

TUteach

Give the Gift of Knowledge



“There is nothing which can better deserve our patronage than the promotion of science and literature. Knowledge is in every country the surest basis of public happiness.”

—George Washington, address to Congress, January 8, 1790

TUteach is an innovative program that will train a new generation of content-prepared science and math teachers. College of Science and Technology students will become tomorrow's leading teachers. Students can get a BS degree, a teaching certificate and extensive real classroom experience in just four years.

Partner with us

The National Math and Science Initiative will match all gifts up to a total of \$1 million. Help our students fix the nation's math and science education deficit with your gift today.

Visit www.temple.edu/cst/tuteach or contact Brooke Walker at 215-204-4776 or brooke.walker@temple.edu for more information.



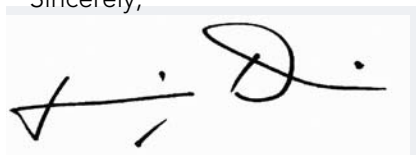
TUteach is a partnership between the College of Science and Technology and the College of Education.

2008 was an exciting year here at the College of Science and Technology (CST). We celebrated the 10th Anniversary of the College's establishment from the science disciplines in the College of Arts and Sciences (formerly the College of Liberal Arts) as well as our continued growth. We now have 3,300 undergraduates, 230 graduate students, and 190 faculty members in the departments of Biology, Chemistry, Computer and Information Sciences, Earth and Environmental Science (formerly Geology), Mathematics and Physics. This past year also saw the introduction of new career and research opportunities for CST students, the arrival of new faculty members, the continuing rapid growth of external research funding, and the founding of the exciting new TTeach program, which has already enrolled 50 students eager to become content-prepared K-12 math and science teachers.

The 10th Anniversary Celebration highlighted the greatest strength of the College—our faculty, students and alumni. We are very lucky to have faculty who have dedicated their lives to the discovery of knowledge and education, students whose aspiration to knowledge and perseverance in learning predicts their success, and alumni who give back to the institution that helped make them who they are. I hope, in reading this issue of *Touchpoint*, the stories herein remind you of the people who make Temple and CST special to you.

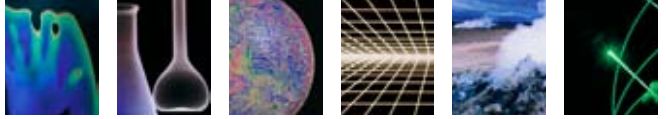
As you read of the alumni, friends and faculty who give their time and support to the College, and the students who are aided by their efforts, please consider doing the same. With your help, the College will continue to produce graduates who remember Temple as a special place.

Sincerely,

A handwritten signature in black ink, appearing to read 'Hai-Lung Dai', enclosed in a light gray rectangular box. The signature is stylized and cursive.

Hai-Lung Dai
Dean and Laura H. Carnell Professor

THE 10TH CELEBRATION



The College of Science and Technology 10th Anniversary Celebration

November 17 to 23, 2008

The College of Science and Technology celebrated the 10th Anniversary of its 1998 formation from the sciences in what was then the College of Arts and Sciences with an exciting week of festivities. Over 1,000 alumni, friends, faculty, staff and students enjoyed everything from a homemade earthquake to a concert at the Kimmel Center during the celebration. Here are some scenes from the memorable week.



The Ambler Symphony Orchestra, led by guest conductor Dean Hai-Lung Dai and conductor Jack Moore, performed a selection of pieces with links to the College at the 10th Anniversary Celebration Concert Honoring Distinguished Faculty and Students. Pieces performed included Johannes Brahms' *Academic Festival Overture*, Alexander Borodin's *Symphony No. 1 in E Flat*, Chen Gang and He Zhanhao's *The Butterfly Lovers' Violin Concerto*, and a world premiere composed by Boyer College of Music and Dance professor Maurice Wright in honor of the College's anniversary, *With Fanfare and Song*.



Top left: Nobel Laureate Baruch S. Blumberg gives a lecture hosted by the Department of Biology.

Top right: Students network with a prospective employer at the first CST Science and Technology Job Fair.

Center: Third and fourth grade students from nearby Duckrey Elementary School jump in synch as they learn the effects of vibrations on a seismograph by creating their own homemade earthquake.

Bottom: Greg Moore of Moore Brothers Wine Company leads an informative winetasting in conjunction with the Department of Chemistry.

TUteach

TUteach update

Student demand for the College's new TUteach program is remarkably high. Already, in just its second semester, over 50 CST students have joined the program to work toward becoming science and mathematics teachers with both deep content knowledge and pedagogic skill.

