical professionals and industry leaders to discuss the future of e-NABLE, the conference served as an opportunity to provide hands-on workshops for prosthetists, children and their parents to build their own hands.

The Santangelo family attended the event to meet other families and to learn more about 3D-printing technology.

"We learned how to actually put together a hand, and it's more challenging than you might think," said Kathy Santangelo. "We even met an eighth-grade girl who developed her own myoelectric arm (arms that use electric power from muscles to run) using 3D printers."

Kathy Santangelo hopes to have the RIT students do a presentation at Lusia's school to explain what went in to making the hand and to show kids how cool science can be.

RIT's e-NABLE team also plans to do a presentation at school with Lucas, who has been using his 3D-printed hand to ride his bike down hills more aggressively and, of course, to eat tacos. The family ended up eating tacos his first three nights with the hand. Lucas held the taco in his right hand while pouring sauce on it with his left.

He is still working on holding cards, but with help from Myers, the family will continue to adjust the grip to make the hand more functional.

His parents expect him to begin using the 3D hand more at school and in public. Lucas told them that he was nervous at first getting the hand because he would stand out.

But Jim LeMay said that Lucas is becoming more comfortable and even hopes to encourage another kid like him to not be afraid. "Sometimes when Lucas is by himself," his father said, "I'll catch him practicing the rock-on sign with his new fingers."

Scott Bureau '11

To learn more

To learn more about e-NABLE, go to <http://enablingthefuture.org>.

BUY A BRICK

Make your mark.

RIT's **Buy A Brick** program offers you an opportunity to support student success and the future of the university while becoming a part of RIT's history. Your engraved brick will be placed on **Philanthropy Way**, located between the Saunders College and Gleason Circle. You can personalize your brick to commemorate your time at RIT, your graduate, a loved one, or a Greek or athletic affinity.

Bricks are now available for inscription in two sizes:

- ▶ 4" x 8" (tax-deductible gift of \$175)
- ▶ 8" x 8" (tax-deductible gift of \$250)

If you have any questions or are interested in multiple bricks, please contact us at 800.477.0376 or fundforrit@rit.edu.



Make your mark today at rit.edu/buyabrick.

Austin McChord

About Datto

- Datto Inc. provides hybrid cloud-based on-site and off-site backup, disaster recovery and business continuity services for municipalities, small- and medium-sized businesses, and organizations in education, health care, retail, law and financial services.
- The company is based in Norwalk, Conn., and has more than 300 employees. The majority of them are in Norwalk, but others work in Monroe, Conn., outside of London, Toronto, Sidney and now Rochester.
- In 2013, Datto marked its fourth consecutive year of high double-digit annual growth, with revenues approaching \$50 million annually.
- The 12,000-square-foot office at 40 Franklin St. in Rochester opened this summer as part of the START-UP NY tax incentive program. The program made it an easy decision for Datto to come to Rochester. Datto is committed to creating about 70 jobs in the next 18 months.
- Datto was named to the Inc. 500 list for the third consecutive year, ranking No. 314 overall, No. 5 in security and No. 1 fastest-growing privately owned company in the state of Connecticut.

Advice

"My advice to students, especially those wishing to become an entrepreneur, is to just do it. Sometimes your best asset can be having no idea what you are doing."

Austin McChord '09 (bioinformatics) started his computer data backup company Datto Inc. out of his parents' basement in Norwalk, Conn., in 2007. This summer, Datto opened an office in downtown Rochester as part of New York state's START-UP NY program, which offers a zero-tax rate for 10 years to businesses that create jobs. Here are McChord's thoughts on how he created the business and opening a branch in Rochester.

I came up with the idea for the company while I was at RIT. I brought it up with my academic adviser during the fourth year and we talked about it, and he didn't really think there was a good opportunity for someone to build physical appliances in their basement and sell them to consumers. But nothing really gets me excited more than proving someone wrong.

I thought that online backup was starting to become a big deal and I was like, it's kind of silly they don't make a network-attached storage appliance that backed up data off-site. So it seemed like a very achievable thing to do. I spent a lot of time in the basement working at it.

It wasn't until February of 2008 that I really felt I had something that resembled a real product. I put it up on a website and said, 'this is for sale,' and of course nothing happened. No one bought anything because no one went to the website.

I realized that I had to market the product in order for it to succeed. So I started contacting prominent tech blogs and basically emailed and bugged them every day until finally they wrote about my product. That got the first sales of the business.

I came up with a different product idea and I decided I wanted to bet the farm on it. It was an idea of two mass devices that would sync to each other no matter where they were on the planet. I thought the best way to market that would be to go to the Consumer Electronics Show in Las Vegas in January 2009. My parents agreed to fund the trip with money they had saved to help me with a down payment on a house. There was also a pre-requisite there that I had to finish my degree at RIT, which I did through taking online classes.

A major nationwide retailer was interested in carrying our product and they said, 'Hey, can you send us a couple of pallets of this? We want to test market it in the Midwest region.' At that point, we hit a wall because I was hand-assembling these things in a basement and there was no way for me to produce a couple of pallets. That was a huge turning point for the business because we realized that selling direct to the consumer market was not possible from a basement.

I had run up about \$80,000 in credit card debt because in 2007 anybody could sign up for any credit card. I maybe had a week or two left of money to meet payroll for my friends who were working for me, so we were very, very close to going out of business.

We had been approached by these IT service providers. They were saying, 'Hey, we should be your resellers.' We decided to make this leap and sell to this channel because I figured we were at the end of the road anyway and hopefully this will save us. It turned out that was a really smart move and we got a lot of traction very quickly.

What it did was change our focus. Rather than trying to sell to individual small companies, which is a very large category that feels nearly impossible to reach, we instead were selling to businesses called managed service providers. That is what put the company on its incredible growth trajectory. We still have that focus today.

RIT has been incredibly supportive, helping us with the office in Rochester. A second piece is RIT's co-op program. Many of our development team is from RIT, almost two-thirds, and they have come through co-ops that we then hired on as full-time staff.

I have a lot of love for the city of Rochester. It is very rewarding to have an ability to contribute and to bring jobs to Rochester. It also helps that Rochester has a pretty fantastic talent pool we can put to work. The reality is that RIT trains some really smart, technical people who have helped us build a lot of the innovation that has separated us from our peers.



Austin McChord '09
at the new Datto
office in downtown
Rochester.

Alumni Updates



Minoru Yoshida '04, '08 credits RIT/NTID with giving him the experience to land a job as a grant officer with The Nippon Foundation of Japan.

Photo by A. Sue Weister

RIT/NTID grad helps improve lives around the world

Curiosity about a college campus more than 6,600 miles from his home nearly 20 years ago has led Minoru Yoshida to improve the lives of deaf, hard-of-hearing and hearing individuals around the world, overseeing millions of dollars in projects each year as a grant officer with The Nippon Foundation of Japan.

Yoshida '04, '08 (information technology; science, technology and public policy) was born in Kyoto, Japan. He became deaf when he was a year old due to a high fever and was mainstreamed most of his life. A family acquaintance had mentioned the National Technical Institute for the Deaf being on the primarily hearing campus of RIT.

"I was fascinated with the environment which RIT/NTID offered," Yoshida said. "It provided a great welcoming and sense of community for the students who were deaf and hard of hearing with a great mass of students who were like me, from a very similar academic background."

Yoshida studied at a community college in Illinois for six months to improve his English and American Sign Language skills, then enrolled at RIT/NTID.

His major in information technology led to a part-time and later full-time job at the NTID-based Postsecondary Education Network-International. PEN-International was a multinational partnership of colleges created in 2001 by more than \$15 million in grants from The Nippon Foundation to improve and expand college education for deaf and hard-of-hearing students around the world by sharing educational technology and conducting faculty development and training.

"This provided me an opportunity to work with various people not only at NTID, but with deaf educators and deaf leaders around the world," Yoshida said. "This work influenced my path to become more involved in the public/nonprofit sector as I witnessed injustice still remaining."

Yoshida landed a job full time with The Nippon Foundation in Tokyo after getting his master's degree. He screens applications for grants, primarily for international disability projects as well as deafness-related projects in Japan. He manages ongoing relationships with grantees to help them enhance the effectiveness of their projects. When projects are completed, he reports on the impact of

their programs and evaluates whether the outcomes were accomplished.

"My academic and working experience at RIT/NTID helped me in this job," Yoshida said. "It provided me self-confidence and cultural identity as a deaf person. And without interactions with my fellow students and professional colleagues during my college years, I would not have been able to come this far in my career path."

The foundation's mission is social innovation; its grants are intended to promote positive changes by providing assistance for humanitarian work, including social welfare, public health and education. There are still many issues that remain unsolved in terms of education for deaf and hard-of-hearing students, Yoshida said. "Deaf issues are generally very complex and not correctly understood."

While his work has taken him around the world, he has fond memories of Rochester, which he considers his second home. "Being at RIT/NTID was a precious moment in my life as I was able to meet my role models and friends who are like me. I no longer had to be the oddball in a mainstream setting."

Greg Livadas



Kristen Curtze '09, '11, left, and Liz Gombert '09 launched a chapter of Girl Develop It in Rochester in September.

Photo by Tom Brenner

Girl Develop It aims to bridge gender gap in tech fields

Kristen Curtze '09, '11 (new media interactive development, communication and media technologies) initially didn't think too much about the pink sticker a fellow female developer gave her at a conference in South Carolina this summer.

But after the woman explained to Curtze and college friend Liz Gombert '09 (new media design and imaging) that the sticker represented the organization Girl Develop It, they realized that Rochester could benefit from having a chapter.

