

FALL/WINTER 2012

# TC

---

# Today

The Magazine of Teachers College,  
Columbia University

## Wellness in a Thinking World

Teachers College explores  
the mind-body connection

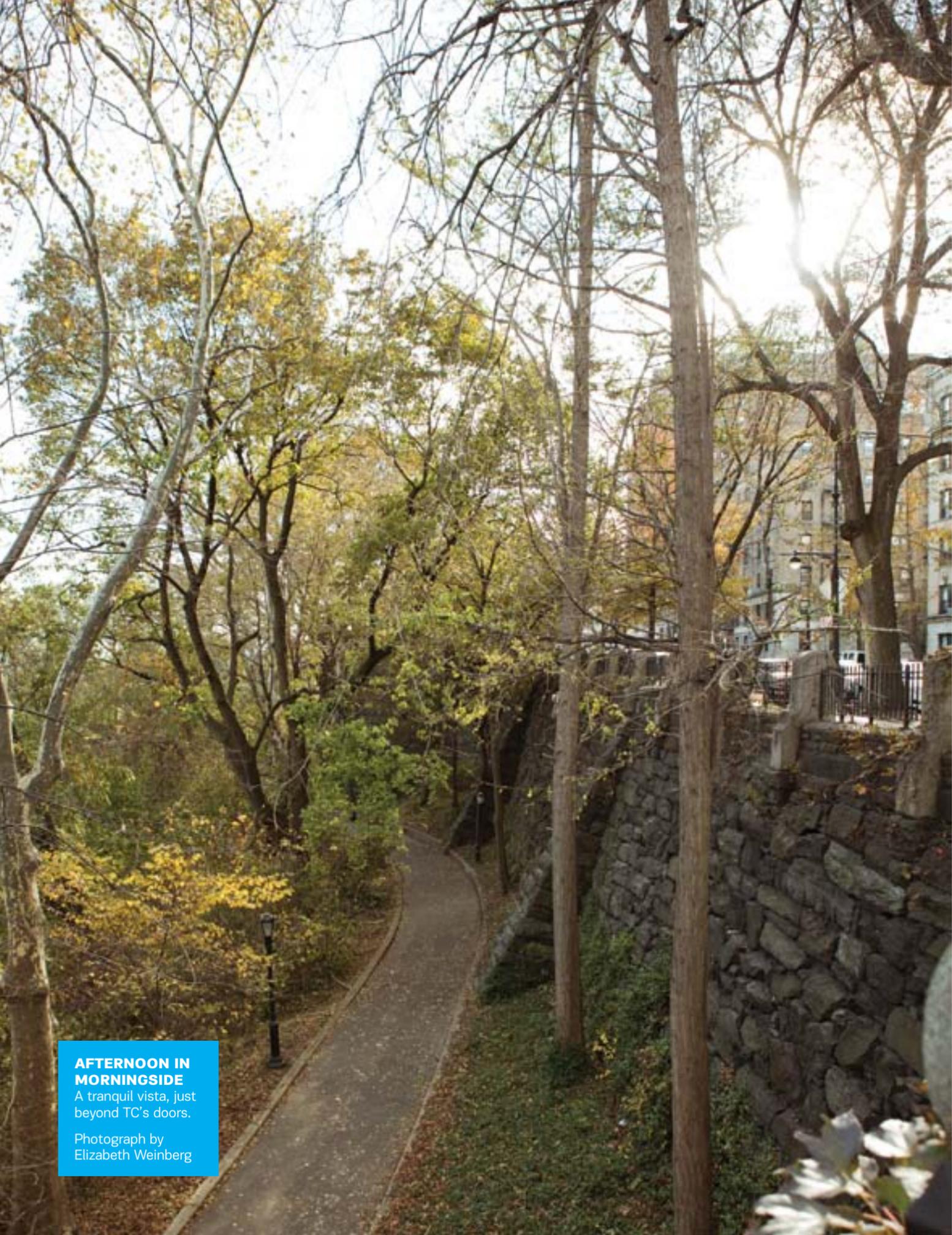
---

BRINGING BODY AND  
SOUL TO CLINICAL  
PSYCHOLOGY

WHY CLOSING  
THE ACHIEVEMENT  
GAP DEPENDS ON  
STUDENT HEALTH

GETTING KIDS  
TO LIKE GYM

CUTTING THROUGH  
THE NOISE IN DEAF  
EDUCATION



**AFTERNOON IN MORNINGSIDE**  
A tranquil vista, just beyond TC's doors.  
Photograph by Elizabeth Weinberg



**I**N MY ELEVATOR SPEECH about Teachers College, I remind people that TC has long stood for educating children through a rich array of academic and non-academic programs that meet their intellectual and developmental needs.

This past September, we stood tall indeed as we celebrated the arrival of the Teachers College Community School (TCCS) at its permanent home in West Harlem.

The ceremony brought together parents, teachers, community board members, TC faculty and staff, and representatives from the New York City Department of Education and Columbia University. Their joy and pride were evident as first graders sang "What a Wonderful World" and TCCS Founding Principal Jeanene Worrell-Breeden spoke of building the school of her dreams.

Virtually from the moment I became TC's President, one of our board members and staunchest supporters, E. John Rosenwald, has challenged me to conceive and execute big and bold ideas about the future of the College. TCCS, which counts John as a leading benefactor, enables us to demonstrate one of our biggest and boldest ideas: University partnerships with local schools and communities can bring about lasting, cost-effective improvement to urban public education. At TCCS, you will find our faculty and students working with parents, teachers and staff to de-

liver an outstanding, comprehensive education reflecting our knowledge and experience in teaching, learning and child development.

This issue of *TC Today* taps that same source and grows out of our belief that being "comprehensive" – in education or any other area of development – means addressing physical health and its connections to intellectual and emotional well-being.

Of course, the mind-body connection has been remarked upon throughout human history, from Scripture ("Do you not know that your body is a temple?") to the Iron Chef, recycling the epicure Brillat-Savarin ("Tell me what you eat, and I will tell you what you are"). But today, science is revealing precisely how our minds are inextricably linked with our physical selves.

TC health education professor Charles Basch has underscored that link in his remarkable crusade to document how seven major health conditions are hindering the academ-

competition. With childhood obesity and diabetes threatening the nation's future, their work argues powerfully for a reconsideration of gym, recess and other endangered activities.

Beyond these more traditional areas of health, you'll read about our new Spirituality and Mind/Body Institute, founded by psychologist Lisa Miller, who has helped establish meditation, mindfulness and prayer as a legitimate focus of psychological inquiry. Supported by Goldman Sachs Gives at the direction of Phil Armstrong, a Goldman Sachs partner, Lisa and her students are using these techniques to help New York City's homeless children attain and maintain emotional health.

These stories illustrate how our health care system can deliver more for less. They also suggest ways each of us can take control of our own health. For example, in reading about health education professor and Deputy Provost John Allegrante's

**The mind-body connection has been remarked upon, from Scripture to the Iron Chef. But today, science is revealing precisely how our minds are linked with our physical selves.**

ic achievement of low-income and minority students. Chuck has worked tirelessly to bring this information to audiences ranging from White House officials to community groups. Several states have adopted many of his recommendations for using schools to provide students with coordinated health care.

Even as many districts cut school physical education programs, Stephen Silverman, Carol Ewing Garber and other TC faculty are championing a new approach to youth fitness that emphasizes enjoyment and lifelong athletic skill-building over

research on using positive thinking to help patients manage chronic illness, you'll meet an elderly woman who recalls how researchers urged her to take advantage, in exercising, of her two-story home.

Following her lead, I'm inclined to adjust my TC elevator speech along similar lines: Instead of using the elevator, let's all take the stairs.

SUSAN FUHRMAN (PH.D. '77)

LOFI STUDIOS

# Fall/Winter

## FEATURES

### BODY AND SOUL

- 14 **How Faith Heals**  
TC is offering the Ivy League's first master's degree program in spirituality and psychology
- 20 **The Power of Positive Patients**  
As America ages, people need to think positively to better manage their own care

### SOUND MIND, SOUND BODY

- 26 **Head Games**  
Welcome to "the New Gym," where kids hold group discussions and use iPads, and teachers ponder the role of race, gender and body type
- 32 **Taking Student Health to Scale**  
**Chuck Basch** says we won't close the achievement gap until we attend to student health. He has a plan
- 38 **Cutting Through the Noise**  
TC's Deaf/Hard of Hearing program poses the big questions about assistive technologies



**WE HAVE LIFTOFF** The Teachers College Community School is launched in its permanent home.

- 42 **Eating Smarter**  
When patients relearn the seemingly innate act of swallowing, their brains change – and their lives can too
- 46 **A Community of Healing**  
**Lena Verdelli** has brought a talking cure to people living in the most adverse circumstances
- 50 **As Nurses Go, So Goes Health Care**  
Current TC faculty and legendary alumnae weigh in on why nursing education is more important than ever

## FRIEND OF TC

- 54 **Not Very Tall, but Bigger Than Life**  
**E. John Rosenwald Jr.** is a fount of wisdom and force of nature who can prod institutions to reinvent themselves

**ON THE COVER:**  
Photograph by Elizabeth Weinberg

PHOTOGRAPH BY JEFF GLENDENNING

## @TC

- 4 **First Editions**  
Leadership guides for nurses and the rest of us, by **Elaine LaMonica Rigolosi**; *Building Mathematics Learning Communities*, by **Erica Walker**
- 6 **News**  
TC's new public school finds a permanent home; the College hosts a major conference on teacher prep; and more
- 12 **Essays**  
**Barbara Wallace** on a new paradigm for understanding health disparities; **Randi Wolf** on building trust to conduct health education

## 57 ALUMNI NEWS

- 58 **Alumni Association**  
59 **Alumni Awards**  
61 **Class Notes**  
64 **In Memoriam**

### THE JOY OF GIVING

Thanking and celebrating major donors to Teachers College:  
Evalyn Edwards Milman (M.A. '64), page 7; Joyce B. Cowin (M.A. '52), page 8; Sue Ann Weinberg (Ed.D. '97), page 11; Marla Schaefer (M.A. '03), page 19

## ALUMNI FOCUS

- 66 **A VERY PATIENT ADVOCATE**  
Raising a child with autism was hard, but getting the nation to understand the disorder really required **Ruth Christ Sullivan** to take the long view
- 67 **PUTTING HER BEST FOOT FORWARD**  
As both a dancer and a scientist, **Elizabeth Coker Girón** explores the ties between imagination and movement
- 68 **A FENCER WITH AN EDGE**  
Her familiarity with other cultures helped Olympian **Maya Lawrence** in London
- 69 **RUNNING THE NUMBERS**  
Alumna and new faculty member **Sonali Rajan** uses statistics to identify programs that address overall health in a synergistic way
- 70 **HELPING ALL WOMEN TO HAVE IT ALL**  
As the new leader of the nation's oldest YWCA, **Danielle Moss Lee** is reaching out to overcome disparities for women at all levels

- 71 **UP ON THE ROOF**  
**Nate Wight** and his students are creating an environmental literacy lab atop their school in the South Bronx
- 72 **LOOKING KIDS IN THE EYE, EVERY DAY**  
The late educator, counselor and philanthropist **Betty Fairfax** believed in involving herself in students' lives

The magazine of Teachers College is produced by the Office of Development and External Affairs at Teachers College, Columbia University.

**Suzanne M. Murphy**  
VICE PRESIDENT,  
DEVELOPMENT  
& EXTERNAL AFFAIRS  
(Ed.M., Organization  
& Leadership, 1999;  
M.A., 1996)

**James L. Gardner**  
ASSOCIATE VICE  
PRESIDENT,  
EXTERNAL AFFAIRS

### TC TODAY staff

**Joe Levine**  
EXECUTIVE DIRECTOR,  
EXTERNAL AFFAIRS

**Sheryl Hoffman**  
DIRECTOR,  
EXTERNAL AFFAIRS

**Jeff Glendenning**  
CREATIVE DIRECTOR

**Paul Acquaro**  
DIRECTOR,  
OFFICE OF THE TC WEB  
(M.A., Instructional  
Technology, 2004)

**Patricia Lamiell**  
DIRECTOR,  
MEDIA RELATIONS

**Matthew Vincent**  
ASSOCIATE WEB EDITOR

**Hua-Chu Yen**  
WEB DEVELOPMENT  
SPECIALIST

**Kalena Rosario**  
ADMINISTRATIVE ASSISTANT

**Rebecca Chad,  
Heather Smitelli**  
EDITORIAL ASSISTANTS

**Urania Mylonas**  
CONTRIBUTING WRITER

**Kee eun Lee**  
CONTRIBUTING DESIGNER

TC Today, Fall 2012 Volume 37, Number 1  
Copyright 2012 by Teachers College,  
Columbia University

TC Today is published twice per year by  
Teachers College, Columbia University.

Articles may be reprinted with the per-  
mission of the Office of External Affairs.

Please send alumni class notes, letters  
to the editor, address changes and other  
correspondence to:

TC Today Office of External Affairs, 525  
W. 120th St., Box 306, New York, NY  
10027, 212-678-3412, tctoday@tc.edu

[www.tc.edu/tctoday](http://www.tc.edu/tctoday)

# First Editions

Members of the TC Community in Print

## On Management – Bedside and Lakeside

Leadership guides for nurses and the rest of us

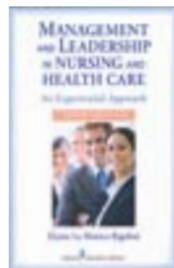


## Changing the Odds for Math Success

Why math communities are critically important  
for supporting student achievement



TWO NEW BOOKS by Elaine La Monica Rigolosi, Professor of Education and Director of TC's Executive Program in Nursing, could not seem more different. *Unlock Your Cage* (CreateSpace, 2013) is an allegorical fable in which a lake-dwelling family consults a Great Wizard to figure out why their lily pad seems smaller. *Management and Leadership in Nursing and Health Care: An Experiential Approach* (Springer, 2013) is a practical guide to organizational effectiveness that applies theories from business, organizational psychology, health care, law and education administration.



Yet both books exhort readers to take control, set goals and be the leaders of their own world. Or as Rigolosi writes in *Unlock Your Cage*, "You put on the eyeglasses that frame what you see."

Rigolosi herself has worn many lenses. A practicing attorney, she holds degrees in human relations and counseling, and medical and surgical nursing administration. She consults for health care organizations and other businesses and formerly chaired TC's Department of Organization and Leadership.

*Management and Leadership* cites thinkers as diverse as the psychologist Abraham Maslow and the management consultant Peter Drucker, and offers tips as specific as "keep the coffeepot going" and as broad as an injunction to communicate in "an open, mature and direct way... that allows others to learn about one's feelings and identity while enhancing self-esteem."

Yet a single line in Rigolosi's shorter book succinctly sums up her outlook: "I have the power to become whatever I want to be. I alone am responsible!" —**Joe Levine**



IN *BUILDING MATHEMATICS LEARNING Communities: Improving Outcomes in Urban High Schools* (Teachers College Press), Erica Walker, TC Associate Professor of Mathematics Education, argues that, too often, school policies and practices limit the math involvement of students of color. These students generally have positive

attitudes toward mathematics, Walker writes, but often lack opportunities to learn high-quality math in schools. Decades of research document that many educators have low expectations for students of color, often teaching basic-skill mathematics that does not promote higher-order thinking. Many students of color are simply consigned to a remedial track from which they never emerge, branded as "underachievers" regardless of their potential or even their actual performance.