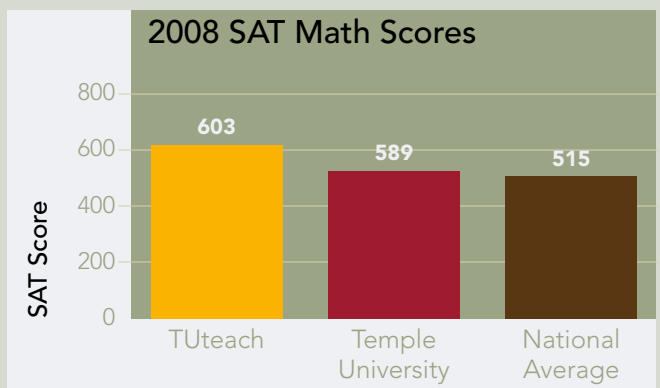
TUteach addresses the country's mathematics and science education deficit through a new approach to preparing great science and mathematics teachers. Math and science majors in the College of Science and Technology, who are passionate about their subjects, are given extensive pedagogic preparation through the College of Education. TUteach students get a Bachelor of Science degree, multiple courses based in the College of Education, and intensive practice teaching experience in just four years. TUteach graduates will be dedicated, skilled and content-prepared; well-qualified to help repair science and mathematics education in Philadelphia and beyond.

TUteach Master Teacher
Herb Green, EdD (EDU '87),

who taught the first class in Fall 2008 along with College of Education professor David Kanter, was pleasantly surprised by the raw ability shown by his students.

"I was very impressed with how well the students did with teaching lessons, considering they were first semester freshman and this was their first formal teaching experience," Green recalls. "Teaching third and fourth graders isn't easy. It's just you up there in front of the class, thinking about how to get them to enjoy what they're learning."

Every TUteach donation has twice the benefit of the amount donated, since **every gift up to a total of \$1 million is matched** by funds from the National Math and Science Initiative. The program must build an endowment to be able to continue its mission once the original funding expires. Please contact Brooke Walker at 215-204-4776 or brooke.walker@temple.edu to learn more about supporting TUteach.



TUteach students are well-equipped to teach math and science; the first class had average SAT math scores nearly 100 points higher than the national average.

Thank you, Dr. Dai. It has always been a concern to me that science teachers have been so poorly educated, and it pleases me immensely that serious measures are being taken to remedy the problem — at last!

Sincerely, Helen M Ebert

TUteach finds passionate students and supporters



EBERT

“Hallelujah!” Helen Ebert exclaimed, out loud, when she read about the College’s plans to open the TUteach program. “After 65 years,” she writes in the letter that tells of her reaction, “a change in philosophy is at last being made in the preparation of secondary education teachers—namely knowledge of and enthusiasm for the field of teaching they have selected.”

Ebert (BA '46, MA '49, Chem) is one of uncountable college students over the years who have wanted to teach and also valued in-depth content knowledge. In 1943, she and a few friends moved from education degrees to science fields in order to learn as much as possible about the subjects that interested them. Though Ebert enjoyed being a teaching assistant as she earned her BA and MA at Temple, she never began a career in teaching.

Today, the need for a program that combines content knowledge with pedagogy is just as great. But today, TUteach students can get the credits and experience required for a teaching certificate

as well as a BS in the sciences or mathematics. Just like when Ebert was at Temple, demand for such a program is high. In its first year, nearly 100 qualified students have applied to the TUteach program.

They are interested in TUteach for the same reasons Ebert would have been.

“I am fascinated with science and would love to show children the fun side of it,” writes one applicant.

“I am interested in a teaching career because I want to be able to impact students’ lives in a positive way,” says another. *“I love math and would like to be able to share my abilities in it with others.”*

Writes yet another, *“I want to be a teacher so I may help others, even if it means I only influence the life of a single student.”*

Many elements of TUteach help to make it a successful program. But it is the passions the students bring—for science or mathematics and for teaching—that make it worthy of a “Hallelujah!”



“I want to be the kind of math teacher that inspires kids,” says freshman TUteach student Laura Szmidt.

The Abraham and Ruth Clearfield Scholarship

CLEARFIELD



“I decided that if I ever had enough money I would pay Temple back... Now I’m in a position to give back.”

—Dr. Abraham Clearfield

“In my own mind I decided that if I ever had enough money I would pay Temple back for what they did for me,” recalls Dr. Abraham Clearfield. “Now I’m in a position to give back.”