"There are women who feel like they missed the tech boat a bit," said Gombert, who is a thesis away from a master's degree in graphic design at RIT and works as the lead user experience designer for Solu Technology Partners at Xerox. "This is a chance to have an organization that can introduce them in a nice, easy way that is not intimidating or overwhelming."

Rochester's Girl Develop It kicked off with a launch party in late September in RIT's Center for Media, Arts, Games, Interaction

and Creativity (MAGIC). Both MAGIC and RIT's Women in Computing are supporting the organization.

The goal of the group is to help adults learn Web and software development through classes, workshops and networking. Although the organization is targeted at women who are underrepresented in the Internet technology field, men are welcome.

Curtze and Gombert hope to start introductory to basic coding and Web design classes by the end of this year. Classes could be all in one day or split up into several nights, depending on the teacher. Eventually they will add more advanced classes and networking events.

Curtze, a Web developer who has never worked with another female in IT, said they are already hearing positive feedback from local start-ups, who think this will help the Rochester workforce get more well-rounded.

Girl Develop It has chapters in more than 35 cities across the country. For Curtze and Gombert, a local chapter is a way to give

back to the community. "I know how to build products. I know how to make things work," Curtze said. "But I wanted to do something more than just making things function."

Gombert added that they realize change isn't going to happen overnight, but this organization is a good start.

"We are trying to help women get their foot in the door so the numbers can change in the next five years, the next 10 years," Gombert said. "We want them to be more confident to join the workforce in this field."

Mindy Mozer

To learn more

To learn more about Rochester's Girl Develop It, go to www.meetup.com/Girl-Develop-It-Rochester. To learn more about chapters in other cities, go to www.girldevelopit.com.



Dan Caster '89 reviewed student portfolios at the most recent Creativity Industry Day, sponsored by RIT's Office of Cooperative Education and Career Services. "Creativity has served me so well throughout my career," Caster said, "and I'd like to pass that along to today's students as well."

Photo by Gretchen E. Burruto

Illustration alumnus goes from CIAS to the CIA

In the political thriller *Argo*, U.S. Central Intelligence Agency operative Tony Mendez artfully uses disguises and diversion in leading the rescue of six U.S. diplomats from Tehran during the Iran hostage crisis.

Dan Caster '89 (fine art/illustration) cited the 2012 movie as a prime example of how mission successes were borne out of innovative and highly creative actions combined with imaginative thinking.

"When you have that creative perspective or dimension to your thinking, it gives you the ability to look at a difficult situation from many different sides," Caster said. "It enables you to creatively put together a plan, even under high risk."

It also helps explain how Caster went on to a decorated career as a mission integrator supporting counter-terrorism operations with the CIA, retiring in 2012 with over 22 years participating in sensitive missions in more than 25 countries.

Caster's military service began when he entered active duty with the U.S. Air Force in 1979, serving as an aerospace photographic systems specialist teaching foreign nationals as a technical school instructor at Lowry Air Force Base in Colorado.

His college years started when he attended the Art Center College of Design in Pasadena,

Calif., where he began pursuing illustration from 1985 to 1986. After his mother became ill, he wanted to be closer to his family, so he enrolled at RIT.

During Caster's junior year, he attended a presentation by CIA recruiters. "My résumé included my military experience and security clearance, including my work with foreign military personnel (at Lowry)," he continued. "They hit on it immediately."

Caster subsequently was called into an interview with CIA recruiters in 1988.

"For the most part, I built a design portfolio specifically for the agency," he said. "They were looking for political and multicultural understanding. I wanted to do disguises; only Hollywood does it better than the CIA."

Caster's real-life experiences enabled him to design highly precise portraits, expertly matching skin tones and textures in his visual renderings and sketches.

His final "wild card" portfolio piece was an artist's impression of a main battle tank with special armor on the latest tanks fielded by the former Soviet Union. No clear images of the armored vehicle existed anywhere in the West, but Caster was able to "fill in the gaps" with the up-close knowledge he gained from trying to identify vulnerabilities of similar tanks during his time in the military.

"I drew my impression of what that tank would look like," Caster said. "They were amazed, and when they matched it against the real thing, it was very accurate."

Caster landed a position as a visual information specialist from 1990 to 1993, when he was assigned to the Design and Presentation Center at CIA headquarters in Langley, Va. There he specialized in crafting culturally unique illustrations and graphics in support of agency field operations and the presentation of finished intelligence. He also developed a forte for creating custom, highly visual presentations used to inform Congressional oversight committees.

Another specialty was designing formal portraits of high-level CIA officials, including outgoing directors, as gifts. His personal favorite is an "unfinished" rendering of Robert Gates, who served as former defense secretary and CIA director. "He left the position earlier than expected, so his work was not complete," Caster explained.

While Caster's art career at the CIA eventually gave way to supporting highly sensitive counter-terrorism operations worldwide over the next 20 years, "I still relied on my creative abilities many times throughout my career with the agency," Caster said.

Rich Kiley



Joseph Pawelski '06 opened Overland Distillery in Loveland, Colo., in 2009. He makes Trinity Absinthe Superieure, a spirit that has won multiple awards.



Photos by Amanda Pawelski

Engineer shows his entrepreneurial spirit

Ever since his father gave him his first model rocket when he was a child, Joseph Pawelski '06, '07 (mechanical engineering, thermal fluids engineering) knew he wanted to be an engineer. But he could never have predicted that he would become a leading producer of an alcoholic drink that was once banned in the U.S. and many other countries worldwide.

A husband and father of two with a third child on the way, Pawelski works as a technology manager for Advanced Manufacturing Technology in Loveland, Colo., where he develops equipment for craft breweries and designs production lines for beverage companies like Coca-Cola and Pepsi. And he is a professional distiller in his spare time.

"Years ago, my roommates told me that I should start a distillery," said Pawelski. "I joked that I would never be profitable in the business because I would always be improving the stills."



Pawelski opened Overland Distillery in 2009 with his wife, Amanda, whom he met while studying at RIT. Their first and only product, Trinity Absinthe Superieure, sold approximately 1,200 bottles last year and has won numerous awards. Among its many accolades, Trinity Absinthe won silver in the 2014 San Francisco World Spirits Competition, silver in the 2014 Fifty Best Tasting and double gold in the 2012 Denver International Spirits Competition.

Absinthe is a highly alcoholic spirit made from wormwood, anise, fennel and other herbs. The drink has often been linked with hallucinations and was banned in the U.S. and other countries due to concerns regarding thujone, a chemical present in wormwood that can be dangerous in high volumes. However, after scientific studies debunked these claims, the U.S. lifted its ban in 2007.

"Absinthe will not make you hallucinate," Pawelski said. "The unique thing about absinthe is that it actually reduces the negative

effects of alcohol because of the mix of herbs in the drink that have medicinal properties."

Pawelski chose to produce absinthe because of the drink's rich history among artists and writers and also because he enjoyed the complex nature of its distilling process. Unlike many other spirits, absinthe is distilled with herbs. The resulting mixture is then colored, diluted and aged before being bottled.

"The process is similar to making a really strong cup of tea," Pawelski said.

Trinity Absinthe is currently distributed in Colorado, Illinois, Massachusetts and Virginia, with limited availability in Maryland and D.C. Overland hopes to expand its distribution to more Northeastern states, including New York, New Jersey and Connecticut.

Pawelski credits his success to his passion for invention, the skills he acquired at RIT and to his wife, who manages the distillery's business operations.

"We created a brand together and it's something I hope my daughters can run one day. I hope it inspires more people to craft spirits."

Derrick Hunt '15

Regional Alumni Activities

Albany

Members remembered RIT student Nicholas Murray by participating in the fourth annual Rhino Run Oct. 11. Proceeds benefit an incoming student from the Albany area who will attend the Kate Gleason College of Engineering.

Bay Area

On Aug. 24, more than 30 alumni gathered in San Mateo at Coyote Point Recreation Area for the second annual Taste of Rochester picnic. For the first time, RIT partnered with the University of Rochester for this event.

Boston

On Sept. 13, alumni volunteered at Zoo New England as part of RIT Cares and painted its children's zoo. Thanks to host **Stephanie Simon '14**.

Buffalo

On Sept. 13, more than 40 alumni and guests toured and tasted beer from **Jeffrey Ware's '04** newly opened Resurgence Brewing Co. on Niagara Street.

Charlotte

Alumni and guests gathered for a tour, tasting and German-themed brunch at Olde Mecklenburg Brewery on Oct. 25. Thanks to host **Jeffrey Creagh '11, '13**.

Dallas

The chapter hosted its annual dinner club meeting at Cattleman's Steak House on Aug. 27. Thanks to hosts **Jacqueline Gonsalves '01** and **Scott Saldinger '91**.

Denver/Colorado Springs

On Aug. 6, alumni gathered for happy hour at Ship Tavern in downtown Denver. Thanks to **Assistant Vice President of Alumni Relations Kelly Redder** for hosting the outing.

On Oct. 25, the RIT men's hockey team traveled to Air Force for its annual game. More than 30 alumni gathered at The Academy Hotel for an afternoon pregame reception and team update from head coach Wayne Wilson.

India

More than 20 alumni in Mumbai gathered for dinner and networking on Sept. 19. Thanks to host **Ashutosh Agarwal '01**.

Alumni in New Delhi gathered for dinner on Sept. 28. Thanks to organizer **Shipra Chaturvedi '03**.

Milwaukee

On Sept. 28, alumni gathered at Miller Park for the Brewers' last regular-season game.

Pittsburgh

On Aug. 16, alumni and friends sailed the Three Rivers in Pittsburgh on a luncheon cruise. Thanks to host **Assistant Vice President of Alumni Relations Kelly Redder**.