Walker, who did research for her book at a New York City school she calls Lowell High School, learned that family, peer and teacher networks contributed significantly to the math success of high-achieving students. She suggests that by strengthening peer academic communities, grounding rigorous educational content in real-world experiences and holding students to higher expectations, educators, families and communities can raise the bar for math achievement by all.

*Building Mathematics Learning Communities*, which contains a foreword by civil rights activist and math educator Bob Moses, describes several models for such an approach. Walker suggests that schools can better serve students of color through practices that support mathematics engagement and build on students' strengths. Given that the United States ranks 25th among OECD nations in secondary students' mathematics achievement, Walker argues, it is high time we capitalize on all students' significant mathematics potential and — across and within schools — "ensure meaningful mathematics learning for all." —**Steven Kroll**



PHOTOGRAPH BY HEATHER VAN LUXEM LEWIS

### 6 News

TC's new public school finds a permanent home; the College hosts a major conference on teacher prep; and more

### 12 Essays

Barbara Wallace on a new paradigm for understanding health disparities

Randi Wolf on building trust to conduct health education



IT'S A WRAP President Susan Fuhrman and friends cut the ribbon for the Teachers College Community School in late September.

## A SCHOOL ARRIVES

TCCS CELEBRATES ITS NEW HOME

**“Good afternoon, everyone.** I want to welcome you to the [Teachers College Community School](#)’s permanent home. Thank you!”

At those words from TCCS Founding Principal Jeanene Worrell-Breeden, an audience of more than 300 parents, teachers, neighborhood residents, city and state dignitaries and members of the Teachers College and Columbia University communities burst into loud applause.

TCCS, a public, university-assisted school for pre-K through eighth grade, run by the New York City Department of Education and formally affiliated with TC, admitted its first class – a group of kindergarten students – last year in a temporary facility. The school, designed with neighborhood residents, integrates delivery of services for children and families in order to optimize educational opportunities and achievement.

Now serving 125 students in pre-K, kindergarten and first grade, and with plans to add one additional grade per year, TCCS is operating in a refurbished building located at 168 Morningside Avenue at West 126th Street.

“This is a dream become reality,” said TC President Susan Fuhrman, “a university-supported public school that will offer unparalleled education for the children of our community.” She added, to cheers, “Can you imag-

ine the improvement we would see in public education in America if every university worked in concert with local schools and communities?”

Fuhrman was joined on the TCCS auditorium stage by others who made the school possible, including the Reverend Georgette Morgan-Thomas, Chair of Community Board 9; Donald Notice, Chairman, and Kofi Boateng, Executive Director, both of the West Harlem Development Corporation; New York City Councilman Robert Jackson, who chairs the Council’s Education Committee; Manhattan Borough President Scott Stringer (represented at the event by Deputy Borough President Rosemonde Pierre-Louis); New York State Board of Regents Chancellor (and TC alumna) Merryl Tisch; New York City Schools Chancellor Dennis Walcott; Columbia University President Lee Bollinger; New York State Assemblyman Keith Wright; and Nancy Streim, TC’s Associate Vice President for School and Community Partnerships, without whom, Fuhrman said, the school “would never have happened.”

Morgan-Thomas said that “TCCS illustrates for us the value of collaboration” and praised TC for having “heard the needs of our community and been extremely responsive.”

Wright also drew thundering applause. “Langston Hughes wrote a long time ago, ‘What happens to a dream deferred – does it dry up like a raisin in the sun?’” Wright looked around the room and grinned. “No! A school gets built on 126th Street and Morningside Avenue!”

To view a video about TCCS, go to <http://bit.ly/TNk3z8>

PHOTOGRAPH BY HEATHER VAN UXEM LEWIS

## The JOY of GIVING

### EVALYN EDWARDS MILMAN

Preparing the Next Generation of Literacy Specialists



**L**iteracy is the freedom to expand one’s thought, one’s confidence,” says Evalyn Edwards Milman (M.A. ’64), who has given Teachers College \$1 million to establish the Evalyn Edwards Milman Literacy Fellowship. “I would like to see the College boost literacy and involve children who are in need, and produce scholars and teachers who will excel.”

The Milman Fellowship will support two or more outstanding TC students to further their literacy-related research and practice in TC Partnership Schools in Harlem. The Milman Fellows will be directed by Nancy Streim, Associate Vice President for School and Community Partnerships, and mentored by TC faculty. The Fellows will play a big role in improving the educational and developmental outcomes of children in West Harlem.

“Through Evalyn’s generosity, we can transform learning for teachers and students,” says Kecia Hayes, Director of the TC Partnership Schools Consortium. “Her wonderful gift provides teachers with a unique opportunity to study effective instructional practices in a professional learning

community and transfer learning into practice.”

Evalyn studied child development as an undergraduate at Cornell. Her gift marks her graduation from TC’s master’s degree program in Curriculum and Teaching nearly 50 years ago. She taught in the early-childhood grades before earning another master’s degree in art history at Hunter College. She has since worked as a curator and television producer and owned a cultural tour company.

Daniel Ferguson, a C&T student and the first Evalyn Edwards Milman Fellow, will be in the new cohort of literacy specialists. Daniel, who has taught in New York, Alabama and Japan, calls teaching literacy “life-changing” and “by far the most philosophically stimulating experience I’ve had.” Evalyn anticipates “celebrating the award and seeing Daniel in action.

“I am so pleased that the Milman Fellows will get to the heart of what teaching means,” she says. “I love the fact that the program enables TC students to teach and learn on a one-on-one basis. TC is in a position to lead other schools and universities, not just in the United States, but around the world.”

PHOTOGRAPH BY HEATHER VAN UXEM LEWIS

## The JOY of GIVING

### JOYCE B. COWIN

Ensuring Financial Literacy for Tomorrow's Citizens



“Every person past the ninth grade should have knowledge of money – how to finance a college education, how to balance a checkbook, how to ensure that expenses don’t exceed income, how to monitor a credit card and interest, how to shop for clothes and food, how much to pay for rent and what a mortgage is,” says Joyce B. Cowin (M.A. ’52).

To that end, a generous gift from Joyce, who is a TC alumna and longtime Trustee, is funding a partnership among Teachers College, the New York City Department of Education and the nonprofit Working in Support of Education (WISE): *The Cowin Financial Literacy Project*, a unique professional development program for New York City public school teachers working with students in grades 9-12. The first workshops for teachers from select New York City schools will begin in Summer 2013. The program has been developed by TC faculty member Anand Marri, with consultation by alumna Pola Rosen. New York State Education Commissioner John King also has fully endorsed the

new program.

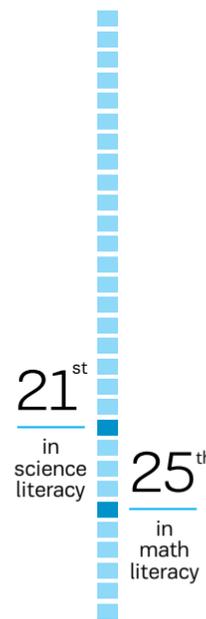
“This collaboration is a wonderful example of partnership between the public and private sectors, with the goal of strengthening New York City public school students’ skills in an important field,” Dennis M. Walcott, New York City Schools Chancellor, wrote to Joyce. “Financial literacy is necessary for our students’ success in the 21st century.”

To help ensure that *The Cowin Financial Literacy Project* takes hold throughout the New York City school system and beyond, the EdLab unit of Teacher’s College’s Gottesman Libraries will create a website from which teachers can download the project’s materials at no charge.

For Joyce Cowin, financial literacy is a moral imperative. “When the market collapsed in 2008, so many wonderful, hardworking people who had saved money throughout their lives were snookered about subprime mortgages, and they lost everything,” she says. “We need to educate the next generation to ensure this never happens again.”

### DID YOU KNOW?

In 2006, American students ranked



among students in 30 industrialized countries, on the Programme for International Student Assessment comparison.



Xiaodong Lin

### SAYING YES TO SCIENCE

TC faculty member Xiaodong Lin has received a five-year, \$2.5 million grant from the National Science Foundation to probe what motivates students to pursue an interest in the STEM subjects (science, technology, engineering and math). Working in 13 New York City-area schools, Lin and Stanford University social psychologist Carol Dweck will test the impact of two classroom-based motivational instruction programs on students’ performance in STEM courses: a neurocognitive approach that teaches students that their minds and brains can literally change and grow through hard work; and a social-historical approach using stories of how famous scientists such as Albert Einstein and Marie Curie struggled to achieve their breakthrough discoveries.

### A NEW DIRECTOR FOR TC’S CAHN FELLOWS

TC’s Cahn Fellows Program for Distinguished School Principals has a new director: Nora Heaphy, a former special education teacher who served as Deputy Director of the Colin Powell Center for Leadership and Service at the City College of New York. Heaphy succeeds Krista Dunbar, who has become Senior Director of Recruitment in the Office of New Schools of the New York City Department of Education. The 15-month Cahn Fellows program, which counts more than 12 percent of New York City’s public school principals as alumni, now

includes participants from Chicago and Newark, New Jersey, as well.

### PROFESSIONALIZING PAKISTAN’S TEACHERS

This past summer Teachers College hosted 22 high-ranking Pakistani education officials and provincial leaders as part of a USAID-funded project to professionalize teachers and significantly improve education in Pakistan’s primary and secondary schools. Under the three-year, \$5 million TC collaboration, all Pakistani teachers will be encouraged to hold four-year or two-year teaching degrees in their fields by 2018. Since 2009, TC faculty members have worked with 15 Pakistani universities in four



Gita Steiner-Khamsi

provinces, as well as with the global nonprofit Education Development Center, to create an undergraduate 136-credit, four-year teaching degree and a two-year associate’s teaching degree. The USAID grant was received, and the project is administered, by TC’s Office of International Affairs. Faculty member Gita Steiner-Khamsi is the project’s principal investigator.

### SUE NAMED TO UNESCO PANEL

Derald Wing Sue, TC Professor of Psychology and Education, is serving on an advisory panel for an effort by the United Nations Educational, Social and Cultural Organization to develop a global curriculum designed to foster racial, ethnic and multicultural



Derald Wing Sue

tolerance among children ages 10 to 16. The curriculum, a response to rising levels of racism and xenophobia worldwide, will enter pilot distribution in 2015 in 5 to 10 countries. Sue has been a leader in moving issues of identity and difference to the center of counseling psychology.

### THE ELEPHANT IN THE CLASSROOM

“Beyond the Schoolhouse Door: Bringing Non-School Factors Into Education Policy,” a conference held at TC in September, focused on the latest research on the connection between poverty and education and the implications for policy.

Sponsored by TC’s Department of Education Policy and Social Analysis (EPSA), the event featured Richard D. Kahlenberg, of the Century Foundation; Greg J. Duncan, of the School of Education at the University of California, Irvine; Richard Murnane, of the Graduate School of Education at Harvard University; William F. Tate, of Washington University in St. Louis; and TC’s Michael Rebell, Professor of Law and Education. Jeffrey Henig, Chair of EPSA, moderated.

“There has been a remarkable divergence in the educational outcomes for kids growing up in high- and low-income families,” said Duncan.

### A MASTERCLASS STUDY GUIDE

A study guide created by Teachers College to accompany the first year of

episodes from the HBO television series *Masterclass* has been distributed by the Young Arts Foundation free of charge to some 6,500 middle and high schools in New York City, Los Angeles and Miami. *Masterclass* chronicles the experiences of teens chosen by Young Arts to work with great artists such as tenor Plácido Domingo, choreographer Bill T. Jones, architect Frank Gehry, actress Liv Ullman and playwright Edward Albee.

Creation of the study guide was led by Hal Abeles, TC Professor of Music and Music Education, and former TC Professor Margaret Crocco, now Dean of the University of Iowa College of Education. The guide seeks to build 21st-century critical thinking skills.

### CONNECTING TEACHING TO RESEARCH

In July, TC and TeachingWorks, based at the University of Michigan, presented “Connecting Advances in Learning Research to Teacher Practice,” a conference on the future of teacher preparation.

TC President Susan Fuhrman told more than 400 attendees that recent negativity about the value of theory in educator preparation coincides, ironically, with “an explosion of new knowledge...about how both adults and children take in information most effectively.

“How will we incorporate this new knowledge into teacher preparation and practice?” Fuhrman asked.

The answer, said Deborah Loewenberg Ball, Dean of the School of Education at the University of Michigan, begins with recognizing that “simply knowing the subject doesn’t enable you to teach it well.” Ball argued for a medical residency model of teacher prep that combines theory with hands-on experience.

View a video of the conference at <http://bit.ly/QqVcSC>

**DEAR TC ALUMNI & COMMUNITY:**

Please know that our hearts and thoughts are with you in the wake of Hurricane Sandy. We know that many of you were hit hard by this storm and that the aftermath is still taking a toll on your daily lives.

Fortunately, our campus was spared damage; however, we are painfully aware of the destruction the storm has left on New York City and the region. Collectively, we extend our concern for those whose lives, families and neighborhoods have been most seriously affected by flooding, loss of power and other damage.

Our city and surrounding communities have much hard work to do in recovering from this historic storm. For a list of resources that may prove helpful, please visit: <http://bit.ly/TNk9a8>. Meanwhile, it is heartening to see neighbors and communities throughout our region coming together as one to help one other. Stay safe, and know that all of us in the TC Community wish you and your loved ones the best.

*The Alumni Relations Team*

**DID YOU KNOW?**

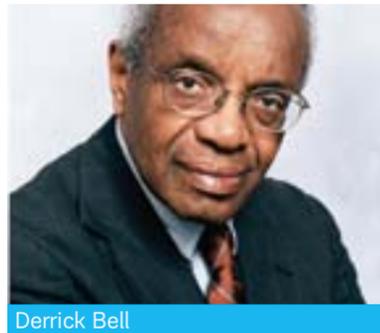
Multiple independent studies have shown increased years of enrollment in

**ARTS**

courses are positively correlated with higher

**SAT**

verbal and math scores.



Derrick Bell

**SPECIAL REPORT****HONORING DERRICK BELL'S LEGACY**

The sixth annual Critical Race Studies in Education Conference, hosted at TC in May, honored the late Derrick Bell, the first tenured African-American professor at Harvard Law School, whose work focused on race and social justice.

"I've owned this book since I was a puppy Legal Aid lawyer in New York City," Janice Robinson, TC's Vice President for Diversity and Community Affairs, told audience members as she held aloft Bell's masterwork, *Race, Racism and American Law*. "Listen to these chapter headings: 'American Racism and the Uses of History.' 'Interracial Sex and Marriage.' 'Public Facilities: Symbols of Subordination.' 'Discrimination in the Administration of Justice.' Have any of these issues gone away?"

Organized by Michelle Knight-Diop, TC Associate Professor of Education, and Lee Bell, Professor of Education at Barnard College, the conference included youth performances coordinated by Urban Word and spanned theory and practice. David Gilborn, Professor of Critical Race Studies in Education at the University of London, delivered the keynote, and three leading scholars were honored: Gloria Ladsen-Billings, of the University of Wisconsin-Madison; Daniel Solórzano, of the University of California, Los Angeles; and

TC alumnus Marvin Lynn, of the University of Wisconsin-Eau Claire.

Knight-Diop and doctoral student Joanne Marciano presented on "Troubling College Readiness and Access for Black and Latino High School Youth"; Yolanda Sealey-Ruiz, TC Assistant Professor of English Education, co-led "Give Them Something to Talk About: Racial Literacy Roundtables as Community Building in Higher Education"; and TC Professor of Education Celia Oyler, with students Wanda Watson, Sarah Schlessinger and Maryann Chacko, spoke on "Towards a Praxis of Critical Inclusivity."