Clearfield received his BA in chemistry in 1948, just as a flood of GI Bill graduates hit the job market along with the regular crowd of graduates. He couldn’t find a job. But Temple offered him a teaching assistant position to support him and his future wife, Ruth, while he earned his MA in physical chemistry.

A successful master’s experience started him on the path to a PhD in chemistry and his current position at Texas A&M University. He has published over 550 peer-reviewed articles, edited four books and patented 15 inventions. He is a former associate dean for research and spent time as the associate program director for thermodynamics with the National Science Foundation.

“Ruth and I were in complete agreement on the idea that we should support people who needed it,” Clearfield says. “The only requirements we have are that they have good academic standing in the physical sciences and that they have financial need.”

Patrick Connors, a junior biochemistry major and this year’s **Abraham and Ruth Clearfield Scholarship** recipient, met both of those criteria.

“My mom was almost in tears when I told her,” Connors says. “I read about Dr. and Mrs. Clearfield. It’s an honor to be given a scholarship with their names on it.”

Originally a pre-pharmacy major, Connors switched to biochemistry when he grew interested in research. He was one of only 25 Temple University Diamond Peer Teachers in 2008, helping his fellow students navigate professor Jacqueline Tanaka’s biology class. Patrick currently plans on going to medical school to practice oncology.

“I’m really grateful to the Clearfields,” says Connors. “I know how much this scholarship has helped me out, and it has definitely inspired me to try and help someone else out one day.”

CONNORS



2008 Student Scholarship Profiles

Chris Unera

The Hazel Tomlinson, PhD Memorial Scholarship

couldn't have arrived at a better time for Chris Unera. This past year, circumstances at home led him to put his medical school dreams on hold so he could better support his mother and younger brothers. He added a biology major to his chemistry major to increase his earning potential and began sending home a portion of the wages he currently earns as a teaching and research assistant. The Tomlinson Scholarship supported Unera's studies and allowed him to help his family more than he'd hoped. "It was a big burden off my shoulders," he says. "With tuition and books and rent on top of everything else, it really helped out a lot." Tomlinson, the beloved chemistry professor who demanded so much of her students and gave so much in return, donated a significant portion of her estate to start the endowed scholarship fund. Over the years, many of Tomlinson's former students have added to the fund.

Goutham Kodali

"It's motivation toward the next step," says Goutham Kodali, winner of the both the 2008 **Daniel Swern Memorial Fellowship** and a **Graduate Research Award**. "It lets me know that professors think I'm doing good science and I should keep it up." Goutham works on several projects with chemistry professor Robert Stanley, one of which could someday lead to researchers being able to repair sun-damaged DNA with a protein called DNA photolyase, which occurs naturally in *e. coli*, rice plants, kangaroos and frogs. "Goutham's doing great work, he deserves this award," says Stanley. "I'm sure Dr. Swern would be proud of him."

Erin Walsh

The Nathan Apple Graduate Scholarship in Biology

helped 2008 winner Erin Walsh toward her career goal: becoming a professor like those who helped her attain her current position. "With the economy the way it is, everyone's tightening their belts and budgeting. The scholarship helped me get through it," she says. Walsh's research with biology professor Cezary Marcinkiewz currently focuses on a receptor that occurs on the cell membrane of cancerous brain cells and not normal brain cells. Their research could lead to better treatments for brain cancer. Erin, who has been a teaching assistant her whole career at Temple, enjoys passing on knowledge as much as discovery. "I love the benchwork, but I also love getting other people to love their research and teaching students to make their own decisions and think scientifically."

Pauline Romas

Like many successful computer and information science (CIS) students, Pauline Romas is intimately connected to the department. An Honors student, she is a Diamond Peer Teacher, a former laboratory assistant to professor Frank Friedman, part of the undergraduate research group selected to present at the Grace Hopper conference, and a double major in film and computer science. Romas is one of the winners of the **Henri Weisel Memorial Term Scholarship** given in memory of professor Weisel, who passed away in March. "It was very meaningful because professor Weisel did a lot for the department," Romas says.



UNERA



KODALI



WALSH



ROMAS

Pioneering the future. College of

“An investment in
knowledge always pays
the best interest.”

—Benjamin Franklin

BERNARD AND SHIRLEY BROWN



BRENNEN



Guy F. Allen Memorial Award Fund

Established in 1975 in memory of former chemistry faculty member Guy F. Allen to provide for annual awards to outstanding chemistry teaching assistants for excellence in teaching.