D New York City

Alumni gathered for the annual U.S. Open men's tennis final match on Sept. 8.

On Sept. 10, alumni enjoyed Dinosaur Bar-B-Que and networked at alumni-owned business Harlem Flo. Thanks to host **Louis Gagliano '94**.

On Sept. 20, alumni enjoyed the Urban League Classic—Howard University vs. Morgan State football game.

Peru

Alumni from the Andean region of South America held their official chapter launch event in Lima, Peru, on Aug. 15. Thanks to organizer and chapter leader **Carlos Cornejo Rojas '09**.

C E Rochester

Alumni enjoyed a summer golf league at Genesee Valley. Congratulations to league champion **Mike Kiely '06**.

C—On Aug. 24, more than 150 alumni and students attended a picnic and baseball game at Frontier Field as the Rochester Red Wings beat the Scranton/Wilkes-Barre RailRiders. Thanks to alumni volunteers **Chris Jackson '13**, **Kristy Mooney-Graves '00**, **Stacy Kurtz Lake '05, '07**, and **Bary Siegel '66, '68, '75, '87**.

E—On July 20, alumni and guests enjoyed lunch and a tour of Wagner Vineyards in the Finger Lakes. Thanks to host **John Wagner '88**.

Alumni and friends marched in the Puerto Rican Festival Parade on Aug. 2. Thanks to supporters **Orlando Ortiz '04, '08** and **Denisha Ortiz '04**.

On Aug. 3, alumni from Rochester and Syracuse went on a whitewater-rafting excursion on the Salmon River. Thanks to hosts **Frank Lucas '75** and **Susan Shanks '97**.

On Aug. 20, more than 100 alumni with children or grandchildren in RIT's incoming freshman class gathered for the annual Alumni Legacy Dinner on campus.

More than 100 alumni and guests took part in the Big Shot at Golisano

Institute for Sustainability on the RIT campus on Sept. 6. Thanks to volunteers **Donna and Tony Kocienski '78**, **Kristy Mooney-Graves '00** and **Rita Haschmann '79**.

On Sept. 13, alumni attended a cleanup day at Mt. Hope Cemetery as part of RIT Cares.

On Sept. 16, alumni sorted medical supplies for those in need at InterVol as part of RIT Cares. Thanks to **Maggie Reilly '04** for leading the effort.

On Sept. 18, alumni took part in the Gene Polisseni Center dedication activities and ceremony.

On Sept. 20, alumni attended a special reception at the First Niagara Rochester Fringe Festival Spiegelent.

More than 50 alumni gathered to enjoy the Hillside Community Shield soccer game featuring RIT vs. University of Rochester on Sept. 20 at Sahlen's Stadium.

More than 3,000 alumni attended Brick City Homecoming & Family Weekend Oct. 16-19. AALANA (African American, Latino/a American and Native American) alumni took part in a full schedule of activities during the weekend, including a happy hour kick-off at Mario's and campus tours.

South Florida

Members participated in the RIT Cares volunteer event on both Sept. 13 and Oct. 25 at the Caring Kitchen in Delray Beach, Fla. Thanks to organizer **Paul Finkelstein '91**.

Syracuse

Alumni gathered on Oct. 11 for the Syracuse University football game against the Florida State Seminoles.

Vermont

Alumni gathered on Oct. 18 to cheer on the RIT women's hockey team during its away game against the University of Vermont.

Washington, D.C.

On Aug. 7, more than 30 alumni and friends gathered at Capitol City Brewing Co. in Arlington, Va., for happy hour.

A Reunions

On June 13-15, 38 of 47 former House LS Residents met at RIT to reacquire and reminisce about their dorm life in RIT's first-ever Club House. People came from 10 states for the reunion.

On Aug. 30, the cross country team held its annual alumni reunion and 5K race, and the men's soccer team held its annual alumni reunion, which in-

cluded the Doug May Memorial Golf Tournament and alumni soccer game.

On Sept. 20, the baseball team and softball team held their annual reunions and alumni games.

On Oct. 4, the men's hockey team held its annual alumni reunion, which included an alumni game in the new Gene Polisseni Center.

More than 50 alumni and guests attended Zeta Tau Alpha's 25th anniversary during Brick City Homecoming & Family Weekend. Phi Kappa Psi, Kappa Delta Rho, Delta Phi Epsilon, Pi Kappa Phi, wrestling and men's and women's lacrosse also held alumni activities.

On Nov. 1, the women's hockey team held its annual reunion, which included an alumni game in the new Gene Polisseni Center and a chance to see the current team battle Lindenwood University.

Summer send-offs

The RIT Office of Alumni Relations in conjunction with the RIT Center for Orientation and Transition organized a full schedule of summer send-off events for incoming freshmen. The send-offs welcomed more than 700 students. Thanks to **Brian O'Shaughnessy '81, '84** and **Kim O'Shaughnessy '83, '85** and **Kim Conti '90** for hosting send-offs in their homes. Events were held in the following cities: Albany, N.Y.; Boston; Buffalo, N.Y.; New York; Denver; Philadelphia; Washington, D.C.; Chicago; Syracuse, N.Y.; Atlanta; San Francisco; San Luis Obispo, Calif.; and Los Angeles.

To learn more

Dan Christner '07 is the contact in the Office of Alumni Relations for regional alumni activities. Contact him toll free at 1-866-RIT-ALUM. To learn more about alumni activities, go to www.rit.edu/alumni.



Class Notes

Key to abbreviations

- CAST** College of Applied Science and Technology
- CCE** College of Continuing Education (now CMS)
- CHST** College of Health Sciences and Technology
- CIAS** College of Imaging Arts and Sciences
- CLA** College of Liberal Arts
- CMS** Center for Multidisciplinary Studies
- SCB** Saunders College of Business
- KGCOE** Kate Gleason College of Engineering
- COS** College of Science
- FAA** Fine and Applied Arts (now CIAS)
- GAP** Graphic Arts and Photography (now CIAS)
- GCCIS** B. Thomas Golisano College of Computing and Information Sciences
- NTID** National Technical Institute for the Deaf
- SVP** NTID "Summer Vestibule Program"

About Class Notes

Class Notes are edited for space, clarity and style. Share details and photos of special occasions and professional achievements in your life by going to www.rit.edu/alumni/news.

1953

James Forney '53 (GAP) is writing a book called *Jim's World...A Fast Romp Through The Rather Extraordinary Life Of An Otherwise Ordinary Guy*. He has traveled the world for photo shoots for magazines such as *House Beautiful* and *Town & Country*.

1957

Betty (Pratt) Saunders '57 (SCB) is retired and lives in Ponte Vedra Beach, Fla. She worked in the system analysis field and then at a brokerage firm, ending her career as a senior vice president, investments at Raymond James in 2011. She would love to hear from others who lived in Kate Gleason Hall on the old campus.

1961

Edward Catapane '61 (GAP) celebrated two big events this year. He became a great-grandfather on April 16, 2014, to a boy named Talan, and on Aug. 3, 2014, he celebrated 57 years of marriage to his wife, Barbara.

1962

Gene DePrez '61, '62 (FAA), managing partner of U.K./U.S.-based Global Innovation Partners, recently served as senior strategic adviser to the St. Louis City and County Economic Development Partnership in the development of their Strategic Plan. At home in New Jersey, he has been elected board president of the Sussex County Arts & Heritage Council and board chair of the Lake Mohawk Preservation Foundation.

1964

Donald P. Kingston '64 (SCB) was re-elected in December 2013 for a second term as the mayor of Duck, N.C. He retired from his business career as a vice president/officer of Kelly Services Inc. in the Washington, D.C., area in 2007.

1965



Andrew Botwick '65 (GAP) reconnected with roommate **Steve Eisenberg '65 (GAP)** after more than 50 years.



Ron "DeGroom" Glazer '65 (GAP) had a gallery show of his series of Italian photographs. **Dale Farkas '65 (GAP)** printed the photos at Dale Labs, his facility in Florida.

1966



James Rasmussen '66 (GAP) retired in August 2009 from Hallmark Cards as senior graphic arts/quality engineer after 36 years

and is now co-owner of Vintage Vogue Apparel in Independence, Mo. For more on the vintage store, go to www.vintagevoguekc.com.

1969

Fred Elmes '69 (GAP) has been working on an upcoming HBO mini series called *Olive Kitteridge*. The series is comprised of four one-hour segments and stars Francis McDormand, Richard Jenkins and Bill Murray. Elmes is the cinematographer for the series, which was shot in the Gloucester, Mass., area.



Jack Jordan '69 (GAP) has completed his 20th consecutive year as staff photographer for the Arizona Children's Burn Camp, a one-week summer camp for children who have survived burn injuries. He is also in his 13th year as a volunteer trip leader for Arizona Highways Photo Workshops, where he currently serves as the president of the board of directors.

1970

Harry Schaefer '70 (GAP) retired on March 25, 2014, after 40 years working as a scientific and technical photographer in the dermatology branch of the National Cancer Institute at the National Institutes of Health in Bethesda, Md.

1971

Thomas Klinkowstein '71 (GAP) presented "Getting Ready for 2020" at the Dutch Electronic Arts Festival in Rotterdam, The Netherlands, May 22, 2014.

1972



Margaret (Gabler) King '72 (SCB) wrote her debut mystery, *Murder at the Book Group*, which will be published by Simon & Schuster in December 2014.

For details, go to www.maggieking.com

Tom Winter '72 (GAP) and Irene Doppel Winter celebrated their 41st wedding anniversary on Aug. 12, 2014.

1973

Jonathan Atkin '73 (GAP), '78 (CIAS) is actively involved in pursuing certification and licensing of commercial drone usage. He is an active member of the New York City Drone Users Group.