Theodora Berry, President of the Critical Race Studies in Education Association, recalled the killing last February of Trayvon Martin, an African American high school student, by George Zimmermann, a white man who had followed him because he seemed "suspicious." Florida police initially reported that Martin was six feet tall and weighed 160 pounds, while Martin's family described him as being six-foot-three and 150 pounds. The autopsy listed him as five-foot-eleven and 158 pounds.

To Berry, these conflicting accounts underscore the need for "counter stories" of black identity. "Race is often placed in the forefront," she said. "To date, the only counter stories reported in regard to Trayvon Martin are those regarding his height and weight. If George Zimmermann had had access to those counter stories – if he knew what was worth knowing about young men of color – Trayvon might be alive today."



Michelle Knight-Diop

**The JOY of GIVING****SUE ANN WEINBERG**

Honoring a Champion of the History of Education



**"Larry Cremin was a magical teacher," says Trustee Sue Ann Weinberg (Ed.D. '97). "He was so widely read, and he had such a broad understanding of education."**

To honor the former TC President and Pulitzer Prize-winning historian, who was also her dissertation adviser, Sue Ann has given a substantial gift that honors Lawrence Cremin's vision and memory by laying the foundation for a center for the History of Education.

"What this wonderful gift will allow us to do is to approach the history of education as a form of civic education, because educational histories are a gateway for understanding the formation of citizens and the development of democracy over time," says Provost Thomas James.

As TC celebrates its 125th anniversary, such a center will help the College reclaim its standing as the custodian of the history of American education. It will encompass funding for senior faculty, doctoral research and future programming in the History of Education, broadly conceived as Cremin intended it. And it will strengthen

TC's relationship with Columbia through collaboration with Columbia's Department of History.

"I had such a great experience at TC that opened up so many intellectual interests and pursuits for me," says Sue Ann, who started out just taking courses, but ended up pursuing a doctorate because of Cremin's encouragement. "Larry was trying to teach us to think critically — to see that each historian was writing from his own perspective," she says.

With Cremin as her adviser, Sue Ann wrote her dissertation about Lewis Mumford, the philosopher and architecture critic who wrote for *The New Yorker*. "I think it's important to have history written by many different people from many different points of view," she says.

With this gift, Sue Ann is ensuring that Cremin's history and legacy is not forgotten at TC or anywhere else. "Larry was a real renaissance man," she says. "He was constantly reading. He was interested in everything his students were doing. And he gave of himself without holding back."

**Celebrating a Tradition for Tomorrow**

As Teachers College prepares to celebrate the 125th anniversary of its founding, we are presented with a wonderful opportunity to tell the TC story – our rich history, our legacy of "firsts" and our positive impact on the community. Now is our time to reinvent ourselves by building on our strengths, embracing our distinctions and creating an institution that honors the past while transforming the future.

To that end, we have literally sought to make our mark anew, developing an anniversary icon that speaks to our core values while reflecting the unflagging vibrancy we bring to our work in each new era. The new TC icon will be visible across our campus and in all our communications, evoking a sense of forward motion and representing our three major areas of focus: Education, Health and Psychology. Each of the three overlaps with the others, as they do in our daily endeavors.

So, welcome to a year to remember. Join us in celebrating 125 years of excellence – and join us in looking forward to 125 years more.

Visit [www.tc.edu](http://www.tc.edu) for updates on the 125th anniversary celebration.

**Representing the Candidates on Education**

In a debate in the Cowin Conference Center at Teachers College on October 15, Jon Schnur and Phil Handy, top education advisers to President Barack Obama and his Republican challenger, former Massachusetts Governor Mitt Romney, staked out clear philosophical differences over the role of the federal government in funding education and incentivizing reforms in testing and teacher preparation. Titled "Taking the Election to School," the debate spotlighted a topic many felt had received short shrift during the campaign. The event – this year's Phyllis Kossoff Lecture on Education and Policy – was moderated by TC President Susan Fuhrman. Watch a videotape of the debate at <http://bit.ly/Z61w29>



## Barbara Wallace

### A NEW PARADIGM FOR UNDERSTANDING HEALTH DISPARITIES



neglecting evidence of their strengths and resilience in the face of stress. Far too much research tells this same sad story over and over again: Members of historically oppressed racial-ethnic groups fare worse than whites.

A new paradigm investigates relationships among health status; experiences of specific sources of stress in the social-environmental context, such as racism or factors associated with poverty; various coping strategies that respond to that stress; and demographic and other variables. By adopting this paradigm, researchers can not only conceptualize and document the resilience of many diverse groups, but also understand ways that many “problem behaviors” represent attempts to adapt and cope with stress. Researchers can then focus on distinguishing between adaptive and maladaptive attempts to cope with stress. Not to be forgotten, social action for social justice and advocacy may be among the adaptive responses — whether by members of diverse populations, researchers or teachers.

Before this century’s end, I believe that teachers will enter urban classrooms and encounter greater evidence of health equity. However, key to this vision is a paradigm shift, *away* from “blame-the-victim” and “deficit-oriented” research and *toward* research that identifies adaptive coping with stress. A diverse population may become a source of vital information on adaptive coping responses that can guide the creation of prevention strategies and interventions within health education. Within the new paradigm I am recommending, those formerly studied from “blame-the-victim” and “deficit-oriented” perspectives can emerge as resilient teachers of “what works” in coping. **TC**

Too much research tells the same sad story, overlooking what the resilience of diverse groups can teach us about coping.

Barbara Wallace is Professor of Health Education and Coordinator of the Program in Health Education, Department of Health and Behavior Studies.

**A** teacher may enjoy the beautiful leaves of autumn, but once in the classroom may be stunned by empty seats — particularly in an inner-city school. Asthma, which in some neighborhoods disproportionately affects children of color by a 6-to-1 margin, is contributing to absenteeism.

Researchers must recognize the impact of asthma and other health disparities on diverse populations. But they also must avoid engaging in “blame-the-victim” or “deficit-oriented” research.

“Blame-the-victim” research identifies key factors producing a health disparity as being located *within* the individual — effectively neglecting factors in the social-environmental context that have helped produce that disparity, both historically and in contemporary times. “Deficit-oriented” research focuses on deficits attributed to members of the diverse group, while



## Randi Wolf

### REACHING PATIENTS WHERE THEY ARE



Yet, men and women over the age of 50 often resist having colonoscopy done. They tend to be unfamiliar with the test’s purpose or to view it as embarrassing. They are less likely than younger adults to perceive themselves as at risk, doubtful that peers have undergone screening, and fearful both of cancer and of the procedure itself. Their primary care physicians are often inconsistent in directly supporting colorectal cancer screening.

Thus, we have learned to tailor our communications to each individual. Sometimes that means abandoning efforts to promote colorectal cancer screening and instead talking to people about other pressing health issues, or simply addressing their fears.

We start with an approach we call “RESPECT,” for creating rapport, educating without overwhelming, starting with people where they are, having a philosophical orientation based on a humanistic approach to education, engagement, care and empathy, and trust. Unlike other widely used health behavior models, this approach is unique in being conceptualized as a set of general guidelines rather than as specific learning objectives, content or scripts to promote informed decisions about health.

Once health educators have established rapport with patients, they can dispel myths about colorectal cancer and screening, make sure facts are understood and underscore the urgency of being tested. Only by creating such caring and trusting relationships can educators change attitudes, beliefs and behaviors.

We think these strategies would work well in almost any health care situation. Promoting them as a model is what, ultimately, health education is all about. **TC**

Standardized health education often doesn’t work. Teaching people about wellness starts with building trust.

Randi Wolf is Associate Professor of Health and Behavior Studies.

**A**s a health educator, I believe an informed public is a healthy public. But educating people isn’t just about imparting information.

Over the past decade, my colleague Charles Basch and I have shown that telephone outreach can increase screening for colorectal cancer in hard-to-reach, low-income, urban minority populations. But hundreds of telephone outreach calls have also convinced us that “cookbook approach” interventions, focusing on content and executed in a standardized fashion, simply don’t work.

You might think people would respond to the facts alone. Colorectal cancer is the third most commonly diagnosed cancer among U.S. adults and causes about 50,000 deaths annually. Removing polyps detected through screening can prevent cancer from occurring. Screening also helps detect cancer earlier, when it can often be cured.

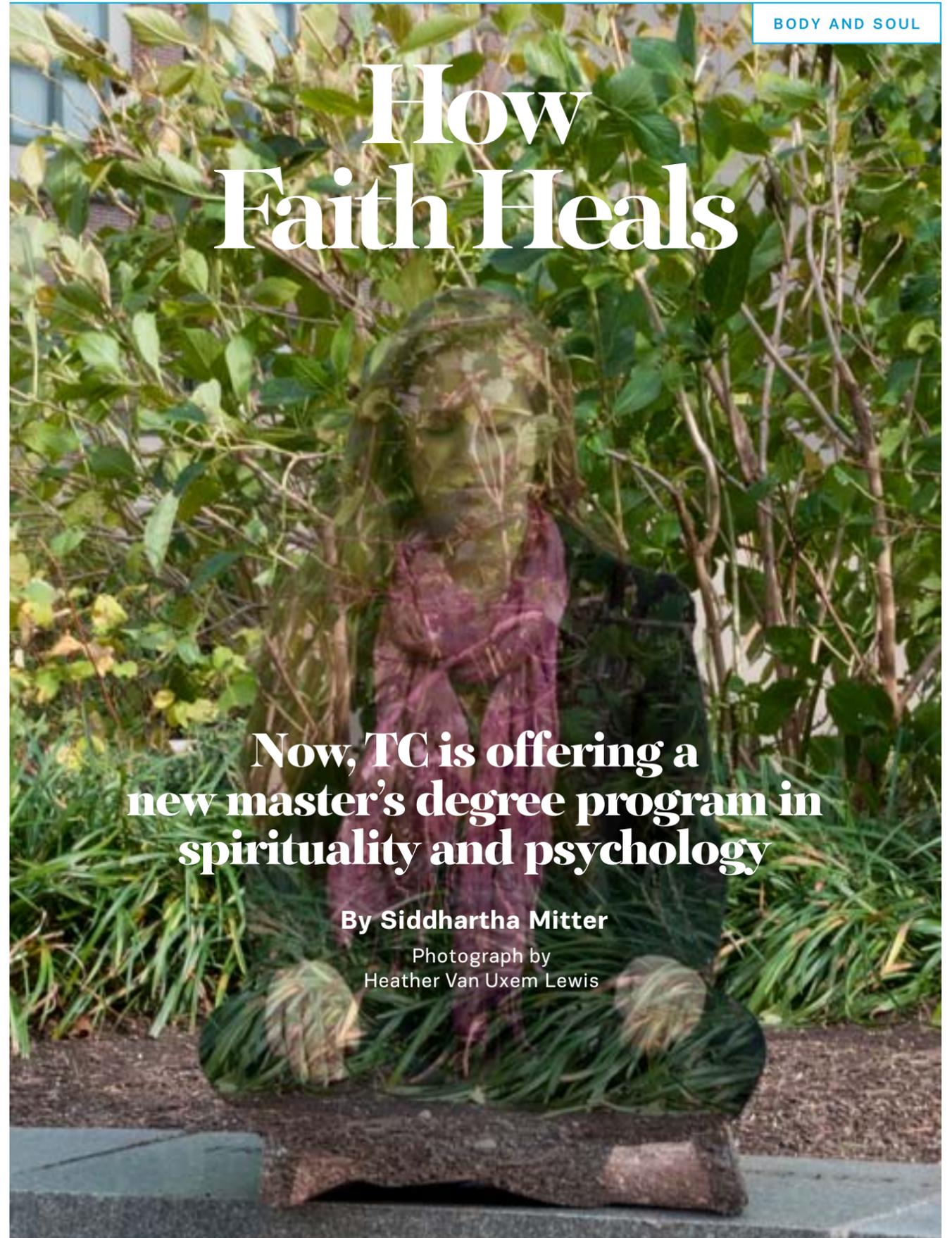
SHUTTERSTOCK; (INSET) TC FILE PHOTOS

GETTY IMAGES; (INSET) TC FILE PHOTOS



— **Half a century ago, people were asking, “Is God dead?”**

**SPIRITED AWAY** Eleanor Ford, a doctoral student in TC’s clinical psychology program, is interested in teaching meditation to young children.



# How Faith Heals

— **Now, TC is offering a new master’s degree program in spirituality and psychology**

**By Siddhartha Mitter**

Photograph by  
Heather Van Uxem Lewis

Students in the program increasingly are involved in spiritual practices, says Lisa Miller, the program’s coordinator.

“I

want to highlight together how magnificent and full of awe you are.”

Lisa Miller, Associate Professor of Psychology and Education and Director of [Clinical Psychology](#), is greeting some three dozen master’s degree students on day one of her course in Spirituality and Psychotherapy. She invites the class to “clear a space for yourself with your breath and intention.” She invites them to “journal what sacred space is for you in your own life.” She asks everyone to think of a time of spiritual awakening in their own lives, and of a person who had a spiritual influence on them.

Then, she quotes the author [Marianne Williamson](#).

“Your playing small does not serve the world,” she intones. “As we let our own light shine, we unconsciously give other people permission to do the same.” She looks around, smiling. “So, in that spirit, I invite you to reflect and reenter a time when you were a spiritual teacher for someone else. We have asked the elephant in the room – modesty – to leave, because this is quite naturally the reservoir from which you live out your practice as a teacher, a healer, a guide.”

Welcome to what [The New York Times](#) describes as the Ivy League’s first master’s degree concentration in spirituality and psychology – part of a new focus within TC’s clinical psychology program on spirituality as a powerful force in mental health and well-being.

Titled Spirituality and Contemplative Practices and directed by Miller, the concentration offers courses in “alternative” areas taught by well-known adjunct faculty such as [Ted Dimon](#), pioneer of a holistic approach to mind and body health known as psychophysical education, and [Sam Menahem](#), author of *All Your Prayers Are Answered* and *When Therapy Isn’t Enough*, who advocates the healing power of prayer.

Doctoral students who work with Miller use magnetic resonance imaging (MRI) of the brain to research the links between spiritual practices and resilience against major depression. Other students are working in field placements in Manhattan

at [Covenant House](#), a nonprofit charity serving homeless youth with a network of shelters across the Americas, where they use meditation and reflective techniques inspired by Buddhism to help young men and single teenage mothers.

All of this work, which falls under the umbrella of a new venture within the department called the [Spirituality and Mind/Body Institute](#), places the College at the confluence of several national trends.

A growing number of Americans are engaging in mind-body practices such as yoga, meditation, Tai Chi and mindfulness exercises. According to *Yoga Journal*, for instance, the number of yoga practitioners in the United States more than tripled between 2001 and 2010. For many, the goal is fitness or stress reduction. At the same time, as reported in *Time* and on NPR, [surveys by the Pew Research Center and Gallup](#) describe an increase in people who say they have a personal spiritual orientation that is uncoupled from organized religion and that often includes a physical dimension such as a “deep connection with nature or the Earth.”

Of course, the term “spirituality” can seem vague. Miller defines it as “a direct relationship with a loving and guiding universe,” while others describe it simply as the relationship that individuals feel to something greater than themselves.