Nathan Apple (SBM '39) Graduate Scholarship in Biology

Established in 1990 by Sadie Apple, EDU '32, to provide fellowships to biology graduate students who have demonstrated academic achievement and financial need.

Barak Artzy Memorial Award Fund

Established in 1976 by Helene H. Stolker to provide for an annual award to the member of the graduating class who has been an outstanding student in biochemistry, biology or chemistry in the pre-medical program.

Florence R. Berg Endowed Scholarship Fund

Established in 2008 by Florence R. Berg, CST '49, to provide scholarships for students enrolled in the College of Science and Technology who are either conducting summer research or have financial need.

Mark Berger Memorial Scholarship Fund

Established in 1990 by Michael R. Berman, CST '66, to provide scholarships to biology students who have demonstrated academic achievement and financial need.

Morna Brennen Memorial Scholarship Fund

Established in 2008 by Kenneth R. Brennen, PhD, CST '62, '66, in memory of his daughter, to provide scholarships for students enrolled in the College of Science and Technology who plan to pursue a degree in math and/or science teaching certification through TUTEACH or another program.

Andrea Broad Award in Biological Sciences Fund

Established by William E.S. Browning in 2000 to provide for an annual award to an outstanding undergraduate majoring in biological sciences.

Shirley and Bernard Brown Scholarship Fund

Established in 1995 to provide scholarships to junior or senior chemistry students who have demonstrated academic achievement.

Francis H. Case Fellowship Fund

Established in 1989 through a bequest from Francis H. Case to support a graduate fellowship in organic chemistry.

Abraham and Ruth Clearfield Scholarship Fund

Established in 2005 to provide scholarships for full-time undergraduate students majoring in chemistry or another physical science, who have financial need and excellent academic performance, with preference given to graduates of South Philadelphia High School.

Paul G. Curcillo II, MD Biology Award Fund

Established in 2008 by Paul G. Curcillo II, MD, CST '84, to provide annual awards to seniors majoring in biology with demonstrated excellent academic performance.

Computer and Information Sciences Undergraduate Student Activities Fund

Established in 2007 by Steven B. Petchon, SBM '80, to support CIS undergraduate student activities including, but not limited to, travel to conferences, support for International ACM Programming contest participants and fees associated with acceptance of undergraduate papers and professional publications.

Sol and Elsie Deglin Memorial Award Fund

Established in 1977 by Beatrice Deglin Leder, EDU '42, and others in honor of her brother Sol Deglin '36, and sister-in-law Elsie Fisher Deglin, EDU '38, to provide for an award to be given to an outstanding graduating biology major who is interested in a career in teaching.

Der-Min Fan Chemistry Graduate Student Scholarship Fund

Established in 2007 to support research in the Department of Chemistry.

Edward and Frances Fineman Memorial Scholarship Fund

Established in 1995 by Robert M. Fineman, CST '66, in memory of his parents, to provide scholarships for undergraduate chemistry students who have demonstrated academic achievement and financial need.

For information about establishing a named scholarship or contributing to an existing scholarship fund, please contact:

Brooke H. Walker
Assistant Dean for Development
and External Affairs
400 Carnell Hall
1803 North Broad Street
Philadelphia, PA 19122
215-204-4776
brooke.walker@temple.edu

f Science and Technology Endowed Funds.

Murray Green Memorial Prize in Physics Fund

Established in 1995 by Murray Green, CST '57, to provide for an annual award to an outstanding graduating student majoring in physics.

Chandrakant “Chuck” Gupta International Student Emergency Award Fund

Established in 2008 by Chandrakant Gupta, CST '58, to provide emergency financial support to international students on a one-time basis, with preference given to students from India, to help prevent interruption in students' studies due to an unforeseen financial or personal emergency.

Peter Havas Humanitarian Fund for Outstanding Physics Graduate Students

Established in 2005 by Angelo Armenti, CST '70, and family and former students of Peter Havas to provide for scholarships to outstanding physics graduate students with demonstrated academic achievement and financial need.

Marcus B. Herscher Memorial Prize in Physics Fund

Established in 1965 by Mr. Herscher's coworkers at RCA to provide for a prize to be given to an outstanding graduating physics major.

The Italia-Eire Foundation Faculty Award Fund

Established in 2007 to provide for the college's annual Distinguished Faculty award.