Gordon Hewitt '73, '75 (SCB) retired from the Department of Homeland Security, U.S. Customs and Border Protection on Jan. 3, 2014, after 37 years of federal service. He was a procurement manager of the strategic enterprise initiative branch.

Sheryl Ross '73 (FAA) has completed training to be a certified group leader for two programs developed by Stanford University's Patient Education Research Center: The Chronic Disease Self-Management Workshop and The Diabetes Self-Management Workshop.

1974



Gary Bonvillian '74 (SCB), '81 (CAST) is beginning his ninth year as president of Thomas University in Thomasville, Ga. A new academic building was opened on campus recently that is named Smith-Bonvillian Hall for Rankin Smith, former chair of the university's Board of Trustees, and Bonvillian.



Tom Rieger '74 (GAP) was appointed to the Library of Congress as Supervisory Information Technology specialist in the Office of Strategic Initiatives.

1975

Henry Freedman '75 (GAP) filed a U.S. patent with Peter Dundas and Peter Crean. They have formed Image Test Labs to commercialize the technology for grading all forms of conventional and digital printing presses, wide format printing systems, photographic printing systems and government and scientific print imaging systems.

1976

David Newman '76, '81 (KGCOE) has his first post retirement job as the Finger Lakes Trail Conference's vice president for trail preservation after a 35-year career at Eastman Kodak Co. and three years with a tech start-up company in the Greater Rochester area.

1978



Dawn Marvin '78 (CAST) accepted a contract position as marketing communications consultant for National Naval Medical Center in Bethesda, Md., in February 2000. She was hired into government service in 2006, first for the Navy and currently under the Department of Defense, where today she serves as marketing and communications strategy administrator and special assistant to the commander.

1979



Collette Fournier '77, '79 (GAP) held an exhibition Sept. 8-Oct. 24, 2014, called "Retrospective: Spirit of A People" at Finkelstein Memorial Library in Spring Valley, N.Y.

1980

John Christopher '80 (SCB) is founder and president of Hospitality Associates, which was chosen as the preferred developer for a Holiday Inn hotel in New York. The company was also awarded the management contract for another Holiday Inn in Vermont.



Wendy Maruyama '80 (FAA) will fully retire as professor emerita at San Diego State University at the end of spring 2015. After teaching at SDSU for 25

years, she will continue her studio practices as an artist and furniture maker. Maruyama's solo exhibition, "Wendy Maruyama: Executive Order 9066," opened at the San Francisco Museum of Craft + Design on Oct. 4, 2014, and will close on Jan. 4.

1981



Howard Goodman '81 (GAP) walked more than 500 miles from Sept. 4 to Oct. 31, 2013, from Saint Jean Pied de Port in the French Pyrenees across all of northern Spain, to Santiago de Compostela, near the Atlantic coast of the Iberian Peninsula. He is completing a book of photographs, with a release planned in November at the Theo Ganz Gallery in Beacon, N.Y.



William Varley '81 (CAST) has joined Cooper's Ferry Partnership Board of Directors. Cooper's Ferry Partnership

facilitates long-range policy and infrastructure projects for the Camden Waterfront and surrounding neighborhoods. He serves as president of New Jersey American Water and New York American Water.

1982



Owen Kassimir '81, '82 (GAP) taught a week-long class at the New York Photo Workshop in July 2014 called "Wild

About Nature." The class was held at Hobart and William Smith Colleges on Seneca Lake in New York.

1983

Scott Pardo '83 (CCE) published the book *Equivalence and Noninferiority Tests for Quality, Manufacturing, and Test Engineers* last fall.

1984

Jack Masseth '84 (CAST) was named the 2013 Manufacturing Engineer of the Year by his employer, Meritor Inc. He is manager of gearing and advanced manufacturing for Meritor and lives in Brighton, Mich.

1985



Wade Sisler '83, '85 (GAP) is the executive producer at NASA's Goddard Space Flight Center in Greenbelt, Md., and leads a

team of video producers, Web wranglers, animators, data visualizers and social media mavens to share NASA's science stories with wide and diverse audiences.

1987

Robert Firestein '86, '87 (GAP) celebrated his 12th year as president/CEO of Ecoprint Inc. in Silver Spring, Md.

Lori Marra '87 (CCE) was a playwright for an event at the 2014 First Niagara Rochester Fringe Festival.

Shahzad L. Paul '87 (GAP) is president/CEO of SLIPza.com.

1988



Steve Czompo '88 (GAP), senior producer/director/editor at RIT Production Services, is proud to announce that the Telly Awards has named RIT Production Services as a Silver winner for his piece titled "2013 RIT Innovation Hall of Fame—John Schott."

1989

Ted Diehl '89, '89 (KGCOE) is the president of Bodie Technology and is responsible for strategy and technology development for Bodie's engineering division. During the summer of 2014, he was the keynote speaker at Simulia Community Conference, talking about "Stretching The Limits—An Analyst's Journey."

Hamad Ghazle '89 (COS) won the national Distinguished Educator Award from the Society of Diagnostic Medical Sonography. The award recognizes exceptional educators in the field of diagnostic medical sonography or ultrasound. He is the director of the diagnostic medical sonography program in RIT's College of Health Sciences and Technology.



Rick Kittles '89 (COS), a national leader on cancer health disparities and the role of genes and environment in disease, and a pioneer in DNA testing to trace the ancestry of African Americans, has been appointed director of the new Division of Population Genetics, part of the new Center for Applied Genetics at the Arizona Health Sciences Center at the University of Arizona.

Craig Varjabedian '89 (CIAS) celebrates his 40th year as a fine arts photographer. He is currently working on a project on White Sands National Monument, and a book and traveling exhibition will launch in the fall of 2018. He lives in Santa Fe, N.M. Learn more at www.craigvarjabedian.com.

1990

Michael Winters '90 (KGCOE) has accepted a position as senior principal engineer with Baxter in Round Lake, Ill.

1991

Wendy Enoch '91, '92 (FAA) writes that her daughter, Ava Enoch, is a member of the freshman class at RIT, majoring in mechanical engineering.

Jeffrey Rowoth '91 (CAST), '12 (CAST) accepted a position as vice president of the DePrez Group of Travel Companies in Rochester. He manages the corporate travel team along with new business/meeting and incentive development.

1992



Mark Pizza '92 (GAP) accepted a position at Viacom in New York City as the senior director of account services. He joined the Catalyst team, which is a full-service in-house advertising, branding and marketing studio.

Richard Riffel '85, '92 (GAP) is senior director of sales for II-VI Photonics Inc. (www.ii-vi-photonics.com), and is responsible for the sales team in Europe and most of North America. Previously, he was senior product line manager, Advanced Development for Oclaro. He, his wife and six children live in Kansas City, Mo.

Brian Wilson '92 (GAP) accepted a position at the Hyatt Regency in Rochester as banquet manager.

1993



Joseph Brennan '93 (FAA), sole proprietor of Brennan Designs, wants to share another creation from his personal collection. "Frenchevy" is a one-of-a-kind corner table.

Robert Shamis '93 (GAP) was the curator of prints and photographs from 1998 to 2006 at the Museum of the City of New York, where he organized more than a dozen exhibitions. Since then, Shamis has been working as a freelance curator and photography consultant. In 2011, Abrams Books published Shamis' book *New York In Color*, a historical survey of more than a century of color photography of New York.



Jennifer Zausmer-Terry '93 (FAA) is senior design manager for Pinnacle Foods and Diamond Beachbody coach. She got together with other fellow alumni over the summer including: **Stephanie (Sikes) Treccia '92 (CAST); April (Goldstein) Rosen '93 (CAST); Jeff Banks '92 (FAA); Keith Middleton '93 (CAST); and Eric Colby '94 (CAST).**

1994

Thomas Roman '94 (CCE), '11 (CAST) is a GMP senior training specialist for Fresenius Kabi USA.

1995

Jeremy Sniatecki '95 (CIAS) took the top spot last fall for licensed Star Trek shirts through ThinkGeek/Her Universe. Day to day, he is doing toy and collectibles industry work for companies including Disney, Cartoon Network, Nickelodeon, Marvel, DC, BBC/Doctor Who, Lucasfilm, Universal Studios, Fox and Showtime.

1996

Mary Kitzel '89 (NTID), '96 (CCE) recently completed her Ph.D. in historical geography at the University of Sussex. She is beginning a visiting appointment in RIT's history department.

1997



John Connelly '97 (CLA), '07 (CAST) has been working with the RIT Public Safety Office for almost 11 years and within the past year was promoted to 3rd Platoon Lieutenant, supervising the afternoon shift.



Suzette Lajeunesse '97 (COS) has joined the Buffalo Medical Group's obstetrics and gynecology division. A native of Western New York, Lajeunesse received her medical degree from the University at Buffalo School of Medicine and Biomedical Sciences.

Tiger Love



Lacrosse player Rob Mizelle '09 and soccer player Anna Kolnik '08 will celebrate their fifth wedding anniversary in January.

Photos by Jake Hamm '10

Sports injury brings couple together



Rob Mizelle and Anna Kolnik Mizelle

Looking back now, Rob Mizelle '09 (civil engineering technology) can be thankful he was injured during lacrosse pre-season in 2005.

At the time, the quadricep he ruptured during a morning practice in January meant Mizelle had to sit out his freshman season and navigate the RIT campus on crutches. But it also changed his relationship with soccer forward Anna Kolnik '08 (marketing), a friend he had frequently run into in the training room and the honors dorm.

"We started to spend a lot more time together after the injury," Anna said. "I was pretty concerned about him and didn't think anything of the concern. Later I obviously

figured out that I had stronger feelings for him than I was letting myself believe."