But there is nothing vague at all about the growing body of research from top universities and hospitals that is identifying the physical effects, particularly on the brain, of faith and spiritual practices, and their implications for mental health and wellness.

Multiple studies – including some on Buddhist monks – suggest that people who practice a form of religious faith or disciplines such as Zen, vipassana and other forms of meditation have a thicker prefrontal cortex and more concentrated

DID YOU KNOW?

There were **20.1 MILLION**

yoga participants in the United States in 2010,

of whom **76%** were female.



Over **8.5 MILLION** of these people did yoga **50** or more times per year.

gray matter in parts of the brain that influence emotion and mood.

At last year’s American Psychological Association convention, Miller, Ravi Bansal and their collaborators in the labs of Myrna Weissman and Brad Peterson of the [New York State Psychiatric Institute](#) presented brain imaging studies showing cortical thickening in people who, over the preceding five-year period, had attached a high degree of importance to religion or personal spirituality. The thickening occurred in brain regions where thinning is typically observed in people who have strong family histories of depression. The people in Miller’s study who were religious also reported higher levels of emotional satisfaction and mental stability than “controls” who were not religious.

Karen Froud, Director of [Teachers College’s Neurocognition of Language Lab](#), is leading a study comparing people who have meditated for many years with those who are novices at the discipline. She was inspired to conduct this research by a visit to her lab a few years ago by three Buddhist monks from Thailand, who underwent electroencephalogram scans. The scans pinpoint, to within milliseconds, the brain’s response to specific stimuli. Froud found that brain activations in all three men became much more coherent and organized during meditation, with



**UNCONVENTIONAL WISDOM** Miller believes depression can be a precursor to spiritual emergence.

some residual effects afterward. However, in one of the monks – a Rinpoche, or lama-like elder, who lives in a constant state of meditation – the brain activations looked extremely organized all the time.

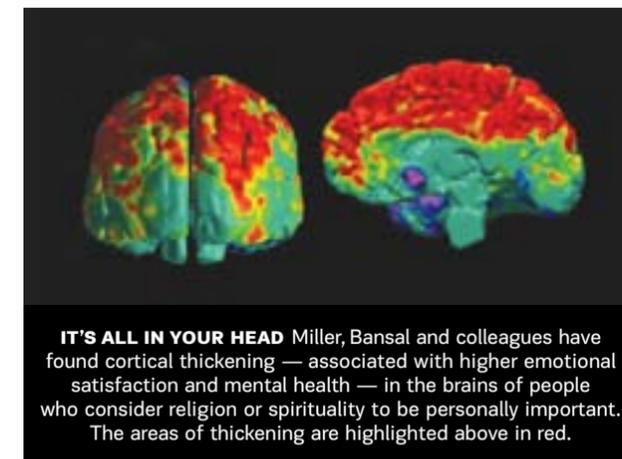
And in 2011, neuroscientists at Massachusetts General Hospital found that people with no prior meditation experience displayed changes in gray matter density after using a technique called Mindfulness Based Stress Reduction for just eight weeks. The positively affected brain areas influence memory, compassion, empathy and resilience to stress. The study’s brief duration established an unmistakable cause-and-effect relationship between meditation and the observed brain changes.

While such work is still mostly in the basic research phase, mainstream health care clearly has recognized the importance of patients’ spiritual orientation and the value of spiritual and mind-body therapies.

Since 2001, for instance, the Joint Commission on Accreditation of Healthcare Organizations has required hospitals to perform a “spiritual assessment” of critical-care patients. The commission’s suggested questions include: “Does the patient use prayer in their life? How would the patient describe their philosophy of life?”

Meditation and yoga in cancer care, end-of-life pastoral counseling and 12-step addiction treatment are other accepted techniques that draw on patients’ spiritual resources.

“In leveraging spirituality for healing, other fields are well ahead of clinical psychology,” says TC lecturer Aurelie Athan, who collaborates closely with the Spirituality and Mind/Body Institute. But now, Athan adds, that gap is starting to close. “We have books and articles that I never had when I was starting out in my training. People are asking



**IT’S ALL IN YOUR HEAD** Miller, Bansal and colleagues have found cortical thickening — associated with higher emotional satisfaction and mental health — in the brains of people who consider religion or spirituality to be personally important. The areas of thickening are highlighted above in red.



**GROUNDBREAKER** Student Ariel Kor is part of the paradigm-changing research on psycho-physiology underlying spirituality.

39-chapter tome that includes contributions from more than 60 scholars. The Handbook spans spiritual development, Western and Eastern traditions of prayer, meditation and “sacred dialogue” in treatment, connections between physical health and spirituality, the neuroscience of spiritual experience, and the history of psychology’s engagement with these issues.

Miller’s former students have also added to the field’s literature. In 2011, Randye J. Semple and Jennifer Lee, both of whom hold doctorates from TC, published *Mindfulness-Based Cognitive Therapy for Anxious Children*. Integrating Buddhist meditative practices with Western cognitive therapy, the book builds on clinical trials in which Semple, who now teaches at the University of Southern California, and Lee, a psychologist in private practice, found that the hybrid technique they recommend fostered greater concentration and increased attention to schoolwork among children ages 9–12.

Ultimately, Miller is interested in developing clinical approaches that aim not just to diagnose and cure disorders (such as anxiety or depression), but also to actively increase well-being. She has argued that depression and the emergence of personal spirituality may be tightly connected, or even two facets of a single phenomenon in which depression serves as a painful but necessary phase that people pass through en route to finding a more stable kind of happiness. If so, then treating depression as a spiritual process, rather than as the result of trauma or chemical imbalances, may benefit patients in the long term. Miller recently secured a \$2.5 million grant to test this hypothesis through a five-year study that will look at emerging adults ages 18–22, using MRI, genotyping (the process of determining differences in people’s genetic makeup by examining their DNA sequences) and other techniques.

That same idea, of spirituality arising out of depression, underlies Miller’s work at Covenant House, which is supported by *Goldman Sachs Gives* at the recommendation of Phil Armstrong, Co-Chief Operating Officer for Goldman Sachs’s Operations Division.

how to best integrate spirituality in curricula. None of this was here 10 to 15 years ago.”

Much of that progress stems from the work of Miller, who joined TC’s faculty in 1999 and now serves on the governing body of the American Psychological Association. At a time when psychology saw itself as largely antithetical to religion, Miller, who had previously studied at the University of Pennsylvania with *Martin Seligman*, one of the founders of positive psychology, was investigating religiosity and spiritual development in adolescents. She focused on the ability of positive messaging to boost self-esteem among vulnerable groups such as teen mothers. She began an ongoing involvement in a 20-year study of women with a history of depression and their adult children, which has found, among other things, that personal spirituality limits the recurrence of major depression. She and her students at TC have since produced more than 50 peer-reviewed journal articles on the protective property of spirituality against mental disorders. And this year saw the publication, under Miller’s editorship, of *The Oxford Handbook of Psychology and Spirituality*, a 600-page,



**PHIL ARMSTRONG**

## He’s a Partner — at TC as Well as on Wall Street

**“I think we are just at the beginning and can aspire to change the lives of thousands of homeless youth,” says Phil Armstrong, Co-Chief Operating Officer for Goldman Sachs’s Operations Division. At Armstrong’s recommendation, Goldman Sachs Gives has made substantial grants to fund TC’s work with Covenant House. Armstrong got involved through a Goldman Sachs alumnus, Biaggio Mastropieri, a student of Lisa Miller’s who manages the Covenant House work. Adds Armstrong, “I’m very fortunate that Goldman puts me in a position where I can offer to help.” Read more about Armstrong at <http://bit.ly/Psc1Lw>**

PHOTOGRAPHS BY HEATHER VAN LUXEM LEWIS

Miller’s team of current Ph.D. students offers a form of group therapy that feels as much practical as spiritual, addressing the issues of participants who are in crisis or transition, but with some use of meditative techniques and a discussion emphasis on love and connectedness. Alexandra Jordan and Marina Mazur lead sessions for single mothers. Biaggio Mastropieri and Lorne Schussel work with young men transitioning to self-sufficiency. It’s a real-world setting, with clients who often carry great anger and suspicion. The therapy aims to help them overcome the trauma of homelessness and “nourish internal resources intended to increase emotional regulation and awareness.”

Schussel opens each session with a mindfulness exercise, asking the young men to focus on the sound from a Tibetan singing bowl as it dissipates. Later, the men take time to visualize their “best selves.” In a session with volunteers willing to let a reporter sit in, these techniques mingle with more classic sharing of past traumas and current challenges.

“Meditation is great for conflict resolution,” Schussel says later. “It helps you step back, see your anger as it arises and allow it to dissipate. And that’s what we’re experiencing at Covenant House. Once you transform anger, you can bring in love.”

In the women’s group, Mazur reflects, “we look at the motherhood experience as a spiritual transformation, as well as other things. We are there to help them bring out their inherent strength and the knowledge that they really already have.” This group is co-supervised by Aurelie Athan, whose own work with women is informed by a spiritual orientation that frames motherhood as a growth-producing process.

These doctoral students are spiritually inclined themselves, in eclectic ways – some more intensely than others. Mazur, for instance, simply sees a “spiritual connection to the universe” as a useful tool for managing daily life. Schussel, by contrast, embraces an array of alternative techniques such as energy healing and Holotropic Breathwork.

Perhaps the biggest change she has witnessed in teaching spiritual psychology for the last 13 years, Miller says, is that each year more students arrive already curious about spirituality and involved in practices of their own.

“They get it,” she says. “Many of them meditate, many pray, do spiritual journeying, some of them do a shamanic practice. They’re already making a practice in their life of spiritual awareness and spiritual values.”

Miller believes that everyone’s expression of spirituality is unique, and that holds for patients as well as therapists. In her master’s degree class, she asks students to explore their own spirituality, precisely so that they will be able to help their patients do the same.

Her job as a teacher, she says, is to give students full-fledged scientific training in clinical psychology methods while validating their spiritual orientation.

“I find that students are quickly able to work out of this spiritual understanding,” Miller says. “And when students are clear within, they go into the therapy room as emerging healers, and then the client is naturally at home.” **TC**

## The JOY of GIVING

**MARLA SCHAEFER**  
Creating a Space for Peace



**“We can either kill each other, or sit down at a table and work out our problems,” says TC Trustee Marla L. Schaefer (M.A. '03). “I vote for sitting at the table.”**

**Marla recently gave a \$575,000 gift to renovate just about everything at the International Center for Cooperation and Conflict Resolution (ICCCR), headed by Peter Coleman, Associate Professor of Psychology and Education. Her gift will create the Marla L. Schaefer Office Suite at the ICCCR.**

**During her time as a student in the organizational psychology program, Marla took a weekend-long practicum that introduced her to conflict resolution. “If it hadn’t been for that class, I wouldn’t have developed an interest in the field,” she says. “I was so impressed with Peter and the ICCCR’s work in this area.”**

**The ICCCR is committed to developing knowledge and practice to promote constructive conflict resolution, effective cooperation and social justice. Building on the foundational scholarship of social psychologists Kurt Lewin and Morton Deutsch, the**

**Center is internationally recognized for innovation in theory, research and practice. Marla’s gift will provide a state-of-the-art space that will help attract new students and scholars.**

**“Their offices reminded me of a rabbit’s warren,” says Marla with a laugh. “They needed updating. The space has so much character, but they need a real place to work. It’s a privilege to be able to help them attract the best and brightest. If there is anybody out there in the world best equipped to work out the world’s conflicts, it’s the ICCCR.”**

**Marla has provided funding to ICCCR in the past, including a 2008 gift that supported the translation into Arabic of *The Handbook of Conflict Resolution: Theory and Practice*, edited by Deutsch and Coleman. “It just made sense to also have it in Arabic — it’s one of the most widely spoken languages in the world,” she says.**

**“If I can help push a door open, I would be thrilled. I think giving should be about providing people with access. I feel I’ve done that with this new gift, as well as others.”**

# The Power of Positive Patients

TC health educators are helping people think positively  
to better manage their own care

**By Joe Levine**

Photograph by Hannah Whitaker



## Four years ago, Sarah McMahon (not her real name), then 83, suffered a heart attack and had surgery to implant a stent, a tiny, balloonlike device that expanded to increase bloodflow through her coronary artery. Afterwards, she was told to watch her diet, take her medications and – because physical activity has been shown to significantly reduce death rates following stent surgery – exercise regularly.

But where most patients struggle to keep to such a regimen on their own, McMahon, who lives alone in Eastchester, New York, joined a follow-up study that evaluated ways to get patients to exercise. She signed a “contract” to try to meet certain exercise goals. She tracked her progress with a pedometer and in an interactive workbook about self-managing heart disease. And, in an unusual twist, the research team helped her identify personal associations, positive thoughts and proud moments that would motivate her to exercise. Twice a month, team members called her to remind her of these strategies. They also mailed her occasional small gifts.

“It was wonderful,” recalls McMahon. “When I volunteered for the study, I was just so pleased to be alive. It was gratifying to think I might be doing something useful, particularly at my age. And then, the girls who called me were so lovely, and I enjoyed speaking with them.”

With people 65 and older expected to constitute nearly 20 percent of the population by 2030 (up from 13 percent now), the United States is becoming a nation of Sarah McMahons – older people with multiple ongoing health problems. In 2005, 133 million Americans, or nearly one in two adults, had at least one chronic illness, and 7 in 10 deaths were due to longer-term conditions such as cancer, heart disease and stroke. Treatment costs were estimated at \$1.7 trillion annually.

Faced with these trends, health care experts increasingly agree that traditional medical approaches no longer suffice.

“We’ve had enormous success with medical discoveries – they’ve led to advances such as statins, beta-blockers, clot-busting drugs and continuous refinements in procedures such as angioplasty [stent surgery] and coronary artery bypass surgery,” says Susan Czajkowski, a scientist at the [National Heart, Lung, and Blood Institute](#) (NHLBI) who is an expert on psychosocial aspects of illness. “They’ve extended

life. But many of the critical issues we now face are related to behavior. The key is to help people quit smoking, maintain a healthy weight and diet, stay physically active and, if they are taking medications, adhere to treatment.”

Doctors tell patients to do these things all the time, but ensuring compliance is much easier said than done. For example, as

many as half of all stent patients stop exercising within four months, and one-fifth experience a new adverse event within a year after surgery. What’s needed, then, are care managers who can get inside patients’ heads – master motivators who are as much Phil Jackson or Vince Lombardi as they are Ben Casey or House M.D.

“It’s not sufficient anymore for a doctor to simply dispense advice and prescriptions,” says John Allegrante, Professor of Health Education and Deputy Provost at Teachers College, and editor of the journal [Health, Education & Behavior](#). Allegrante and his former TC student Janey Peterson, a health researcher at Weill Cornell Medical College in New York City, were part of the investigative team that designed the study that Sarah McMahon participated in. “What’s emerging is a more motivational, intervening type of practice, in which the physician is better at listening, at discussing patient preferences and approaches to a problem, and at building patients’ confidence in their ability to change how they live.”

In the tool kit wielded by this new breed of doctor, positive emotions loom large.

“You can threaten patients with the consequences of failing to take care of themselves, but that’s not enough,” says Peterson, a former cardiothoracic intensive care nurse. “They need a positive reason, something that comes from within and that can be self-induced.”