Dr. Lorraine H. Kligman Endowment Fund

Established in 1998 by Dr. Kligman, CST '66, CST '74, to provide scholarships for nontraditional sophomore biology students who have demonstrated academic achievement and financial need with preference given to single parents.

Nathan D. Lane Memorial Prize Fund

Established in 1949 by Sigma Tau Phi Fraternity in memory of Nathan D. Lane to provide for an award to be given to a graduating senior who has excelled in the sciences.

Helen Leshock Molnar and Jeffrey G. Molnar (CST '76) Award Fund

Established in 2008 by Jessie L. Smith to provide an award to an outstanding graduating senior who majored in either chemistry or geology, with preference given to female students.

Most Promising Math Major Award Fund

Established in 1995 by Orin Chein, faculty member in the Department of Mathematics, to provide an award to an outstanding sophomore or junior math major who has completed the Basic Mathematical Concepts course and displays the most promise for successful future work in mathematics.

Richard Asher Paclin Memorial Award Fund

Established in 1974 by Estelle and Martin Paclin, LAW '32, the parents of Richard Asher Paclin, CST '73, to provide an award to the member of the graduating class concentrating in chemistry who has attained the highest scholastic average.

Francis James Sholomskas Memorial Fund

Established in 1979 in memory of Francis James Sholomskas, EDU '48, CLA '60, former assistant chair of the Mathematics Department, to provide a prize for a junior or senior math major for outstanding achievement in math and active participation in university activities.

Henry A. Sloviter Student Research Award in Chemistry Fund

Established in 1996 by Henry A. Sloviter, CST '35, '36, to provide an award for an outstanding sophomore or junior chemistry major to support and encourage excellence in laboratory research.

Phyllis Zayon Steinberg Memorial Award Fund in Mathematics

Established in memory of Phyllis Zayon Steinberg to provide an award to a member of the graduating class concentrating in mathematics for outstanding achievement and promise in the field of mathematics.

Daniel Swern Memorial Fund

Established in 1982 in memory of Daniel Swern, esteemed faculty member in the Department of Chemistry, to provide fellowships for doctoral students in the Department of Chemistry or the Fels Research Institute to enable students to pursue their research.

Seda Tarzian Endowed Scholarship Fund

Established in 2006 by Seda Tarzian, CST '48, to provide scholarships for academically talented students majoring in the sciences who have financial need, with preference given to those who have experienced socioeconomic or educational disadvantages.

Hazel M. Tomlinson, PhD Memorial Scholarship Fund

Established in 1995 by the estate of Hazel M. Tomlinson, CST '26, '28, a longtime member of the Chemistry Department faculty, to provide scholarships for undergraduate chemistry students who have demonstrated academic achievement and financial need.

Herbert M. Winegard Memorial Award in Chemistry Fund

Established in memory of Herbert Winegard to provide a prize for the member of the graduating class, concentrating in chemistry, who has attained the highest scholastic average.



2008 student scholarship recipients, from left: Megha Patel, Thanh-Lan Nguyen, Danielle Rogers, Pauline Romas, Nooshin Asadpour, Alanna Burke, Rajesh Madathingal, Eddie Reed, JingXing Liang, Goutham Kodali, Coretta Gerould, Kurt Kistler, Oleksandr Isaienko, Christopher Unera, Erin Walsh, Patrick Connors, Darya Shevchenko, Peter LoBue.

The Steven Petchon Distinguished Teaching Award



PETCHON

Steven Petchon doesn't have a degree in the sciences; he has a bachelor's degree in accounting from Temple's business school. And though he worked for Arthur Andersen and Accenture for over 25 years, he never became an accountant. He was a computer systems integrator.

A required programming class for accountants introduced Petchon to computer science, and a friendly and student-oriented Computer and Information Sciences Department helped him graduate with almost as many computer science credits as accounting credits. He took an entry-level programming job at

Andersen and began his ascent to senior partner at Accenture, a global consulting firm that counts 96 of the Fortune Global 100 companies among its clients.

"If it weren't for the support of the CIS faculty I probably would have been an accountant. My career would have been far less interesting than what it turned out to be," Petchon says.

"Being a good teacher is important," he continues. "Engaging with and inspiring students and going above and beyond the call of duty is what, ideally, every teacher would strive to do. When I learned that Dean Dai wanted to reward faculty for excellence in teaching, I wanted to help."

Wendy Urban, CIS faculty, CIS alumna and this year's winner of the **Steven Petchon Distinguished Teaching Award**, is certainly such a teacher. Urban's classes promote interaction and in-depth discussion, and her

connections with her students often extend beyond the classroom. She helps students through academic challenges and career decisions, and lends a compassionate ear during times of personal stress. She also founded and directs the CIS Mentor program, which matches students with peer and faculty mentors.