By March, the two were dating after an impromptu Valentine's Day celebration, which involved Rob dancing on crutches with Anna in his dorm room. Four years later on Valentine's Day, Rob proposed. They will celebrate their fifth wedding anniversary on Jan. 2.

The two might never have met if Anna hadn't decided to attend RIT. The Sharon, Wis., native was recruited to play soccer at three schools—RIT, Babson College in Boston and the University of Marymount in Virginia. On May 1, the last day to submit her deposit, she was at a soccer tournament and on the phone with her mom, who was at the post office with three envelopes wondering which one to mail.

"The whistle blew for captains and I said RIT, walked on the field and never looked back," she said.

For Rob, who grew up in nearby Pittsford, N.Y., selecting a university was an easier decision. "RIT was the best fit for academics and the opportunity to play lacrosse," he said.

Rob and Anna did more than play sports. They formed the first RIT Student-Athlete Advisory Committee after representing RIT at a NCAA symposium in 2005. By the following fall, athletes were engaged in community service and were showing their school

spirit by attending each other's games. The community service project grew into a Tigers Give Back weekend with athletes volunteering their time at Rochester schools and helping to clean up city neighborhoods.

Their efforts to increase school spirit included starting President Bill Destler's Orange Hair Challenge, where he would dye his hair orange if students filled Clark Gym for a men's and women's basketball game.

Rob and Anna live in Portland, Ore., after living for three years in Washington, D.C. Anna works as a marketing and promotions specialist for Comcast Spotlight. She finished her MBA in August at the University of Portland. Rob works as a senior project engineer for Balfour-Beatty Construction. He is working on becoming a Licensed Professional Engineer.

"For us, RIT was an opportunity not just to have a really fun and enriching college experience, but also to move forward," Rob said. "It was the opportunity to meet one another. And it was the opportunity to set ourselves up to succeed as professionals."

Mindy Mozer

About Tiger Love

To suggest one of RIT's 4,600-plus alumni couples to feature, email us at umag@rit.edu.

1998



Tiffany Owens '98 (KGCOE) was honored with the Distinguished Community Service Award at the Naval Surface Warfare Center Dahlgren Division for her

diverse volunteer services involving education, workplace volunteer activities, youth services and the mobilization of her systems safety engineering division colleagues for volunteer services.

1999

Ward Ramsdell '99 (KGCOE) is a self-employed consultant specializing in radio frequency and mixed-signal electrical design for consumer and light industrial products. He lives in the Portland, Ore., area with his wife and 5-year-old son.

2000

Kimberlee De Puy '00 (CIAS) accepted a position as operations manager at Appian Corporation in Reston, Va.

Brian Moon '00 (CLA) is vice president of international sales at the Consumer Electronics Association in Arlington, Va. He and his wife, Belle, are also preparing for the arrival of twins in November.

2001

Manmeet Chhabra '01 (SCB) has recently set up MG Health Foundation (www.mgh.foundation), an organization dedicated to improving the health and sanitation of people in villages near Aurangabad, India.

2002

John Cusick '02 (CAST) was recruited by ITT Industries after graduating and spent 15 months in a contract job in Iraq at the beginning of the U.S. Military Operation. He continued working within the Department of Defense contracting industry and three different companies including ITT, Ensco, and Jacobs Engineering.



Chris Guarente '02, '06 (KGCOE) completed his upgrade to F-22 test pilot for the U.S. Air Force at Edwards Air Force Base, California, making him one of only five F-22 test pilots in the Air Force. He currently flies F-22 and F-16 developmental test missions.

2003



Herman Lee '03, '06 (SCB) accepted a consulting position at Forrester Research, based out

of its San Francisco office, serving eBusiness and channel strategy clients. He previously worked at Accenture Interactive.

Andrew Schall '03 (GCCIS) recently co-authored *Eye Tracking in User Experience Design* (www.eyetrackingux.com), published by Morgan Kaufmann. The book explores the many applications of eye tracking to better understand how users view and interact with technology.

Ian Reardon '03 (GCCIS) opened his second law office in Conway, N.H. He opened his first office in Portsmouth, N.H., in 2013. He specializes in family law. To learn more, go to www.reardonlawoffice.com.

2004

Robert Hochstetler '04 (KGCOE) was recently named president and chief executive officer for Central Electric Power Cooperative, the wholesale power aggregator for 20 electric distribution cooperatives in South Carolina.

2005



Brett Hall '05 (CIAS), as an animation director on the PBS Kids show *Peg + Cat*, recently received an Emmy Award for his work when the series won in the

“Outstanding Pre-School Children’s Animated Program” category for 2013-2014. He also represented the show at the Annecy International Animated Film Festival in June, where *Peg + Cat* was included in the Official Selection of TV Films in competition.

Michael Maeder '05 (KGCOE) was selected for participation in the competitive U.S. Army Engineer and Scientist Exchange Program, working with Defence Research and Development Canada at its Valcartier location for a year-long assignment.

Debra Meiburg '05 (CAST) was named Entrepreneur of the Year (Women of Influence) by the *South China Morning Post* and the American Chamber of Commerce. Meiburg is an award-winning author, TV personality, international speaker and a leading voice in wine education in Greater China.

2006



Sean Kainuma '06 (KGCOE) and **Deborah Chen '09 (KGCOE)** were married on June 20, 2014, in Irvine, Calif. Alumni in attendance included: **Julian Peters '06 (KGCOE)**; **Ryan Stoddard '06 (KGCOE)**; **Chukwuma Morah '09 (KGCOE)**; **Arlene Espiritu '09 (SCB)**; and **Chad Braungart '08 (CAST)**. The couple lives in Denver.



Emily (Wilson) Richard '06 (CIAS) and **John Richard '06 (GCCIS)** were married in Hilton Head, S.C., on May 3, 2014, among family and friends, which included several alumni. From left to right are: **Sarah Layland '06 (CIAS)**, an art director for BCBGMaxazria; **Christina Mulé '06 (CLA)**, a pediatric psychologist at Tufts Medical Center; **John M. Kitchura Jr. '06 (KGCOE)**, a patent attorney at Proskauer Rose LLP; **Emily Wilson '06 (CIAS)**, a senior visual designer at MicroStrategy; **John Richard '06 (GCCIS)**, a computer engineer at a technology-engineering firm; **Elsie Samson '06 (CIAS)**, a middle school math teacher in Oakland, Calif.; and **David Branca '05 (CIAS)**, a researcher/engineer at a technology-engineering firm.

2007



Dmitriy Bekker '07 (KGCOE) is going back to graduate school after working with NASA Jet Propulsion Laboratory for more than six years. He is pursuing his Ph.D. in computer engineering at George Washington University, with a focus on high performance computing.

David Moffitt '07 (CIAS) is proud to announce that three television commercials he shot were aired regionally during the 2013 Super Bowl XLVII.

2008

Brett Granger '08 (COS) graduated from the University of Texas at Austin with a Ph.D. in synthetic organic chemistry. He then began working at AstraZeneca Pharmaceuticals in Waltham, Mass., as a postdoctoral scientist.

2009



Jason Romer '09 (CAST) and **Lauren (Ellis) Romer** are happy to announce their marriage on May 17, 2014, on Long Island, N.Y. Alumni in attendance included best man, **David Doty '09 (CAST)**; **Joseph Lancellotti '09 (CAST)**; **Michael “Mickey” Kohany '09 (CAST)**; **Daniel Chin '10 (KGCOE)**; and **Patrick Clifford '09 (CAST)**. The Romers were also happy to have in attendance RIT professors Scott and Teresa Wolcott.

2010



Eileen Hennigan Desrosiers '10 (CIAS) and **Kyle Desrosiers '11 (KGCOE)** were married on Oct. 19, 2013, in Liverpool, N.Y. They live in Ithaca, N.Y. Groomsmen included: **Michael DeMayo '11 (KGCOE)**; **Justin Lamprey '11 (KGCOE)**; **Kurt Lutz '11 (KGCOE)**; **Matthew Moore '11 (KGCOE)**; and **Jacob Yates '11 (KGCOE)**. Bridesmaids included: **Amanda Crozier '08 (SCB)**; **Jessica Quinn '08 (COS)**; and **Jessica Cotton '08 (COS)**.



Corey (Scala) Felder '10 (COS) and **Andreas Felder '10, '13 (GCCIS)** are delighted to announce their marriage on June 21, 2014, in Union Township, N.J. The wedding party included: **Justin Guse '10 (GCCIS); Christopher Baldauf '10 (GCCIS); Christopher Simpkins '10 (GCCIS); Christopher Walter '10 (GCCIS); Japheth Learn '11 (KGCOE); Nicole Rogers '12 (CIAS); and Alicia Wooten '11 (COS).**



Sarah D. Kohl '10 (SCB) decided that she would leave CM Productions this year and move on to take a more rewarding career role. In 2014, she opened her own business, Oatka Media.



Michelle Malenick '10 (SCB) has joined Testone, Marshall & Discenza LLP's Syracuse team. Malenick, a CPA, is a senior accountant in the firm's tax practice group, providing accounting services to a variety of clients.



Ryan Miller '10 (KGCOE) is happy to announce his marriage to Kelly Lucot on June 28, 2014. They live in Houston, where he works in a rotation program for The Boeing Co.'s Commercial Crew Transportation System program.

Michael Young '10 (CAST) started a new position as research and development engineer II at Pall Life Sciences in December 2012.

2011

Michael Piggott '11 (GCCIS) has recently started Bundlecamp, a company that develops applications for gamers. Their first application, Gamechaser (Gamechaserapp), aims to help hardcore gamers stay on top of the video game industry by tracking a game across the Web over a period of time.