Psychologists such as Daniel Kahneman, Amos Tversky,

### DID YOU KNOW?



Participation in a structured cardiac rehabilitation program – including exercise – improves survival by

**46%.**

DID YOU KNOW? SOURCE: MAYO CLINIC. REPORTED IN CIRCULATION: JOURNAL OF THE AMERICAN HEART ASSOCIATION

Martin Seligman, Edward Diener and Alice Isen have long focused on the power of positive thinking. They have argued that optimism and happiness are learned skills requiring practice and that a positive outlook can change behaviors ranging from making purchasing decisions to processing information about medical risk.

In 2003, NHLBI issued a nationwide call for proposals for studies to apply such findings to improving patient outcomes.

“Many scientists were doing excellent basic behavioral research, focused on understanding why people act, think, feel as they do, but they weren’t applying what they found about human behavior to specific clinical problems,” says Czajkowski, who spearheaded the Institute’s effort. “So we asked teams of basic and clinical behavioral scientists to work together to tackle pressing clinical questions in the heart/lung/blood realm.”

The team that included Allegrante and Peterson – headed by Mary Charlson, Chief of the Division of [Clinical Epidemiology and Evaluative Sciences Research](#) at Weill Cornell – received funding to conduct a set of studies aimed at developing and refining a behavioral intervention, culminating in three randomized clinical trials involving 1,000 patients. One trial focused on boosting physical activity among asthma patients; another on getting African American patients with high blood pressure to adhere to prescribed medication (African Americans have substantially higher rates of hypertension than other ethnic groups); and a third on getting stent patients like McMahon to exercise.

In each study, a treatment group and a control group received state-of-the-art instruction and tools for managing their own care. The treatment group also received a motivational intervention, delivered by phone, that included using positive thoughts and recalling proud moments. Gifts were delivered by mail. The studies tested the power of both “positive affect,” defined as “a state of pleasurable engagement with the environment [that] reflects feelings of mild, everyday happiness, joy, contentment and enthusiasm,” and “self-affirmation,” such as using memories of past accomplishments, to “preserve a positive image and self-integrity when one’s self-identity is threatened.”

The [results of the studies](#) – the first clinical trials to test the power of induced positive affect in patients with a serious medical condition – were published this past year in [The Archives of Internal Medicine](#).

In the trial involving stent patients, 55 percent of those who received the motivational intervention increased their expenditure of kilocalories by at least 336 per week, versus just 37 percent of the control patients – the equivalent of walking 7.5 miles weekly versus walking 4.1 miles weekly, says Peterson, who authored the angioplasty manuscript.

In the hypertension study, adherence to medication after 12 months was 6 percentage points higher in the interven-

tion group than in the controls (42 percent vs. 36 percent) – a gain “consistent with some of the most effective interventions available,” according to the journal [Cardiology](#).

In the asthma study, a subgroup of severely asthmatic patients who received the intervention exercised more than their counterparts in the control group.

None of the three studies demonstrated improvement in patients’ health, but previous, longer studies have established that exercise and adherence to medication create better health outcomes.

“These studies are revolutionary,” says Czajkowski. “They show that this kind of approach can be done and that it is fruitful.”

For Allegrante, the studies are significant because they demonstrate that positive affect enhances the power of patient self-management. “The control group itself received a pretty robust intervention – it was no straw man,” he says.



**WALKING CURE** Positive thinking has helped people exercise more after heart surgery.

“We built the best mousetrap we could and then gave additional positive affect and self-affirmation components to the treatment arm, so that we’d have a good test of the added value of focusing them on positive emotions. And the results were remarkable.”

But can self-management techniques, including positive thinking, be broadly implemented in a health care system with a marked preference for a pound of cure rather than an ounce of prevention? The evidence suggests that such techniques are cost-effective. For example, in a [1999 study of the Chronic Disease Self-Management Program](#) (CDSMP), a well-known group program created at [Stanford University’s Patient Education Research Center](#) to increase patients’ confidence, skills and social support, health care costs for the patients who received CDSMP were \$820 lower (even accounting for the intervention’s cost) than for patients who did not, primarily due to reduced days of hospitalization. Health care expenditure savings for the intervention group were roughly 10 times the cost of the intervention.

But [David Sobel](#), M.D., Ph.D., Director of Patient Education and Health Promotion for the Permanente Medical Group and Kaiser Permanente's Northern California region, sounds some cautionary notes. For behavioral programs to be better integrated into clinical care, Sobel says, we need "good evidence of effectiveness in real-world settings and aligned financial incentives – or at least an absence of disincentives. With medications, there is a whole industry and strong financial drivers to promote their use. How can the drivers for non-pharmacological and behavioral interventions be mobilized?"

Unlike most insurers, Kaiser Permanente does not reimburse physicians on a fee-for-service basis, Sobel says. Kaiser clients – an employer, a university, an individual – pay a lump sum for improved health outcomes, and Kaiser can use whatever evidence-based approaches it believes will work best.

"If we can better manage high blood pressure through a body-mind program, we'll do it, whereas a doctor in a fee-for-service practice has to bill an insurance company for an office visit, which might be the least effective thing for controlling high blood pressure," says Sobel, a practicing physician who helped develop and evaluate CDSMP in real-world care within the Kaiser Permanente system.

Sobel believes more traditional insurance companies would be receptive to self-management approaches supported by good evidence for quality of care and improved outcomes. Right now, though, "there are very few evidence-based self-management programs that have been evaluated," he says. "It's one thing to do an evaluation in a clinical trial under specialized circumstances and another to replicate the program in a real world care system. Often, you can't just ex-

**“You can induce positive affect as easily as by telling a joke or smelling some nice perfume.”**

— Janey Peterson

trapolate from clinical trial data to "This will achieve a reduction of X number of days in the hospital."

Costs, though, are only one piece of the puzzle. How to change the operating style of doctors and other care-givers working on the front lines?

Allegrante believes the effort must begin in medical schools.

"To date, we prepare doctors largely to be biomedical scientists, not applied behavioral scientists, which are what's really needed in an era when behavioral management of chronic disease is critical," he says. "If we're going to get the outcomes we want, and that insurers demand, we need both."

Janey Peterson believes nurses could be key change agents in making behavioral interventions a bigger part of medicine.

"In the 1980's when I worked as a bedside nurse in psychi-

atry and the cardiothoracic intensive care unit, I learned how to connect on a personal level with patients and their families at a very vulnerable time in their lives and address their psychosocial, educational and health care needs," she says. "Hospitalization created a teachable moment when many patients were more open to receiving health information that could significantly affect the rest of their lives." Today, she says, when nurses can practice as clinicians, researchers, scholars and educators, there are greater opportunities to "make the world a better place for our patients."

And [Kate Lorig](#), Director of the Stanford Patient Research Center, believes that the move toward motivating behavioral change could take place even farther away from care centers.

"People spend 99 percent of their time outside the health care system, and it's what they do there that determines their health and their quality of life," Lorig says. "In lots of parts of the country, community organizations teach self-management. Your doctor says, 'There's a Jewish community center a few blocks from your house. You're not interested? We'll contact you when we learn of something more to your liking.'"

Meanwhile, in 2009, NHLBI issued another research solicitation for behavioral intervention studies, this time focusing on obesity and obesity-related behaviors. A second effort, taking in a wider range of health-related behaviors and involving several organizations within the National Institutes of Health, is getting under way.

"We really need to keep increasing the pool of efficacious interventions for behavioral health problems," says Czajkowski. "It's like drug development – even when we have drugs that work, pharmaceutical companies continue to use findings from

basic biological science to make better ones. Behavioral scientists should be doing the same."

Peterson finds the analogy with pharmaceuticals particularly resonant.

"A few months ago, one of the attending physicians in the class I teach told me that he dispenses written prescriptions for physical activity," she says. "That's incredibly powerful, because that's what physical activity is – it's medicine, and often it's as

least as strong, if not more so, than many pills people take." Motivating people can be "so delightfully simple and easy. Instead of asking people to sit through weeks of therapy or classes, you can induce positive affect as easily as by telling a joke, or smelling some nice perfume, or keeping pictures of your grandchildren by your bed."

Sarah McMahan, the patient in the positive affect study, agrees. "When you get to be this age, your children have their own lives, and you've really got to find ways to take care of yourself. When the people from the study would call, they'd always ask me about the staircases in my house. It took me a while to catch on, but what they were really saying when they'd ask me about them was 'Use those stairs. They can help you.' And they were right."

TC



**BEHAVIORAL STRATEGISTS** Allegrante (left) set Peterson on a path to empowering patients

## A Different Kind of Health Insurance

John Allegrante was a 26-year-old Ph.D. student at the University of Illinois Urbana-Champaign when his father was diagnosed with serious heart disease. But the real shocker came a few days later, when Allegrante walked into his father's hospital room back home in Poughkeepsie, New York.

"He said, 'Get me out of here, I can't afford this,'" recalls Allegrante, now Professor of Health Education and Deputy Provost at TC. "He was a self-employed barber, and it turned out he had no health insurance."

Allegrante was so upset that he fired off a long letter to *The New York*

*Times* about the injustices of a society in which hardworking people could find themselves unable to pay for medical care. To his surprise, the *Times* printed an edited version of the piece on its opinion page, under the headline "[Well, Who Needs Life Savings?](#)" President Jimmy Carter read it and invited Allegrante to Washington to talk with his special health adviser. A hospital on Long Island offered Allegrante, Sr. free medical care.

Even before his father's illness, Allegrante had resolved to pursue a career in health education. Still, his father's revelation gave him a different kind of

connection to what he had been studying.

"I started thinking about the relationships among behavior, wealth, status and health outcomes, and about the limitations of our health care system."

During the past 30 years, Allegrante has coauthored an "action textbook" on teen health; been a frequent guest on radio programs and a contributor to journals and lay publications; and collaborated extensively with health education and public health researchers in Iceland.

"We have a lot to learn from the Nordic countries that have come to a political consensus about the morality and practical economic value of making health care a basic human service, available to all," he says. "The investments they have made are making a huge difference."

As editor for the past two years of the journal [Health, Education & Behavior](#), Allegrante has also published a number of studies and commentaries focused on patient self-management.

Meanwhile, at TC, since 1998 he has led a yearly delegation of students to Capitol Hill to lobby Congress for additional federal funding for the U.S. Centers for Disease Control. And since becoming the College's Deputy Provost in 2009, Allegrante has founded and hosted a new colloquium called "Health, Behavior and Society," in which guest speakers examine the interconnections among biology, behavior and environment in relation to health.

Above all, he has influenced generations of students to think about health education issues.

One of those students, Janey Peterson, is now a clinical epidemiologist and behavioral scientist at Weill Cornell Medical College –

a career path she traces directly to her mentor.

Peterson originally trained as a nurse and worked in cardiothoracic intensive care during the 1980s. The waves of elderly patients with chronic illnesses who flooded her unit convinced her that the system wasn't working.

"If you look back at how hospitals have managed patients with cost-driven diseases, you see that they'll monitor you for a single condition, like diabetes," Peterson says. "But if you have, for example, diabetes, heart disease, a cellulitis on your leg, and depression or cognitive issues – which is a really common scenario – there's no one who will manage everything together, and the caregivers aren't talking to each other. The reimbursement system isn't set up for it."

But it wasn't until she became involved in a study led by Allegrante, teaching patients with arthritis to manage their own care, that Peterson began to see the glimmer of an answer.

"John was a role model for me, and he really stimulated me to learn more about working with people and their behaviors," Peterson says. "Because of him, I began thinking about questions like, How do people take charge? Particularly people who are used to a doctor telling them what to do?"

Fifteen years passed before Peterson enrolled as Allegrante's doctoral student at TC. Now they've worked together on a study that represents some of the most advanced thinking in their field.

"Health educators find ways to operationalize behavioral strategies," Allegrante says. "That's what we do. It's especially satisfying when you have a chance to prove that they can work." — JL

PHOTOGRAPH BY HEATHER VAN LUXEM LEWIS

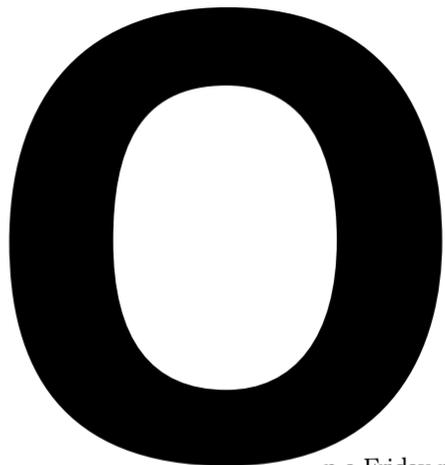
# Head Games

Welcome to “the New Gym,” where kids hold group discussions and use iPads, and teachers ponder the role of race, gender and body type

By  
**Siddhartha  
Mitter**

Photographs by Heather Van Uxem Lewis

**MENTAL GYMNASTICS** At The School at Columbia, the emphasis is on lifelong learning of physical skills.



**CRITICAL THINKING** Students use iPads to critique one another's form.

On a Friday morning in the gym at [The School at Columbia University](#), Doug LeBlanc (M.A., '01, '03) has asked his third graders to prepare to exercise their bodies by warming up their minds. In a moment the children will grab jump ropes and work individually, then in small groups, at double Dutch. But first they sit in a circle and discuss how street games came to be invented amid the special conditions of big-city life.

"City" is, in fact, a third-grade curriculum theme across disciplines at The School. The kids call out ideas they've studied in the classroom: how jump rope, stickball and other pastimes were the product of limited space and materials; the way buildings and sidewalks substituted for fields. "Street

games," one boy announces seriously, "are traditionally a part of the culture of New York."

Later, while the kids work in groups across the gym, LeBlanc, their "Wellness" teacher, asks them to photograph one another on their iPads while they jump rope. The images will be used back in the classroom as subject matter for writing time, and possibly on the class blog as well.

Carlos Jamieson, a Teachers College master's degree student in physical education, looks on. He's just started his student-teaching placement at The School, leading warm-ups and assisting LeBlanc and his Wellness colleagues, many of whom are also TC graduates. "Is this the first time you've seen iPads in a phys ed class?" Jamieson whispers to a fellow observer. "Me, too."

This tight integration of gym and classroom is part of an emerging teaching approach that proponents hope could revolutionize the physical education (P.E.) field. The new method grows out of research by experts at TC and elsewhere who are discovering connections among attitude, motor skills, knowledge and fitness outcomes. Their find-

**"If you feel your body doesn't mirror particular dominant ideals, it impacts your physical education engagement."**

— Laura Azzarito



**BALANCE OF POWERS** Martial arts class is very much a thinking person's game.

ings point P.E. away from the traditional gym class model – competition as motivator; the jocks rule – toward learning, enjoyment and lifelong skills development.

The School champions the new approach, but it has not cast team sports aside. Seventh graders still do a soccer unit, for example, but it's linked to a teaching theme. The students form a league modeled on the one organized by Nelson Mandela and other prisoners in the Robben Island penitentiary. They write letters arguing for the league's recognition and demanding equipment, as the prisoners did, and their teachers evaluate their efforts for persuasiveness.

The students study cricket as well, to supplement classes on India and British colonial rule. Along with how to bowl and bat, they learn the sport's history, rules, scoring and etiquette. "You catch the kids who consider themselves bookish that way," says Laura Walrath (M.A. '07), The School's athletic director, who played Division I soccer in college. "They can teach it to the other kids, and the kids who are better at the physical skills will help them play. You have to reach all types."

Reaching all types – kids who think of themselves as athletically competent, and others who, for a variety of reasons, do not – is a challenge for every P.E. teacher. Not all choose to address it. The roll-out-the-ball gym class stereotype – where the teacher sets up competitive activities for the most

competent students, while others go through the motions, chitchat or just stand around – dies hard.