"The award is recognition that I'm on the right path," she says, "and that I've been successful in trying to achieve the things I want to achieve with my students."

Established in 2007, the first Steven Petchon Distinguished Teaching Award was awarded to professor Maria Lorenz of the Mathematics Department.

"Any way I can give back to Temple University that is going to help it grow, attract better students and recruit and retain the best faculty is worthwhile," Petchon says.



URBAN

2008 Distinguished Teaching and Research Awards



From left: Wendy Urban, Grant Krow, Zoran Obradovic, Theodore Burkhardt, Abbe Forman, Boris Datskovsky.

Instituted in 2007, the College of Science and Technology's Distinguished Faculty awards recognize tenured and non-tenure track faculty who are outstanding teachers, mentors and researchers. Up to nine awards are given annually and each award carries a \$5,000 or \$10,000 prize. The College is grateful to the generous alumni donors who funded five of the awards listed below.

THEODORE BURKHARDT | *The Italia-Eire Foundation Distinguished Teacher of the Year Award*

Burkhardt has taught a broad range of physics courses at Temple, 18 in all, ranging from introductory courses for non-science majors to advanced graduate courses. The Italia-Eire Foundation Distinguished Teacher of the Year Award is awarded annually through the Italia-Eire Foundation Endowment.

GRANT KROW | *The Dean's Excellence in Mentoring Award*

Krow, a professor of chemistry, sees the Mentoring Award as a testament to the more than 125 graduate and undergraduate research students who joined his group over four decades. The Excellence in Mentoring Award was funded by an anonymous donor.

BORIS DATSKOVSKY | *The William Caldwell Memorial Distinguished Teaching Award*

Datskovsky teaches a wide variety of mathematics courses ranging from undergraduate calculus to graduate algebraic number theory. The William Caldwell Memorial Distinguished Teaching Award was funded by Seda Tarzian (BA '48, Bio).

WENDY URBAN | *The Steven Petchon Distinguished Teaching Award*

Urban teaches information science and technology as well as service courses on cyberspace, technology and society in the Department of Computer and Information Sciences. The Steven Petchon Distinguished Teaching Award was funded by Steven Petchon (SBM '80).

ABBE FORMAN | *The Dean's Distinguished Teaching Award*

Forman teaches cyberspace and society, gender issues in science and technology, and introductory courses for the Department of Computer and Information Sciences.

ZORAN OBRADOVIC | *The Dean's Distinguished Award for Excellence in Research*

Obradovic is director of the College's Center for Information Science and Technology and professor of computer and information sciences. The Dean's Distinguished Award for Excellence in Research was funded by an anonymous donor.

Alumni Updates

CAMPOLONGO



JOHN CAMPOLONGO (BS '92, CIS)

“I think we all have to give back,” John Campolongo says. “For me, it’s important to give back not only financially, but to help make Temple a better place for future students.”

Currently secretary of the Temple University Alumni Association Board of Directors, Campolongo has been involved with the Association in some capacity for over a decade.

“We’re responsible for ensuring that we continue to build programs that help alumni connect, help alumni pursue other career opportunities, and thinking about the best interests of students as they become alumni,” he says. “It’s been a great experience.”

Campolongo is business lead in the professional service organization of private banking for SEI, a global investment management firm with corporate headquarters in Oaks, Pennsylvania. He started as a computer programmer in the technology group after graduating and has moved up through the ranks of management at SEI ever since. He now manages one of the company’s largest products and also leads SEI’s recruiting efforts at Temple.

“Temple, over the last ten years, has really been going through some significant changes. I think the university really continues to strive to improve, and I want to be able to support that.”

LEFKOWITZ



STANLEY LEFKOWITZ, PhD (BA '65, Chem)

Temple has been a part of Stanley Lefkowitz’ life since he was very young.

“I used to listen to Temple basketball games on the radio, way back in the fifties,” he says. “I could still name many of the great players of that era. My wife Debbie and I come to Philadelphia for two or three games a year.”

Lefkowitz received his bachelor’s degree in chemistry from Temple in 1965 and a PhD in chemistry from Princeton, where he played intramural basketball with current chemistry professor Grant Krow. “Grant played varsity basketball as an undergraduate at Albright, and he was the star of the graduate school’s intramural basketball team. I played at most a couple of minutes a game.”