Grant Tremblay '11 (COS) became a NASA Einstein fellow at Yale University.

2012



Shreyasi Das '12 (CIAS) was hired as a lighting technical assistant at DreamWorks Animation Studios.

Matthew Vander Horst '12 (GCCIS) was chosen as one of 13 people across information technology at Liberty Mutual Insurance to receive the 2014 IT Excellence Award.

2013

Phillip Brown '13 (KGCOE) began a career with Joining Technologies as a system engineer. Joining Technologies is a leading laser welding, laser cladding, and laser machining company in East Granby, Conn.



Andrew Donald '13 (CHST) secured an internship to work on jaw joints, which was related to a clinical case study he had done as an undergraduate. This summer, he began the four-year program at the University of Maryland School of Dentistry in Baltimore.

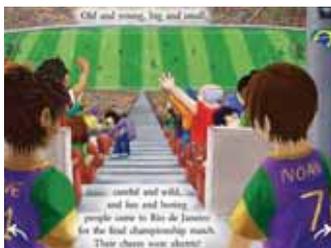


Anna Joy Guthrie '13 (CHST) and **William Stephen Craig '14 (KGCOE)** were married June 20, 2014, in Jericho, Vt. **Amy Guthrie '18**, sister of the bride, was the maid of honor. The bridesmaids included: **Nicole Mallory '13 (CHST); Joelle Scarnati '14 (COS); and Rachel Zoyhofska '14 (COS).** Groomsmen included: **Tom Benner '13 (KGCOE); John Harrington '13 (KGCOE); and Stephen Rugg '13 (KGCOE).** The couple will live in College Park, Md.

Richard Hennig '13 (GCCIS) started a short story publication called *Bastion Science Fiction Magazine* (www.bastionmag.com) last year, publishing seven to nine original pieces on the first of every month.



Lucia Martino '13 (CIAS) received an internship with Smithsonian American Art Museum in Washington, D.C. She also got a job as a teaching artist at Capitol Hill Arts Workshop in Washington, D.C., where she teaches black-and-white darkroom photography and digital photography classes to K-5th graders and adult students.



Alison Nicola '13 (CIAS) had her illustrations published in the recently released children's book *The Global Sleepover: A Soccer (or Football) Sleepover in Brazil*. She joined the company, The Global Sleepover/Forty Winks, last October and has become one of the company's lead illustrators.



Mary Orth '13 (GCCIS), Jenna Deutsch '13 (CLA), Alexis Chasney '14 (NTID), Katie Salvaggio '10 (COS), Sarah Kostuk '12 (KGCOE), Gabbie Barandiaran '14 (CIAS), Emily Call '14 (NTID) and Nick Schiefer '13 (CIAS) joined **Michelle Wilcox**, an instructor in RIT's Wellness Instructional Program, and friends to run in the Cape Cod Ragnar Relay, a 200-mile foot race, in May 2014. Their team of 12 runners and three volunteers started in Hull, Mass., and traveled all the way up Cape Cod, ending in Provincetown, Mass.

2014



Maggie Castle '14 (GAP) and **Tim Keyser '12 (GCCIS)** are excited to announce their marriage on March 15, 2014, in Dresher, Pa. The ceremony was performed by RIT Cru's campus pastor, John Iamaio. Twenty-five alumni helped them celebrate.

Are you moving?

If your address changes, you can make sure you continue to receive *The University Magazine* by reporting your new address to the Office of Alumni Relations. Send an email to ritalum@rit.edu or call the office toll free at 866-748-2586. Written change of address notifications can be sent to the Office of Alumni Relations, RIT Crossroads Building, 41 Lomb Memorial Drive, Rochester, NY 14623-5603. Alumni can also keep in touch through the Online Community. Go to www.rit.edu/alumni.

Tiger Cubs



1 Clark Whitney '70 (GAP) welcomes her fourth grandchild. Her daughter, Stacy, gave birth to her first girl, Hattie Rae Rounds, on Feb. 1, 2014.

2 Richard Hill '73 (KGCOE) is proud to announce the birth of his first grandson, Liam Lynn Butler, on Oct. 7, 2013.

William Davis '77 (CCE) is proud to announce the birth of his first grandchild, Jackson Charles DeVolder, on Feb. 7, 2013.

3 Stacy (Harris) Vestel '95 (CAST) and her husband, Gene Vestel, are proud to announce the birth of a baby boy, Max Samuel Vestel, on Jan. 25, 2014.

4 Mistie Munton '99 (CLA) is proud to announce the birth of a baby boy, Harlow James Frey, on May 7, 2014.

5 Clay Westbrook '00, '09 (CAST) and his wife, Meghan, welcomed a new baby this past spring, Beau Ewan Westbrook.

6 Amanda Masiello '01 (CIAS) and Ed Masiello are proud to announce the birth of baby girl, Mia Piper, on Aug. 14, 2013.

7 Jessica (Barnard) Koehler '02 (CIAS) gave birth in January 2014 to her son, Scout Crosby. She and her husband, Adrian, have lived in Los Angeles for nine years. She is currently shooting lifestyle commercial work and is represented by MergeLeft in New York City.

8 Paul Gebel '03 (CIAS), '09 (SCB) and Abbey welcomed Claire Margaret to their family on May 13, 2014.

9 Bhairav Mehta '03 (KGCOE) is proud to announce the birth of a baby girl, Arya Mehta, on March 13,

2014. Mehta continues to work at Apple Inc., where he was recently promoted to senior program manager.

10 Tuwanner Cleveland '04 (CLA) welcomed a baby boy, Jimmie D. Jennings Jr., on Dec. 24, 2013.

11 Stacey (Price) Spivak '04 (CIAS) and her husband, Izar, are proud to announce the birth of a baby girl, Ellie. She was born on April 15, 2014, and joins her four-legged big brothers, Jack and Ernie.

Phillip Maskelony '05 (KGCOE) and Lauren (Williams) Maskelony '05 (KGCOE) are proud to announce the birth of their son, Peter, on Aug. 5, 2014, in Rochester.

12 Kira Wilson '05 (CAST) and Dan Wilson '05 (CAST) are proud to announce the birth of a baby girl, Kacie, on June 26, 2013.

13 Kathleen (Casey) DiPaola '06 (CAST) is proud to announce the birth of a baby boy, Evan Michael, on Oct. 24, 2013.

Joshua Duerer '06 (GCCIS), '08 (SCB) and his wife, Kelly (Burgess) Duerer '06 (CHST), had their third son, Jason, on April 6, 2014. Joshua is now a senior database engineer at Sensus USA in Raleigh, N.C., and is working toward achieving his black belt in Lean Six Sigma.

14 Cristin (Sick) Mancuso '06 (CLA) is proud to announce the birth of a baby girl, Grace, on April 2, 2014.

15 Kimberly (Schultz) Denno '07 (COS) and Patrick Denno '06 (COS) are proud to announce the birth of a baby boy, Colin Gregory, on May 30, 2014, in Concord, Mass.

16 Stacey Houghton '07 (CIAS) is proud to announce the birth of her second son, Adam John Pabian-Houghton, on Nov. 15, 2013.

17 Leslie Quesnel '08 (CAST) and Jeremy Quesnel '09 (CAST) welcomed a baby boy, Mason Gary Quesnel, on Feb. 2, 2014.

Sarah Cowan '09 (COS) is proud to announce the birth of a baby girl, Emmelyn Aubrey, on Oct. 14, 2013.

18 Elizabeth (Giraldi) McGlone '07 (NTID), '09 (SCB) and Todd McGlone '99 (NTID) are proud to announce the birth of a baby girl, Michaela, on May 31, 2014.

19 Amanda O'Connell '09 (NTID) and Daniel O'Connell '09 (KGCOE) welcomed their first child, Emelia Rose, on April 4, 2014.

20 Chuanshi Qin '09 (CIAS) is proud to announce the birth of a baby boy, Albert Hugh Qin, on Jan. 22, 2014, in Tampa, Fla.

21 Daniel Ringwald '10, '09 (SCB) and Jordanne Ringwald '09 (CAST) welcomed their first child, Madison Jean, on Aug. 13, 2014, in Syracuse, N.Y.

22 Rachel (Unkle) Marcotte '09, '10 (CIAS) and Kyle Marcotte '11 (GCCIS) are proud to announce the birth of a baby girl, Madeleine Grace, on July 23, 2014.

23 Amanda (Kristoff) Weissman '09 (COS), '09 (KGCOE) and Adam Weissman '09 (KGCOE) are proud to announce the birth of their daughter, Amelia Kaelin, on July 18, 2014.

24 Douglas Gaston IV '10 (CIAS) is proud to announce the birth of a baby girl, Yuki Helen, on July 4, 2014, in Chengdu, China.

25 Isaac Holze '10 (CIAS) and his wife, Viviana, welcomed their son, Henry Lee Holze, to the world on July 10, 2014.

26 Jacob LaManna '10 (KGCOE), and Sarah LaManna are proud to announce the birth of their baby boy, Lukas John, on July 11, 2014.

27 Sandra (Woods) Jimenez '11 (SCB) lives in Houston, Texas, with her daughter, Catherine Jimenez, who was born on Dec. 28, 2012.

28 John Markidis '13 (KGCOE) is proud to announce the birth of a baby girl, Scarlett Vivian Margarethe, on March 30, 2014.

29 Jinkai Qian '13 (CIAS) and Wei (Fenway) Fan '13 (CIAS) are proud to announce the birth of a baby boy, Joy Jiayou, on Sept. 6, 2014, in Orlando, Fla.



Tiger baby bib

If you are a graduate of RIT and you have recently had a child join your family, request your free future RIT tiger baby bib at www.rit.edu/alumni/updateinfo/babybib.php.