That's no surprise, says Walrath's mentor, Stephen Silverman, who chairs TC's [Department of Biobehavioral Sciences](#) and coordinates the [College's Physical Education program](#). After all, most P.E. teachers are athletic types themselves.

"One problem is that most of us who were undergraduate P.E. majors were successful doing motor skills, so we're not thinking about those other kids," says Silverman, himself a scuba instructor and diving enthusiast. "And those other kids are a lot of the kids, if not most of them."

Why are so many kids either inhibited about being physically active or else simply unmotivated? Some of the most important reasons originate outside the school setting, beginning with images of physical competence and body standards that pervade society through media and language.

"If you feel your body doesn't mirror particular dominant ideals, it impacts your physical education engagement," says Laura Azzarito, Associate Professor of Physical Education, who joined TC's faculty in 2011. "The body, and learning how to move, matter a great deal to young people, and finding a self that fits and is comfortable in sports, health and physical education can be very difficult for them."

Gender, race and class affect "embodiment" – how one sees



REACHING ALL TYPES Walrath offers some advice on the art of throwing.

**“With team sports, not everyone is playing, and so they’re not learning. And the teachers can’t possibly spend enough time with them.” — Stephen Silverman**

oneself in relation to physical participation and enjoyment -- says Azzarito, who is Italian-born and earned her Ph.D. at Louisiana State University before teaching at Britain’s Loughborough University. In her own research, she says, she has given digital cameras to young people and asked them to create visual diaries to express how they feel in their bodies.

“Many of the boys showed themselves performing sports, very centered in the photos. Many girls were completely absent; they took pictures of other people and never wanted to be in their own photo.”

Research on body perception, while certainly extensive in psychology, is still quite new as applied to physical education, Azzarito says. “With the methods I use, I’m trying, first, to empower young people to tell their own stories about their experiences and struggles in physical activity. Second, I try to assist them in understanding the role of the media in the development of their identities and their bodies. And third, I try to help teachers to see and address inequalities that inform young people’s experiences and physical education.”

All researchers in the field agree that, across cultures, stu-

dents of both genders lose interest and enthusiasm for P.E. as they get older, particularly around seventh grade, and that the decline is faster and steeper for girls.

That finding, which holds broadly across ethnic groups and regions, came to light thanks to a survey instrument, titled [Student Attitude Toward Physical Education](#), that Steve Silverman codeveloped with Raj Subramaniam, a professor at Ithaca College.

First published in 2000, and based on Subramaniam’s doctoral research, which Silverman supervised when the two were at the University of Illinois, the survey is now widely used in the field. It has produced a wealth of research data, both on overall trends in student attitude and on the attitudinal impact of curriculum and teaching methods.

This research on attitude has helped to substantiate insights that seem intuitively obvious: For example, physical education activities based on competition have an adverse effect on the motivation of kids with lower skills. But it has also supported some unexpected conclusions: For example, de-emphasizing competition doesn’t turn off students with higher skills.

“Sometimes P.E. teachers will say to me, ‘If I do what you suggest, the high-skills kids will get bored,’” Silverman says. “But our research suggests there’s nothing they can do to mess up the high-skills kids. That’s not the problem we have in kids learning and enjoying P.E.”

In fact, the really good news from the new attitude research is that skill level, high or low, is not the defining factor in whether students engage in and benefit from physical education. What really tips the scales, so to speak, is the quality of instruction; there is no inherent reason why a less athletic student would be less likely to enjoy P.E. “We found that the teacher and the curriculum were the primary factors that affected attitude,” Subramaniam says.

Jennifer Rasmussen (Ed.D. ’06), a lecturer who coordinates TC’s master’s degree program in physical education and supervises student field placements, calls that finding “breakthrough stuff” because it changes the goals of P.E.

“Now teachers have to design their lessons to target the low-skilled and the advanced,” Rasmussen says. “So what are you going to do? What modifications are you going to make

as an educator so that everybody is learning within their activity and at their own pace?”

The integrated curriculum at The School at Columbia University offers one answer: giving students the historical or political context about different sports (e.g., colonialism as a backdrop for cricket) to lend physical activity greater meaning. The School also employs the Sport Education Model, an approach to teaching team sports that rotates students through all the relevant roles – player, coach, referee, scorekeeper, equipment manager – so that everyone’s involved.

But it’s equally important to tailor physical activities as closely as possible to individual skill levels, so that students are motivated to rise to challenges instead of avoiding them. And that, says Silverman, would ideally mean taking the most radical step of all: dropping team sports entirely from physical education classes.

“With team sports, not everyone is playing, and so they’re not learning,” he says. “And the teachers can’t possibly spend enough time with them.”

Instead, Silverman says, students should work to achieve personal targets through individual and small-group activities, enabling teachers to roam the gym offering individualized instruction. Or to put it another way: Forget the old-fashioned gym teacher, barking out commands. Instead, think yoga instructor or personal trainer.

**DID YOU KNOW?**

Nearly  
**2/3**  
of the nation’s high school students do not meet one recommended level of participation in physical activity.

Back at The School, Walrath operates in precisely this fashion with a group of seventh graders who are working on a fitness unit, practicing curl-ups and push-ups. She moves from pair to pair, gives tips on form, offers encouragement and stops to work more closely with a few students who need help.

In the end, Silverman says, teachers must play the key role in making physical education effective and enjoyable for all students. There’s no question that at an inde-

pendent institution like The School, which is blessed with curricular freedom and resources, the teachers are more likely to accept the hours and workload that interdisciplinary teaching entails. But Silverman hopes that as the new gospel spreads, newer teachers coming up are going to get on board.

“It boils down to whether the teachers want to do it,” he says. “Where there are a lot of young teachers together, you tend to see changes happening.” **TC**

## Giving P.E. a Second Wind



CAROL EWING GARBER

“Physical activity can be a really good tool to help engage kids, help them attend better and behave better in the classroom,” says Carol Ewing Garber, TC Associate Professor of Movement Sciences, who this past year led an American College of Sports Medicine panel that issued new guidelines on physical activity. “And kids sometimes learn concepts by using their bodies – for example, math and science concepts by moving.”

Yet, even that case for physical education isn’t stopping districts across

the country from cutting gym hours. In 2011, only 52 percent of high school students attended a P.E. class, according to the U.S. Centers for Disease Control and Prevention. Meanwhile, America is getting flabbier: 36 percent of adults and 17 percent of children qualified as obese in 2010.

Certainly lawmakers are under pressure to slash spending – and schools to redirect time and resources to meet testing targets. But there may also be a sense that – to use a sports metaphor – P.E. itself is suck-

ing wind and could use a substitution. Or to be more specific: Physical education isn’t worth the investment because too many kids look at gym simply as something to be ducked.

That’s why the new approaches being advanced at TC and elsewhere are genuine cause for excitement. The new thinking could give P.E. the fresh legs it needs because it holds the potential to get *all* kids to be active – not only in gym, but for life. So listen up, Coach: Maybe it’s time to put the new kid in the game. — **SM**

PHOTOGRAPHS BY HEATHER VAN UXEM LEWIS

DID YOU KNOW? SOURCE: CHARLES BASCH, JOURNAL OF SCHOOL HEALTH; TC FILE PHOTOS

# Taking Student Health to Scale

Chuck Basch says we won't close the achievement gap until we attend to student health. He has a plan

By Joe Levine

Illustrations by Jillian Tamaki



Last year, when Colorado began offering a new public school program that enables kids to grab breakfast off a lobby cart and chow down during their first-period classes, some teachers and administrators raised concerns.

True, schools have been offering free breakfast for years in their cafeterias, prior to the first bell. But wouldn't eating in class be a major distraction? What about the mess?

The fact is, breakfast programs nationwide are significantly underused because parents have difficulty getting their kids to school early, and also because, for many older students in particular, there is a stigma about eating "charity food."

To the state's administrators, though, there was a bigger reason for making the change: Eating breakfast can help improve academic outcomes.

"Neuroscience research has identified the processes by which dietary behavior influences neuronal activity and synaptic plasticity, both of which influence cognitive functions," writes Charles Basch, Teachers College's Richard March Hoe Professor of Health and Education.

To Basch, who gave the keynote address at Colorado's annual statewide education summit last spring, insufficient breakfast is just one facet of a much more complex and challenging problem: the inferior health status and health care received by many low-income and minority children in the United States. In 2010, in work originally commissioned by [TC's Campaign for Educational Equity](#), Basch documented the scope of these "educationally relevant health disparities" in a meta-analysis that filled an [entire issue of the \*Journal of School Health\*](#). Incorporating information from hundreds of previous studies by other researchers, he showed unequivocally that poorer students suffer disproportionately from a group of interrelated health problems – poor vision, asthma, teen pregnancy, aggression and violence, inadequate physical activity, insufficient breakfast, and inattention and hyperactivity – that directly hinder their achievement in school. The publication included a preface by one of Basch's former students at TC, Howell Wechsler, Director of the [Division of Adolescent Health at the U.S. Centers for Disease Control](#). Wechsler wrote that "the articles by Basch...represent the most comprehensive, authoritative, and compelling summary of why addressing health-related barriers to learning needs to be a fundamental component of school reform efforts."

Perhaps just as important, Basch called attention to precisely how and why each health issue affects school performance. For example, he reiterated findings that a sense of "school connectedness" fosters a desire to achieve. He also cited evidence that exercise stimulates the production of brain-derived growth hormones, oxygen saturation and other chemical reactions in the brain that facilitate learning.

"If you can't see, if you're not getting a good night's sleep because you can't breathe, if you're not thinking clearly because you haven't eaten breakfast or if you're afraid to come to school because you live in fear of getting hassled and bullied, there's no way you're going to be able to learn, and certainly not at the level of other students who don't face these issues," Basch said recently in his office in TC's Thorndike Hall. He is a lean, intense man who talks rapidly when he gets on the topic that has occupied most of his time for the past several years. "Eighty to ninety percent of school turnaround efforts have failed, and I believe that a big reason is that we haven't addressed these health barriers. Until we do, our efforts to close the nation's achievement gap by academic means – improving teacher and leader effectiveness, improving curriculum, strengthening learning standards and assessment – are going to be greatly compromised."

Similar positions have been endorsed by organizations such as the National Education Association, the American Association of School Administrators, the American Association of State Boards of Education, the American School Boards Association and the Association for Supervision and Curriculum Development. Since publishing his report, Basch has been sharing his findings and proposals with audiences across the country, ranging from U.S. Secretary of Education Arne Duncan and state and city education commissioners, to advocacy group leaders, rep-



**HEARD IN HIGH PLACES**  
Basch (left) met with Duncan last spring.

representatives of private foundations, school boards, teachers, parents and concerned citizens.

"What's needed now is to put into practice what we know in a way that is scalable to reach thousands of schools – especially the 5,000 lowest-performing schools in the nation," he says.

Working closely with the Chicago-based [Healthy Schools Campaign](#), Basch has framed a blueprint for change that would put schools themselves at the center of a coordinated network of players – parents, teachers, state and city agencies, schools of education – all focused on student health. "What I'm proposing is going to require a real social change in the way we think of the mission of schools, and in the connections among schools, communities and families," he says. "Schools have resisted taking on health problems as part of their fundamental goals in the past because they haven't seen that as their primary mission. But they'll be much more receptive if they realize that focusing on health can have a substantive impact on educational outcomes, and that failure to do so will jeopardize their other educational efforts."

Stephanie Wasserman, who directs health and wellness initiatives for the [Colorado Legacy Foundation](#), a non-

profit that works closely with the public schools, agrees with that assessment.

"Chuck Basch is really flipping the traditional school health model on its head," Wasserman says. "There have been many school-based attempts to improve students' health, but they haven't been very connected with academic outcomes. Chuck's approach makes it very clear why educators should care."

Basch himself is partnering with the New York City Department of Education and New York City Department of Health to seek funding to test his approach in nearly 60 of New York City's lowest-performing elementary schools. His team at TC consists of his longtime colleagues Randi Wolf, Professor of Nutrition and Education, and Patricia Zybert, a research scientist and statistician in the Department of Health and Behavior Studies. Other TC faculty in his group include Eric Nadelstern, Professor of Practice and former Deputy Chancellor of New York City's public schools; Michael Rebell, an expert on comprehensive services for students from poverty backgrounds and school finance; Henry Levin, the noted education economist; Aaron Pallas, an authority on standardized testing; Lucy Calkins, the literacy guru who is founding Director of the TC Reading and Writing Project; and Ernest Morrell, a nationally recognized English educator who directs the College's Institute for Urban and Minority Education. Their goal is to compare the standardized test scores (and mediators, including school attendance and school connectedness) of students in schools receiving Basch's intervention with those in a control group of schools that did not.

Meanwhile, a number of states and districts, including Tennessee, Ohio, Idaho, Colorado and the Boston and Denver public schools, are instituting all or parts of Basch's proposal on their own.

The Basch model has three major components.

First, it targets health issues that are prevalent and disproportionately affect low-income and minority youth, have a direct impact on educational outcomes, and can be effectively addressed through school health programs.

Second, the Basch model uses a group of proven, evidence-based programs that have improved health and educational outcomes for thousands and sometimes millions of students, but which have never been collectively evaluated for their impact on academic performance. These programs include [Breakfast in the Classroom](#); Vision for Success, a program designed by Basch and a former doctoral student, Danna Ethan, together with New York City health officials, which has doubled the in-class use of eyeglasses; and [Open Airways in Schools](#), an asthma education program developed by the

**"We need the education goals of the nation to recognize the importance of addressing educationally relevant health problems."**

— Chuck Basch



choosing to focus on certain priorities,” says Jill Carter, Executive Director of the Boston Public Schools (BPS) Health and Wellness Department. Basch was the keynote speaker in December 2011, when BPS Superintendent Carol Johnson, who has made improving student wellness a critical part of her [Academic Acceleration Agenda](#), presented the plan to city officials.

The BPS plan incorporates all the key features that Basch recommends. These include a physical activity program that incorporates in-class movement breaks, physical education and even staff wellness; an in-class breakfast program; and a vision program that issues two pairs of glasses to each qualifying student. Carter and her team recently received grants that will enable them to launch a pregnancy prevention program in middle schools.

“The idea of coordinated school health has been around for 25 years, and we were working on a lot of these issues before Chuck published his paper,” Carter says. “But part of what he’s done is to provide the data analy-

sis to support the idea that all of this really matters. It’s hard to be an expert in your own district, but if someone from Teachers College is saying it, and it’s in the news – well, it must be good, because they’re talking about it.”

In Ohio, Basch’s ideas constitute the foundation of a pilot partnership between the State Department of Health and the State Department of Education to improve student health and school performance.

“Chuck’s article came out at a perfect time for us,” says Laura Rooney, Adolescent Health Program Manager in Ohio’s Department of Health. “We had received funding for coordinated school health from the U.S. Centers for Disease Control and Prevention and were trying to link health outcomes to school improvement, and his work does precisely that.

“As Ohio is restructuring school report cards and teacher accountability, we wanted to find a mechanism that supports the district’s ability to look at the whole child for student success and go beyond test scores and curriculum.”

Ohio schools placed on academic watch or academic emergency status are recruited to participate in a Healthy Schools Leadership Institute that helps them to identify health measures that can aid students.