Today, Lefkowitz is chair of the College of Science and

Technology’s Board of Visitors and a member of the President’s Advisory Board. The analytical skills that have helped him become executive vice president and chief financial officer of The Falconwood Group, a management office for a prominent family, also serve him well in his role as an advisor to both the College and the University.

“I’m excited by the direction that both President Hart and Dean Dai are providing,” he says, “and by the improvement of the quality of the education and the quality of the research faculty.”

“Temple was a springboard that helped me get into Princeton, it got me started,” Lefkowitz continues. “I give back what I can give, because Temple is such an important part of my life.”

HETZNECKER



ZELDIN



“I think we all have to give back. For me, it’s important to give back not only financially, but to help make Temple a better place for future students”

—John Campolongo

SARAH HETZNECKER (BA '83, EES)

Just half an hour north of Philadelphia, in Falls Township, Bucks County, is the largest solar power facility on the east coast and the fourth largest in the United States. Completed in November 2008, the facility generates around 3.7 megawatts (3.7 million watts) of energy per hour. Its 17,000 solar panels sit on the buffer zone of a 16.5-acre landfill, on land that would otherwise be left barren.

Temple Earth and Environmental Science (formerly Geology) alumna Sarah Hetznecker led the development, design, engineering and installation of the system. She is director

of project development for the U.S. branch of Conergy, one of the world's largest solar energy companies.

Hetznecker met her husband Gary Sheehan, a fellow EES alumnus, in professor Gene Ulmer's Perspectives on Energy class. She points to their decision to work together on the environmental consulting firm they founded, Mesa Environmental Sciences, Inc., as a turning point in their respective careers. When they added solar to their portfolio in 2001, "the phone began to ring to do solar installations," she says, "and eventually our company was purchased by Conergy."

Recognized as one of Pennsylvania's Best 50 Women in Business by the Commonwealth's Secretary of Community and Economic Development in 2005, Hetznecker is also a founding Board Member of the Society of Women Environmental Professionals of Greater Philadelphia. She recently returned to Temple for her induction into the Temple University League for Entrepreneurial Women's Hall of Fame.

MICHAEL ZELDIN (PhD '65, Bio)

In 1965, Michael Zeldin was one of the first students to earn a PhD degree in biology from Temple University. He had been recruited to the program, not officially running when he joined, by Department of Biology chair Jack Ward.

"For those three and a half years I lived basically in paradise," Zeldin says. "You didn't follow a prescribed path, you worked creatively. And when you got rebuffed, you would just try another avenue."

Zeldin went on to do postdoctoral research at Brandeis University, then became a Harvard fellow. His research at Harvard focused on signal transduction in the human eye: the process by which data collected by the retina is relayed to the brain. Then, after more than a decade in academia, Zeldin joined the burgeoning high-tech venture capital industry.

"I didn't know how to invest; much less did I know high

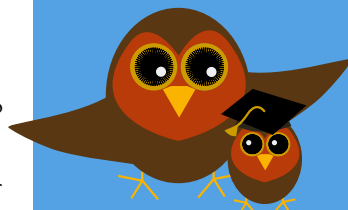
tech. So I took a page out of what I learned at Temple and tried different approaches to figure out what worked."

As the industry expanded, and companies like biotech pioneer Genentech proved their worth, he identified promising research, formed companies around possible applications and built them into valuable enterprises. Now Zeldin runs a consulting firm with a wide range of clients, including major pharmaceutical companies, universities and IT firms. He has helped pharmaceutical companies connect with the doctors who see the real-world results of their drugs and worked with clinics to improve the flow of patient information. Much of his current work focuses on facilitating discovery through digitizing information and using it more effectively.

Today, as he did at Temple, Zeldin searches for creative ways around or through obstacles.

Share your
Owl wisdom.

Become a
mentor.



Connect with current students and young alumni — post internship opportunities, provide career advice and join Temple's mentor directory at myowlspace.com. Click on "My Network" to build your mentoring profile and take the next generation of Owls under your wing.

myowlspace.com
Temple University Alumni & Friends

College of Science and Technology

2008 Gallery of Success Inductees



BROWN

ALBERT BROWN (BA '64, Chem)

Albert B. Brown, who received his bachelor's degree in chemistry from Temple, has spent over 40 years in research as a chief scientist and corporate fellow for Rohm and Haas. Recently acquired by Dow Chemicals, Rohm and Haas will soon be the world's leading manufacturer of specialty chemicals. After graduating from Temple, Brown began working as a chemist in the newly formed emulsion synthesis department. In 1971, he moved to the coatings area to work on new metal protection paints and coatings, and was named a senior chemist two years later. He then turned his attention to better adhesion and flow innovations for house paints in the architectural binders area, and in 1979 was named a section manager. In 1992 he was named a director of synthesis for coatings, and in 1997 director of synthesis for the corporation.