Brick City 2014



A

A A sold-out crowd of 10,556 cheered on the men's hockey team at Blue Cross Arena in downtown Rochester. Boston College beat the Tigers 6-2.
Photo by Colin Huth

B Jerry Greenfield, co-founder of Ben & Jerry's, discussed his business philosophy as part of the Gasser Lecture Series, presented by Saunders College of Business.
Photo by A. Sue Weisler

C First-year computer science student Brandon Ball and his parents, Barbara Bennett and Gregory Ball, participated in the Brick City 5K Fun Run and Walk.
Photo by Colin Huth

D Members of the 1979 coast-to-coast relay team supported their former coach, Peter J. Todd, as he was inducted into the Athletics Hall of Fame.
Photo by Ken Huth '88

E More than 750 people enjoyed an evening of fun at the Presidents' Alumni Ball.
Photo by Ken Huth '88



B



C



D



E

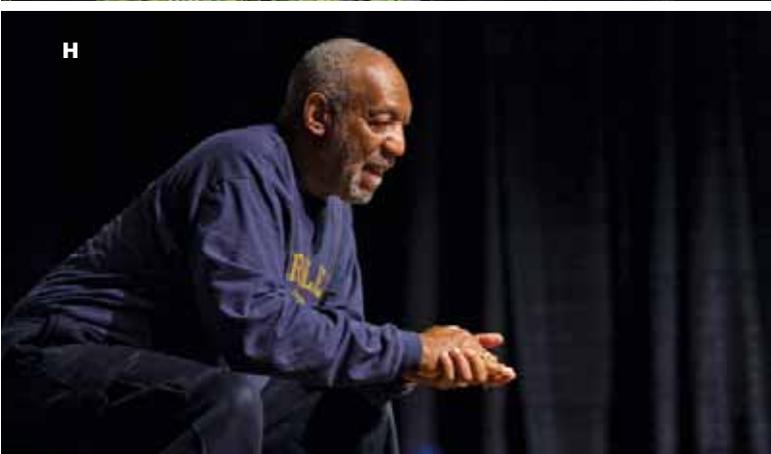


F Dr. Sanjay Gupta, CNN's Chief Medical Correspondent, spoke as the Student Government Horton Distinguished Speaker. Kathryn Davis, director of programming for Student Government, and Ashley Carrington, Student Government president, presented the practicing neurosurgeon with an RIT orange stethoscope.
Photo by A. Sue Weisler

G The Golden Circle luncheon paid tribute to alumni celebrating 50 years or more as RIT graduates.
Photo by Ken Huth '88

H Comedian Bill Cosby entertained a full house of 1,900 at George H. Clark Gymnasium.
Photo by A. Sue Weisler

I RIT President Bill Destler and Rebecca Johnson pose with Volunteers of the Year Patrick Talty '92, '02 and Lisa Talty '91, '97 and Outstanding Alumnus John Bartholomew '60 along with Alumni Association Board President Ricardo Venegas '92.
Photo by Ken Huth '88



It's much more than a donation. It's my legacy.



“Two of our children graduated from RIT—Sarah in the arts, Will in the sciences. While at RIT, my wife and I saw both become happier, more confident, and capable of finding their way into their careers. Supportive faculty helped our kids become more of who they are, providing guidance and encouragement throughout their time at RIT.

RIT is a special place to our family. But, a great education is expensive and not everyone has the means to make a degree a reality. We decided that if we could provide scholarships so others could get the same RIT experience, we would do so gratefully. So, I contacted my attorney and made a provision to establish a scholarship in each of the two RIT programs that gave our children this great start. To us, it is much more than a donation. It is our legacy.”

— Gary Sugarman, RIT Parent, '11, '14

A thoughtful gift supports RIT students as they prepare for successful lives and careers. Did you know that . . .

- / You can make a gift that actually increases your income and reduces your taxes?
- / You can make a gift that provides you a stream of income when you retire?
- / You can donate your house, take a deduction, and live in it for the rest of your life?
- / You can name RIT the beneficiary of your IRA and avoid double-taxation?
- / You can make a gift that costs you nothing now by including RIT in your will?

Make your mark—as Gary and his family have done.

To create your legacy, please contact Robert Constantine, director of Planned Giving, at 800.477.0376 or robert.constantine@rit.edu. Please visit us online at rit.planyourlegacy.org.



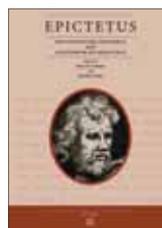
R·I·T



Lella and Massimo Vignelli: Two Lives, One Vision

Jan Conradi

This book is a portrait of Lella and Massimo Vignelli, arguably two of the most important designers of the 20th century. It focuses not on their work, but on their lives, relationships, influences, and influence upon many others since their careers began in the 1950s. Adhering to a minimalist and structured method of design, the Vignellis also adhered firmly to the modernist intention of designing for a better society: resourceful use of space and materials, clear communication, lasting quality, logical functionality.



Epictetus: His Continuing Influence and Contemporary Relevance

Edited by Dane R. Gordon and David B. Suits

Epictetus (c.50-120 CE) is a lesser-known philosopher than other Stoics, yet his teaching is profoundly philosophic. Epictetus was not widely familiar with other philosophers, but would likely have known Socrates' maxim "know thyself." These philosophers shared the belief that life requires the exercise of reason to guide us in how we behave. This book is a collection of 11 essays that were presented at a conference on Epictetus held at RIT in April 2012.

In MEMORIAM

Alumni

1934
Elizabeth K. (Kurtz) Stanton '34 (FAA), May 2, 2014

1935
Lois M. (Yauchzi) Wegman '35 (SCB), July 6, 2014

1939
Ralph H. Zinke '39 (KGCOE), May 31, 2014

1940
Robert E. Downhill '40 (CCE), July 14, 2014

1941
Avery D. Piersons '41 (GAP), Aug. 5, 2014
Marilyn F. (Smith) Woodhull '41 (SCB), June 11, 2014

1942
Lionel Alderman '42 (GAP), July 19, 2014

1946
Mathew L. Gingold '46 (GAP), June 9, 2014

1947
Peggy M. Cole '47 (SCB), May 19, 2014
Marjorie (Droste) Takasawa '47 (FAA), May 6, 2014

1948
Richard R. Dorman '48 (GAP), July 5, 2014

1949
Clifford Swick '49 (SCB), July 20, 2014

1950
Carol W. (Walsh) Bladergroen '50 (SCB), July 9, 2014
Walter F. Blue '50 (KGCOE), July 27, 2014

George D. Brown '50 (KGCOE), July 1, 2014
Donald E. Dutt '50 (KGCOE), June 26, 2014
Walter E. Evans '50 (GAP), July 18, 2014
Louis Lanzi '50 (FAA), July 28, 2014
Frank Rabioga '50 (GAP), April 23, 2014
Donald K. Vanzile '50 (KGCOE), July 1, 2014

1951
Phillip W. Fritz '51 (CCE), June 30, 2014
Phillip Kellogg '51 (KGCOE), July 17, 2014
Kenneth Wells '51 (GAP), May 31, 2014

1952
John R. Ross '52 (GAP), June 3, 2014

1953
William Enssle Jr. '53 (SCB), Aug. 10, 2014
Roger C. Noe '53 (GAP), June 4, 2014
Judith M. (Moss) Wylie '53 (SCB), June 10, 2014

1954
Clifford Graves '54 (CCE), April 27, 2014

1955
Warren L. Bills '55 (GAP), May 14, 2014

1958
Herman J. Peek '58 (GAP), June 27, 2014

1960
James B. Newman Jr. '60 (CCE), July 27, 2014

1962
Ned Bergstresser '62 (SCB), May 17, 2014

1963
David L. Franke '63 (COS), July 5, 2014
William A. Seyboth '63 (CCE), April 30, 2014

1964
Richard J. Krebbeks '64 (CCE), April 22, 2014
Robert Ryer '64 (SCB), April 28, 2014

1965
Harold L. Comstock '65 (CCE), June 4, 2014

1966
Daniel J. Corcoran Jr. '66 (CCE), April 29, 2014
Leonard D. Radzinski '66 (CCE), June 18, 2014
Robert F. Tescione '66 (GAP), Aug. 12, 2014

1968
Daniel D. Houlihan '68 (CCE), May 5, 2014
Stanley J. Lojek '68 (CCE), Aug. 16, 2014
Harold R. Wickman '68 (CCE), May 6, 2014

1969
Jonathan M. Koch '69 (GAP), June 7, 2014

1970
Andrew Richard Dzembo '70 (SCB), June 18, 2014
Raymond V. Malpocher '70 (CCE), June 25, 2014

1971
John A. Bills '71 (CCE), June 5, 2014
Joseph H. Enright '71 (CCE), July 6, 2014
Richard S. Grabski '71 (CCE), Aug. 11, 2014
Norman J. Swartz '71 (CCE), April 25, 2014

1972
Dale R. Ims '72 (CCE), July 9, 2014
Stanley E. Telga '72 (CCE), Aug. 6, 2014
Robert C. Thayer '72 (SCB), June 9, 2014

1973
Antimo J. Cuccaro '73 (CCE), June 27, 2014
William M. Szawransky '73 (CCE), July 22, 2014
Gary W. Tycha '73 (KGCOE), July 26, 2014

1974
Lynne (Smith) Bull '74 (FAA), May 30, 2014
Laverne S. Jackson '74 (CCE), April 21, 2014
August Leon '74 (CCE), July 7, 2014
William C. Mayer Jr. '74 (SCB), May 31, 2014