“We ask schools to look at their students’ behavior and health outcomes, and then to line those up with overall school performance, so that they are the ones making inferences,” Rooney explains. “Then, they look at their policies

American Lung Association, which aims to reduce poorly controlled asthma and improve school attendance. Other initiatives recommended by Basch focus on improving students’ social and emotional skills, decreasing behavioral problems and building character, and increasing in-class physical activity.

Third, the Basch model applies a “scaling mechanism” for implementing all of these programs together. The scaling mechanism consists of a full-time school health coordinator position in each school, professional development for teachers and school personnel, and roving coaches who would provide assistance to teachers, staff and administrators. Along perhaps with an assistant principal for school health, these new positions ultimately would become the focus of a new professional track developed by schools of education.

“Chuck’s proposal is the only one I’ve ever seen that presents a comprehensive approach to student wellness, from nutrition to health screening to behavioral modification to classroom performance,” Nadelstern says. “Other efforts have used aspects of this, but he’s saying, ‘If we can have resources and incentivize all the schools to focus on all of these issues, we can have a profound impact.’ And I think he’s right.”

Many other education leaders agree.

“We started work on our strategic plan in 2010 using Chuck’s article to set the tone and reference why we were

and practices to see which ones are supporting student health and which ones are impeding it. How are they taking attendance? Do they know why students are absent? Can they get that information? If a lot of their kids have diabetes, do they know whether absences are occurring because of that? And if so, are there interventions they could put in place? Ultimately, each school writes a change plan that reflects an analysis of their policies, practices, leadership initiatives and school climate.”

In a final step, the schools link their change strategies to their districts’ overall school improvement plan, “so that health measures are not looked at as being separate from school performance,” Rooney says.

Basch emphasized this last point during a meeting with Arne Duncan last spring. The meeting was arranged by Rochelle Davis of the Healthy Schools Campaign, and it included Davis, Basch and the leaders of the W.K. Kellogg Foundation and the Chicago Community Trust. Basch had just a few minutes to summarize his plan, and when Duncan asked why many features of it weren’t already happening in schools, he had an answer ready.

“I said, ‘Because we need the education goals of the nation to recognize the importance of addressing educationally relevant health problems, especially for youth living in poverty,’” Basch recalls. “‘We need changes in accountability structures to ultimately promote change. Because if schools aren’t held accountable for it, if no one’s measuring it, then it’s not important.’”

Basch, along with Davis and the meeting’s other attendees, urged Duncan to empower an Office of Safe and Healthy Students, run by a Deputy Assistant Secretary of Education, to provide strategic leadership to fully integrate health and wellness into the Department’s policy and practice. They also recommended that student health criteria be incorporated into the federal government’s various professional development and human capital programs for schools, such as Investing in Innovation, School Improvement Grants and Blue Ribbon Schools.

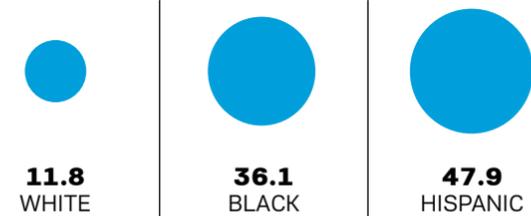
In a subsequent speech, delivered early in May at the National Press Club in Washington, D.C., Duncan spoke about the importance of school health and vowed to promote change.

“I think [Duncan] gets it. But the U.S. is unique in having such a decentralized education system,” Basch says. “The government is incredibly influential, but it also has limitations. And the politics are intense.”

Indeed, politics are a major reason why Basch, who is no great fan of standardized testing, has made a dramatic improvement in standardized test scores the key endpoint of his proposed study. It may be, as his TC colleague Michael Rebell suggests, that comprehensive school health

## DID YOU KNOW?

Births per 1,000 among U.S. 15-17 year-olds by race/ethnicity:



could appeal to Republicans as well as Democrats because it all comes down to getting more bang for the taxpayers’ buck and using existing resources more wisely. As another colleague, Aaron Pallas, puts it, “this is one of those ideas that’s so obvious that you wonder why it hasn’t been tried before.”

Right now, though, state legislatures are strapped for cash, and only the most dramatic kind of evidence is going to convince them to embrace a change of this magnitude. To that end, Basch is betting that the lowest-achieving New York City elementary schools would achieve increases of 20 scale points (versus a 10-point increase in controls) on both English language arts and mathematics standardized tests, raising the percent of students proficient at grade level from 34 percent to 68 percent in the former and from 42 percent to 70 percent in the latter.

“Test scores alone are clearly an imperfect metric for judging the extent to which schools are succeeding, but that’s the metric widely used in states as well as nationally,” Basch says. “For many people, parents included, improving problems like children’s vision, school connectedness and absenteeism are worthy goals in themselves. Nevertheless, this work won’t convince thousands of school leaders to adopt school health as a fundamental mission of their schools if we can’t influence academic achievement. But if we do succeed, it will be judged revolutionary and could create a transformative change in the ways we educate the next generation of Americans.”

In Colorado, it’s still far too early to know whether Basch’s proposed reforms will achieve that kind of impact. But in October, Wasserman of the Legacy Foundation reported hearing from teachers that, since the launch of the new school breakfast program, “kids are way more focused.”

“In Boulder, one kindergarten teacher told us that she has a little girl in her class who had never spoken,” Wasserman says. “When they began serving breakfast, she spoke for the first time.”

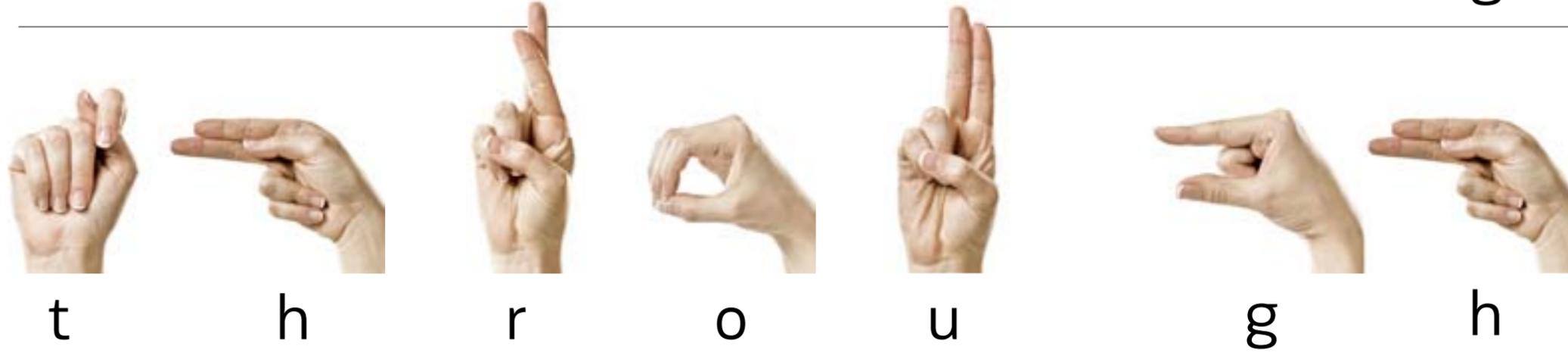
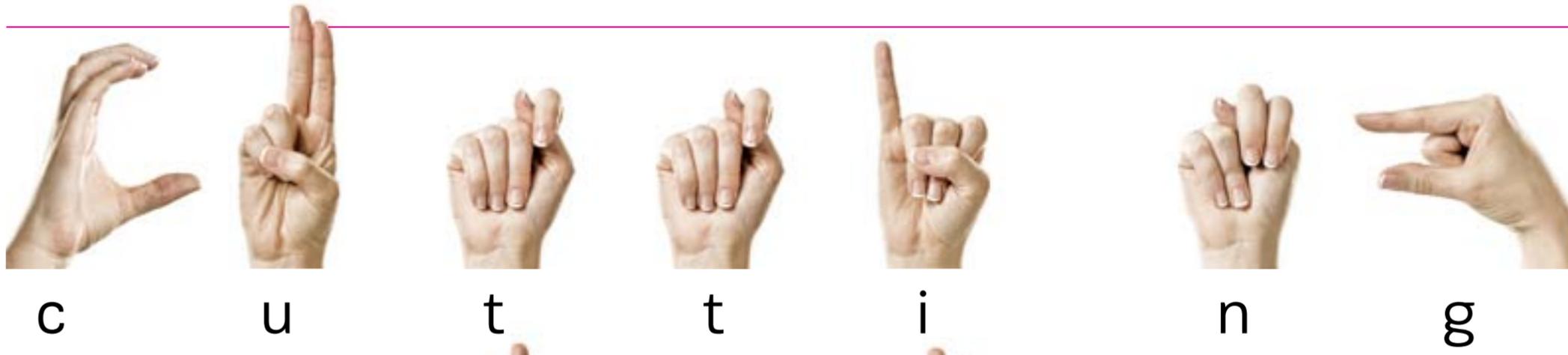
TC

**“What I’m proposing is going to require a real social change in the way we think of the mission of schools.”**

— Chuck Basch

ILLUSTRATION BY JULIAN TAMAKI

DID YOU KNOW? SOURCE: CHARLES BASCH, JOURNAL OF SCHOOL HEALTH



Students in TC's Deaf/Hard of Hearing program wrestle with the big questions about assistive technology

By Barbara Finkelstein

"I DON'T UNDERSTAND, DAD," rages the narrator of Raymond Luczak's poem "Practice" and smashes his hearing aid with the telephone receiver. The poet himself, who lost most of his hearing after being stricken with double pneumonia as an infant, has passed a similar verdict on audio technology, declaring that it renders sound "noisy and meaningless."

Michael Sagum, a first-year student in [TC's Deaf and Hard of Hearing \(D/HH\) program](#), takes a somewhat different view. Born profoundly deaf

SHUTTERSTOCK



TO HEAR OR NOT TO HEAR? Rosen (left) and Kretschmer pose questions that go to the heart of cognition and identity.

in both ears, Sagum, as a mainstreamed student in Seattle, relied on hearing aids and FM listening systems. He had auditory and speech therapy from the time that his hearing loss was diagnosed at the age of 10 months.

At 15, Sagum elected to receive a cochlear implant (CI). He still gets emotional when he remembers the moment the implant was activated and he heard birds chirping. Sagum says that hearing his own speech is a “source of pride” but is careful to emphasize that he respects all ways of communication for the deaf. He feels that the years of auditory and speech therapy that he has had are a critical component for the success of the cochlear implant. He’s also chosen to learn American Sign Language (ASL), which he calls “a very important part of my life.”

To hear or not to hear?

As technology improves, that’s increasingly the question for many people who are deaf or hard of hearing, and it speaks to the very nature of identity and cognition.

“Does language map out what you already know, does language dictate thought or does language add to the cognitive map?” Robert Kretschmer, Associate Professor of Education and Psychology, asks students in his first-year course, Language Development and Rehabilitation. “As educators and researchers, we are obligated to ask how children process the world if they do so without the sense of hearing.”

Kretschmer, who assigns readings on the language development theories of linguists such as Benjamin Whorf Lee and psychologists such as Jean Piaget and Lev Vygotsky, raises a host of issues related to the cognition and education of D/HH children. Is signing an absolute equivalent of spoken language? Will a child whose deafness goes undiagnosed past the age of three experience lifelong learning and thinking deficits? With the use of assistive technologies, will a deaf child identify more with the hearing or the sign-

ing world? How long does it take to become a fluent signer? What is the impact on the child of the parents’ approach to language?

The deaf and hearing worlds have been debating these questions, in one form or another, since the prototypes for modern assistive technology emerged late in the 19th century.

In one camp, many deaf individuals and organizations that speak for them have described deafness as a unique culture, with its own language and modes of social interaction, rather than as something to be cured. The [National Association of the Deaf](#) has yet to fully endorse cochlear implants, a technology introduced in the 1970s.

The Association says CIs are not appropriate for all deaf and hard of hearing children and adults and not a cure for deafness, and that success stories with implants should not be overgeneralized. In the other camp, most of the hearing world, as well as some schools for the deaf, did not approve ASL as a legitimate language until the mid-1990s.

Under the federal [Individuals with Disabilities Education Act](#), deaf children – like all children with disabilities, and not unlike their typically developing counterparts – are now accorded a “free and appropriate education” at schools in their own neighborhoods. And, according to a directive that proponents of deaf culture view as being comparable to policy regarding English Language Learners, public schools must “consider the communications needs” of D/HH children and provide “opportunities for direct instruction in the child’s language and communication mode.”

But which mode?

Hearing aids, which evolved in part from the work of Alexander Graham Bell and were first marketed in behind-the-ear form in the 1950s, amplify sound but do not separate out speech from ambient noise. Nor can they adequately amplify high pitches, particularly high female voices.

Personal FM systems have proved somewhat more effective, especially in the classroom. The teacher speaks into a microphone, usually a lavalier. The student receives the signal, via radio waves, through

#### DID YOU KNOW?

In the United States, roughly

42,600

adults

28,400

children

have received cochlear implants.

TOP LEFT: TC FILE PHOTOS; “DID YOU KNOW”: SOURCE: NATIONAL INSTITUTE ON DEAFNESS AND OTHER COMMUNICATION DISORDERS

an FM receiver that may or may not include a hearing aid interface. FM systems improve the speech-to-noise ratio, an assigned number value that boosts the voice speaking into the microphone over background noise such as scraping chairs, air conditioners and students. The focus on the microphone wearer’s voice can be further heightened by a cochlear implant. But there are drawbacks: The FM signal quality may be hampered by unknown interference, and the system may be too complex for young children to use without help. And then there are cochlear implants themselves, which have stirred the greatest hopes – and controversies. Unlike hearing aids, which rely on inner ear hair cells to convert vibrations into nerve signals, cochlear implants transmit directly to the auditory nerve, which then sends information to the brain. Some implant recipients, such as TC’s Michael Sagum, praise the device for enabling them to learn to speak and interact with hearing people. Others who are deaf or hard of hearing argue that, at best, implants, can only approximate an ability they will never fully have.

“What’s the point of using a CI if it does not do anything for me except make me aware of environmental noises?” says Russell (“Rusty”) Rosen, a lecturer in the D/HH program at TC who is deaf. “Hearing is not the only means of obtaining information and communicating with people.”

Graduates of TC’s D/HH program must accommodate to all these views when they work in schools and other settings.

“The children I work with are cochlear implant and hearing aid users, and most rely on FM systems in school,” says Dana Selznick (M.A., M.Ed ’10), who is a hearing education teacher for the New York City Department of Education. “What you learn right away is that you have to integrate the technology based on knowing the child’s unique needs. Each child responds to new assistive technology differently, which is why it is so important to understand the learner as a whole. For example, teachers have to train the kids to understand the difference between voice qualities when using the FM system.”

[Dale Atkins](#) (M.A. ’72), a TV and radio personality who graduated from the College’s deaf education program and has worked extensively with D/HH children, their families and professionals in the United States and abroad, says that assistive technologies have not changed the basic equation facing children with hearing issues. “The cognitive and learning issues that existed before the era of cochlear implants haven’t really disappeared,” Atkins says. “Certainly, the earlier a child is implanted, the earlier he’ll have access to language and good speech patterns, and the better off he’ll be. The problem, though, is that hearing people have very high expectations for the cochlear



“hearing is not the only means of obtaining information and communicating with people.”

— Russell Rosen

implants and tend to place too much faith in technology. I worry about the kids whose family members, teachers, coaches and friends assume that the kids are doing very well when, in fact, deaf children miss some pretty significant elements of classroom instruction and after-school life.”