It was in Brown's first chemistry class at Temple that he realized he had an interest in pursuing this field, with the encouragement of his professor John Foy. In his senior year at Temple, Dr. Edgar Howard introduced him to carbon chemistry, which later became the foundation of his successful work in the chemistry industry.

In 2001, Brown's significant work in the field of polymers earned him the designation of corporate research fellow at Rohm and Haas—an honor reserved for scientists who have consistently delivered to the company strategic innovations, technical leadership and sustained success. He is only the third corporate fellow in the 99-year history of the company.

Brown's work has led him to become a worldwide expert in emulsion polymerization, contributing to a number of new product technologies. He has chaired the prestigious Otto Haas Award selection committee for nine years and served on the senior fellow selection committee. He is regarded as a highly respected figure in the technology community, advising numerous research departments and businesses, and is called upon by well-known technical groups for his polymerization expertise.

Albert Brown has three children and currently resides in Buckingham, Pennsylvania, with his wife Marie.

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HERB GORONKIN (BA '61, MA '62, PhD '73, Phys)

Dr. Herb Goronkin received his BA, MA and PhD in physics from Temple University. He began his career doing research in compound semiconductors, silicon ICs, microwave semiconductor devices and optical sensors. In 1977, Goronkin joined Motorola to develop the GAA electronic program and went on to become vice president and director of Motorola's physical research laboratories until he retired in 2003. His research in the area of nanoelectronics led to the development of the National Nanotechnology Initiative, and his work while at Motorola earned him the Distinguished Innovator Award in 1992 and the Master Innovator Award in 1995. In 1998, he received Motorola's highest technical distinction, the Dan Nobel Fellow.

During his distinguished career, Goronkin developed over 65 patents and had numerous publications. He is a fellow of the Institute of Electrical and Electronics Engineers and was selected as Senior Engineer of the Year in 1993 by the Phoenix Chapter. Goronkin has served on numerous advisory boards and professional organizations and is honorary chair of the NanoBusiness Alliance Advisory Board, a member of the Governing Board of the Center for Integrated Nanotechnologies, and a senior advisor for the Center for Nanoscience Innovation for Defense.

Goronkin is currently the president of Technology Acceleration Associates, Inc., an organization specializing in improving research and development effectiveness and technology transfer whose clients include U.S. and foreign industries, as well as universities and national labs. He has four children and lives in Arizona with his wife Pam.



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“We enjoyed the luncheon and we especially liked the tour of the chemistry building afterwards. The visit brought back fond memories.”

—Walter Fiddler (BA '59, PhD '65, Chem) and Rosemary Fiddler

Classes of 1950 to 1959 Reunion

Temple alumni who earned degrees in mathematics or the sciences between 1950 and 1959 returned to campus November 23 and 24 for the Classes of 1950–1959 Reunion. As they reminisced about their time at Temple and caught up on developments since graduation, attendees were treated to an enjoyable slate of events.

The weekend started with a luncheon at Cadence Restaurant in the Kimmel Center and continued with a private guided tour of the facilities. Later that evening alumni were guests at the College’s 10th Anniversary Concert Honoring Distinguished Faculty and Students. The Ambler Symphony Orchestra, led

by guest conductor Dean Hai-Lung Dai and conductor Jack Moore, performed four pieces in honor of the College’s anniversary.

The following day, alumni enjoyed a luncheon at the Diamond Club and a student-led tour of campus.



“It was pleasant to meet with fellow alumni, particularly with two former classmates. We were amazed to see so many new buildings and facilities. The College of Science and Technology is certainly moving in the right direction to educate students for the 21st century.”

—Frederick Rothwarf (BA '51, MA '53, PhD '60, Phys) and Rita Rothwarf



From left: Howard and Margaret Nields, Frederick and Rita Rothwarf, Marshall Fishman, and Walter and Rosemary Fiddler on a campus tour.

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The current economic recession poses unprecedented financial challenges to many of our students. Your support is critical. Consider your personal best gift today.

To contribute to an existing scholarship fund or to start your own, please contact Brooke Walker, assistant dean for development, at 215-204-4776 or brooke.walker@temple.edu.



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