1975
Chana H. Isaacs '75 (CLA), June 25, 2014

1977
Tim R. Durkin '77 (KGCOE), June 5, 2014

1978
Larry Thomas Anschutz '78 (CAST), Aug. 14, 2014
Robert Blair Dodenhoff '78 (SCB), May 26, 2014

1979
Susan Rebecca Chaples '79 (CLA), June 5, 2014
Miriam Goldman Gould '79 (SCB), April 26, 2014
Jonathan Noel Ishii '79 (GAP), May 4, 2014
Sharon (Keen) Johnson '79 (CCE), '82 (CCE), June 10, 2014

Nicholas P. Kafasis '79 (SCB), June 5, 2014
Charles Leon Smith '79 (NTID), Aug. 1, 2014
Kenneth Clark Steele Jr. '79 (CCE), June 1, 2014
Edward A. Steffens '79 (SCB), May 22, 2014
Carl James Tacci '79 (CAST), April 28, 2014

1980
Mark J. Baniewicz '80 (SCB), July 9, 2014
Barry D. Nester '80 (SCB), May 21, 2014

1981
George L. Monkovic '81 (KGCOE), '88 (KGCOE), July 1, 2014

1982
Kevin Alton Moyer '82 (SCB), May 1, 2014
Barbara M. Healy '82 (CCE), '87 (SCB), May 5, 2014

1983
Mark Anthony Altobelli '83 (COS), '00 (COS), May 3, 2014
Samuel Tortorici '83 (CCE), April 19, 2014

1984
James D. Hughey '84 (SCB), '85 (SCB), June 8, 2014

1986
Michael Paul Lahaye '86 (SCB), April 22, 2014

1988
Darlene (Fromel) Howard '88 (COS), June 3, 2014
James R. Tetlow '88 (CAST), May 12, 2014

1989
Paul Mudry '89 (GAP), '90 (GAP), Aug. 1, 2014

1991
Pauline (Hahn) Bartlett '91 (CAST), July 18, 2014

1993
Roseann Sentman '93 (CAST), '94 (CCE), June 3, 2014

1997
Michael G. Masseur '97 (CAST), Aug. 19, 2014

1998
George H. Schnakenberg III '98 (CIAS), July 22, 2014

2001
Patricia M. Sadler '01 (CAST), June 2, 2014

2002
Roslyn C. Smith '02 (CAST), July 23, 2014

2011
Matthew C. Starn '11 (GCCIS), July 10, 2014

Faculty and staff

James C. Duffus, a member and past chairman of RIT's Institute of Fellows, June 28, 2014

Richard Lane, professor emeritus in the Kate Gleason College of Engineering, Aug. 30, 2014

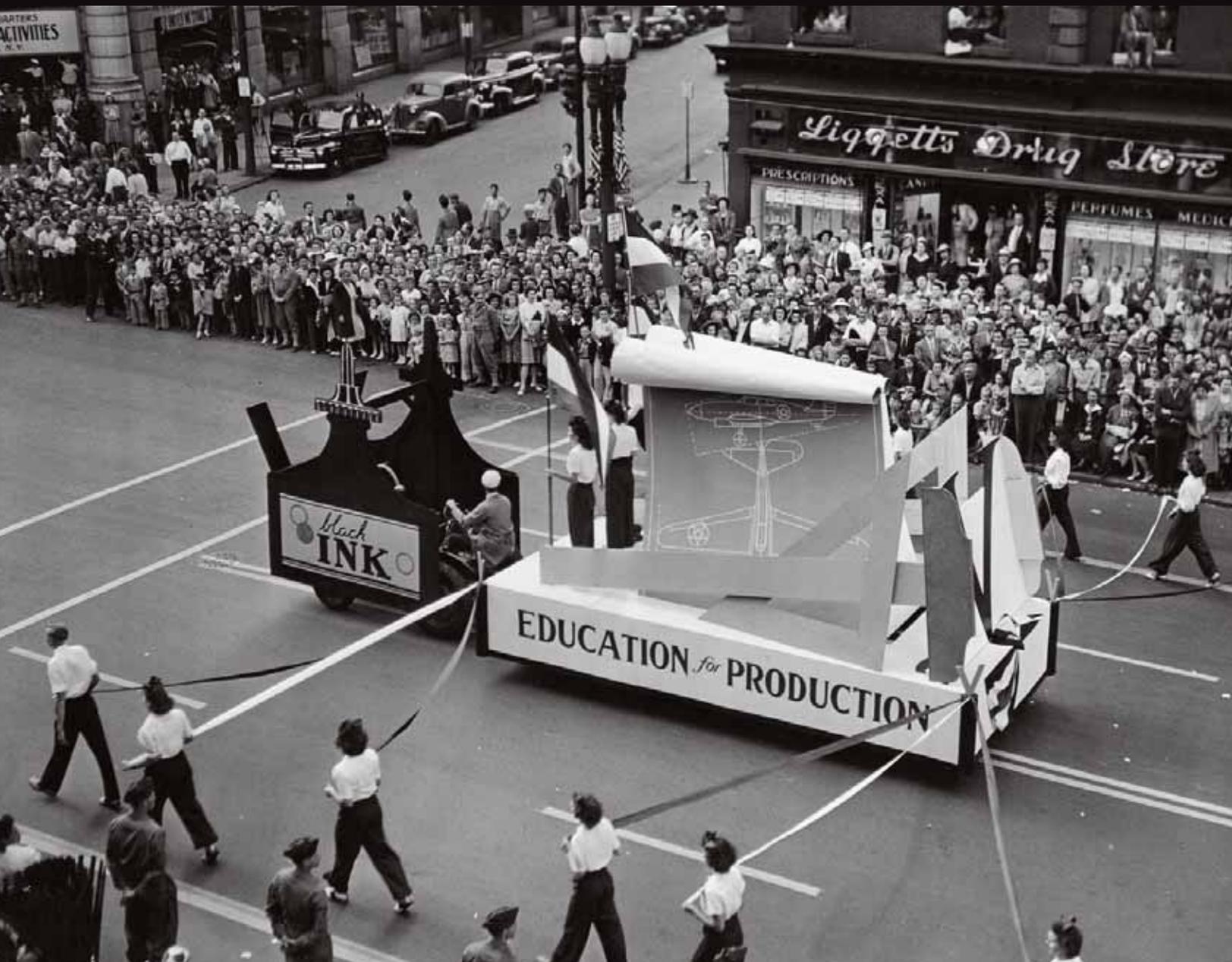
Robert F. Panara, NTID's first deaf professor, July 20, 2014

E. Ross Stuckless, NTID's first hearing faculty member, July 21, 2014

Vienchaleun Vino Kettavong, former truck driver and custodian, Sept. 23, 2014



No. 16, November 2014
RIT (USPS-676-870) is published 16 times annually by Rochester Institute of Technology, One Lomb Memorial Drive, Rochester, N.Y. 14623-5603, once in March, five times in June, once in July, seven times in August, once in October, and once in November. Periodicals postage paid at Rochester, N.Y. 14623-5603 and additional mailing offices. Postmaster: Send address changes to RIT, Rochester Institute of Technology, One Lomb Memorial Drive, Rochester, N.Y. 14623-5603.



A parade float passes in downtown Rochester during Spring Weekend. The exact year of this picture is unknown.

RIT Archive Collections

Downtown parade kicks off Spring Weekend

RIT's Spring Weekend was an annual celebration that began around 1950 and was easily the biggest social event of the school year.

The event was held near RIT's downtown campus and was once described as "RIT's Mardi Gras" by *Reporter* magazine. Festivities were kicked off with a large parade through

Rochester that was followed by a carnival, a formal dance and a concert. Each year, a different theme was chosen for the weekend.

In 1951, the Spring Weekend theme was "Springtime Along the Mississippi." A World's Fair-themed carnival featured booths representing countries all over the world, including Argentina, Ireland, Russia and India.

The following day, more than 1,000 couples danced to the jazzy rhythms of Count Basie in the Columbus Civic Center.

When RIT relocated its campus to Henrietta in 1968, Spring Weekend disappeared. However, the celebration's spirit lives on in the present day through SpringFest.

Learn, explore, innovate
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webinar series exclusively
for RIT alumni



A Webinar Series for RIT Alumni

meRIT is a big hit. If you haven't yet participated in a **meRIT** alumni webinar, you don't know what you're missing. It's time for you to check one out. Here's just some of what fellow alums are saying:

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- ▶ *"**meRIT** webinars are a delightful break in my work day."*
- ▶ *"Great presentation. What a great benefit these webinars are."*
- ▶ *"Wonderful! One of the best webinars yet! Please keep these coming."*
- ▶ *"This was my first but I thoroughly enjoyed it. I'll be back for more."*
- ▶ *"Thank you for providing this **meRIT** webinar opportunity. Well done!"*
- ▶ *"Great webinar! Looking forward to the next one."*

Isn't it time you joined us to find out what you've been missing?

rit.edu/meRIT

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GROUP PRICING	GENERAL ADMISSION & STANDING	RESERVED CHAIRBACK
General Public	\$9	\$12
RIT Faculty/Staff/Alumni	\$8	\$10
RIT Student	\$5	\$10
Youth (12 & Under)	\$5	\$6

Group pricing is subject to availability. Schedule is subject to change



23 DAN SCHULER

WOMEN'S HOCKEY

MEN'S HOCKEY

23 LINDSA GRIGG



GENERAL ADMISSION SEATING	GROUP PRICE
General Public	\$3
RIT Faculty/Staff/Alumni	\$3
Youth (12 & Under)	\$2

Group pricing is subject to availability. Schedule is subject to change



HOW TO PURCHASE TICKETS

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Group tickets- Call (585) 475-3980