Atkins says that in mainstream classrooms, “most kids who are deaf or hard of hearing sit in front of the class so that they can see the board and teacher. But what happens when a student behind them says something? The deaf child may miss all or part of what was said, whether she has a cochlear implant, a hearing aid or use of an FM system.” Atkins says she has addressed this issue by asking students to repeat what they said – a benefit for all concerned. But in a fast-moving classroom, lunchroom or social situation, such instant replay isn’t always possible.

Will technology ever elevate deaf or hard-of-hearing students to the status

of equal players in a hearing world?

Rusty Rosen is skeptical.

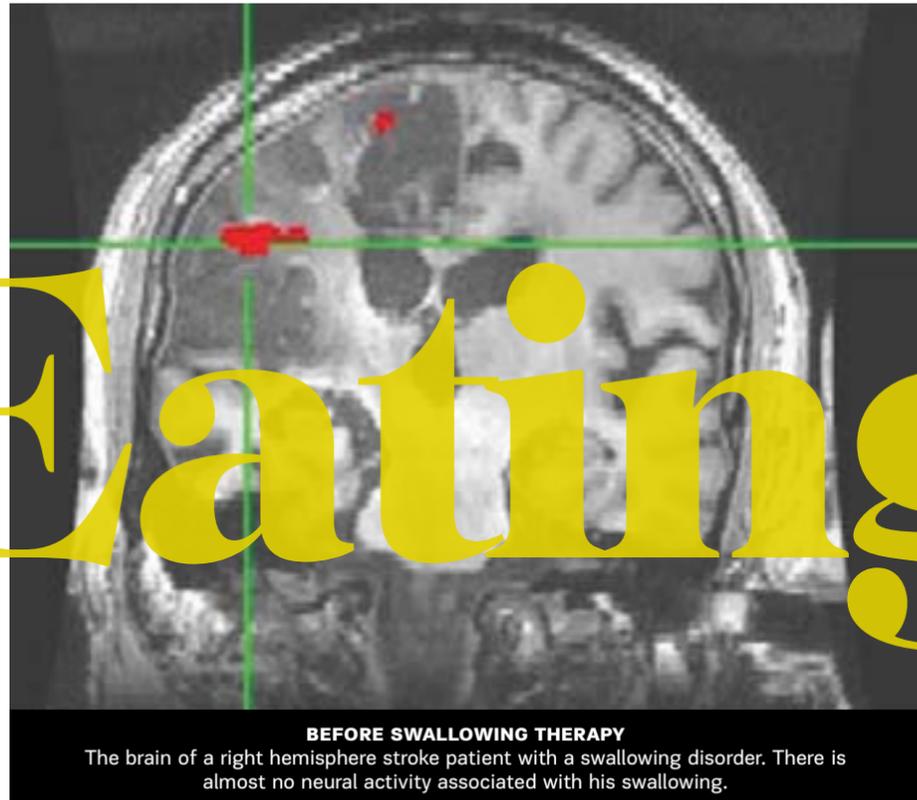
“Every generation has a ‘true believer’ faith in a particular technology,” he says. “In the late 1960s, when I was a student at the Lexington School for the Deaf in Queens, people thought hearing aids were a cure-all. Chairs were arranged in a semicircle. The students wore headphones and the teacher spoke into a microphone. But what I heard through my hearing aids were mechanical sounds, not organic human voices. So, even though the technology was focused on auditory intake, the classroom was really only set up for visual learning.” More recently, Rosen recalls a school board member – a physician, no less – who rejected tenure for an ASL teacher on the grounds that cochlear implants had made deafness obsolete. “We’re just not there,” he says.

Atkins believes technology plays a vital role, particularly for those who have some hearing. “Signing is an important part of deaf communication for a large segment of the D/HH population, but it doesn’t do anything for people who are basically auditory learners.” Still, she says, the ultimate role of deaf-education specialists and other experts is to help the deaf and hard of hearing cut through the noise around the technology-versus-signing debate and find the best individual solutions for themselves and their families.

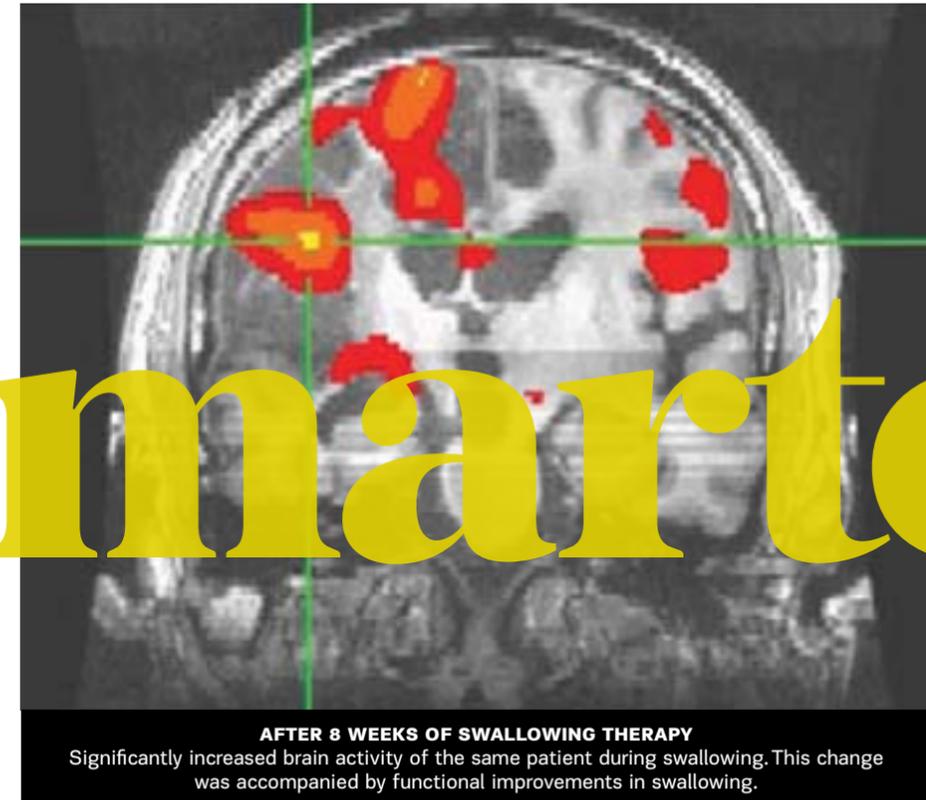
“People are starting to understand that the conversation about deafness can’t exclusively be about technology,” Atkins says. “It’s about celebrating children for the unique and precious people they are. Realizing that is a human advance, not a technological one.”

TC

# Eating



# Smarter



When patients relearn the seemingly innate act of swallowing,

their brains change – and their lives can, too

By Patricia Lamiell

**One afternoon this past August**, Joseph Forrester underwent testing at the [Dysphagia Research Clinic](#) at Teachers College's Edward D. Mysak Clinic for Communication Disorders.

Since suffering a stroke the previous January, Forrester had been unable to swallow food or drink without choking (the condition called dysphagia). He was being fed through a tube in his stomach, but he missed eating, especially jerk chicken and fish, specialties of his native Jamaica.

Now, after four weeks of trial therapy, Forrester was being reevaluated by Amy Ishkanian and Carly Weinreb, master's degree students in TC's [Speech-Language Pathology program](#), which runs the Mysak Clinic. After performing some other tests, Ishkanian and Weinreb gave Forrester a few sips of water. He sputtered a little but got it down. They used a small, balloonlike device on the end of a tube to test Forrester's tongue strength, and they pro-

IN: MALANDRAKI, ROBBINS & JOHNSON (2011), USED WITH PERMISSION FROM JOHN WILEY & SONS, INC. BASED ON A STUDY LED BY DR. JOANNE ROBBINS.

nounced his progress good. They swabbed different flavors – sweet, salty, sour and bitter – on his tongue, and he identified each. They checked his gag reflex and air flow – again, all signs positive. They asked him to repeat the word buttercup as quickly as he could, and he complied, until they all broke into giggles.

Georgia Malandraki, Assistant Professor of Speech-Language Pathology, who spearheads TC's new swallowing ther-

apy program, says that Forrester and four other patients in a pilot project at Mysak have all "improved remarkably" in their ability to swallow. But it's what may be going on in their brains that she finds truly exciting.

In the small, utilitarian space on the ninth floor of Thorndike Hall that she established last year as TC's Swallowing, Voice and Neuroimaging Laboratory, Malandraki has been analyzing functional magnetic resonance



**BACK AT THE TABLE** Forrester can eat solid food again after weeks of therapy at TC's Mysak Clinic. Elana Winters, a student in Speech-Language Pathology, looks on.

“Nobody has ever shown before that swallowing strengthening therapy can lead to neuroplasticity.”

— Georgia Malandraki

images (fMRIs) of the brains of dysphagia patients who participated in a postdoctoral research project she conducted at the University of Wisconsin-Madison under the direction of swallowing researcher JoAnne Robbins. Like Joseph Forrester, some of the patients in that project performed regular tongue exercises over an eight-week period in order to restore tongue strength diminished by stroke or other brain injury.

Initial images taken before the patients began their exercise regimen showed large brain areas where there was little to no neural activity. But images retaken halfway through the trial, and again at the conclusion, showed increasingly large multi-colored splotches, indicating more brain activity (see images on pages 42 and 43). Malandraki says the results, which have been submitted for publication at the 2013 International Stroke Conference, appear to offer the field's first true confirmation of what has long been suspected and hoped: Muscle exercises not only improve muscular function, but also can stimulate neuroplasticity – the actual rebuilding of injured areas of the brain or the transfer of brain functions to healthy areas.

“Nobody has ever shown before that swallowing strengthening therapy can lead to neuroplasticity,” Malandraki says.



**GEORGIA MALANDRAKI**

they are expensive and inconvenient and raise the risk of infection. Moreover, eating is one of the few remaining pleasures for the frail elderly, and Malandraki and other experts say that many of those who lose the ability to eat lose their appetite and their will to go on living, as well.

More than 35 muscle pairs are involved in swallowing, including most of those involved in speech. Like all muscles above the neck, they are connected directly to the brain stem by cranial nerves that bypass the spine. Until the 1970s, doctors believed that the swallowing reflex is innate and governed largely by the autonomic nervous system. They believed that, although swallowing can be intentional, the throat muscles mostly work like the heart, which beats continuously without conscious direction from the brain. It was thought that someone who had lost the ability to swallow could never recover it.

By the early 1980s, Martin W. Donner at Johns Hopkins and, later, Jerilynn A. Logemann at Northwestern University (who has been Malandraki's collaborator) and other researchers began to understand swallowing as a more complex, coordinated activity performed by muscles in the mouth, throat and esophagus that activates different parts of the brain. Their research led to a new hypothesis: By exercising these swallowing muscles,

Swallowing disorders are on the rise, and the demand for therapy is growing rapidly.

As advances in health care and nutrition enable people to live longer, rates of Alzheimer's, Parkinson's and other disorders that disproportionately affect the elderly have risen dramatically, and many of these conditions trigger dysphagia. Indeed, of all patients seen by speech-language pathologists in hospitals, nursing homes and rehabilitation centers last year, more than half received swallowing therapy, according to the [American Speech-Language-Hearing Association](#). In New York City alone, up to 90 percent of patients seen by speech-language pathologists in acute-care facilities have swallowing disorders.

Many dysphagia patients lose their cough reflex, putting them in danger of aspirating food or liquid into the lungs and developing pneumonia or dying. While feeding tubes offer an alternative,

**DID YOU KNOW?**

Approximately  
**10**  
MILLION

Americans are evaluated each year with swallowing difficulties.

However, studies indicate prevalence of swallowing disorders may be as high as

**22%**  
in adults over **50**.

strengthening devices; and sensory stimulation equipment and materials.

Currently, Malandraki is working with doctors and therapists at Columbia Medical Center who treat patients with dysphagia caused by head and neck cancer. Using fMRI technology, she evaluates candidates for trans-oral robotic surgery, which can remove the tumors without an incision to the neck or throat, and measures how the tumors have affected swallowing physiology and brain function before and after surgery. Malandraki started the project in 2011 with Salvatore Caruana, Chief of Head and Neck Surgery at Columbia Medical Center, backed by a grant from TC's Provost's Investment Fund. The team, which includes Robert De La Paz, Columbia's Director of Neuroradiology, and TC alumnus Winston Cheng, Chief Speech Pathologist, is attempting to raise more money to establish a swallowing and neuroimaging center at Columbia.

Meanwhile, Joseph Forrester has continued to come regularly to the clinic and to do his assigned tongue and neck exercises at home. By early October, he had made further progress in swallowing and tongue strength and had resumed eating many of his favorite foods. He had even gone, unescorted, to a friend's house and eaten his beloved jerk chicken. The swallowing therapy at the Dysphagia Research Clinic “has given him his independence back,” says his son, Jason Forrester.

As of this writing, the elder Forrester was still using the feeding tube in his stomach to ingest water, a challenging substance for patients with dysphagia, but there was hope that the tube could be taken out in a few months. “When my father first had his stroke, the initial concern was the length of time, efficacy and danger of infection using the feeding tube,” Jason Forrester says. “That's not something we're even speaking about now.”

patients were transferring function to new brain regions.

In recent years, a range of technologies have made it possible to pinpoint which neurons come into play under different conditions and in response to different stimuli, enabling researchers to correlate observed behavior with brain function and development. The Dysphagia Research Clinic in the [Mysak Clinic](#) is newly equipped with many of these technologies, including high-quality fiber-optic endoscopes, which are used for the evaluation and diagnosis of swallowing physiology; electromyography (EMG), which is used for evaluation of the electrical activity produced by swallowing muscles; respiratory biofeedback and muscle-

## At the Mysak Clinic, A Growing Emphasis on the Brain

TC's clinic for communication disorders opened in the 1940s and was later named for speech pathologist Edward D. Mysak. Today, under the direction of Dr. Kathleen Youse and her assistant director, Elise Wagner, the Mysak Clinic spans a wide range of areas, of which swallowing – a function that employs many of the same muscles as speech – is the newest and smallest.

The clinic provides diagnostic and therapeutic services for a sliding-scale fee for children and adults with disorders of language, articulation, voice and fluency, as well as the problems associated with cleft palate, cerebral palsy, hearing loss, aphasia and other handicaps.

Under the close supervision of faculty members, every student in TC's Speech-Language Pathology program, which includes those who participate in the new Dysphagia Research Clinic, does some clinical work at Mysak with clients referred by physicians or word of mouth.

The fields of both speech-language pathology and swallowing research have become more scientifically-based,

particularly as more has become known about the role of the brain in speech and swallowing. Georgia Malandraki was hired at TC by John Saxman, who will step down in 2013 as Speech-Language Pathology program coordinator, because of her ability to introduce scientific methods and swallowing research into a mostly linguistically oriented program.

At the same time, however, Malandraki says she likes the interdisciplinary environment at TC, especially within the Biobehavioral Sciences Department, where Andrew Gordon, Peter Gordon, Tara McIsaac, Carol Ewing Garber and other faculty work at the nexus of the brain and body.

Malandraki also appreciates the opportunities to mine neurocognitive research being conducted at TC, most notably by the incoming Speech-Pathology program coordinator, Karen Froud, who runs the College's Neurocognition of Language Lab.

“This is a great place to be,” Malandraki says, “because there are so many tools at your disposal and so many great minds at work on related problems.” — PL

PHOTOGRAPHS BY HEATHER VAN UXEM LEWIS

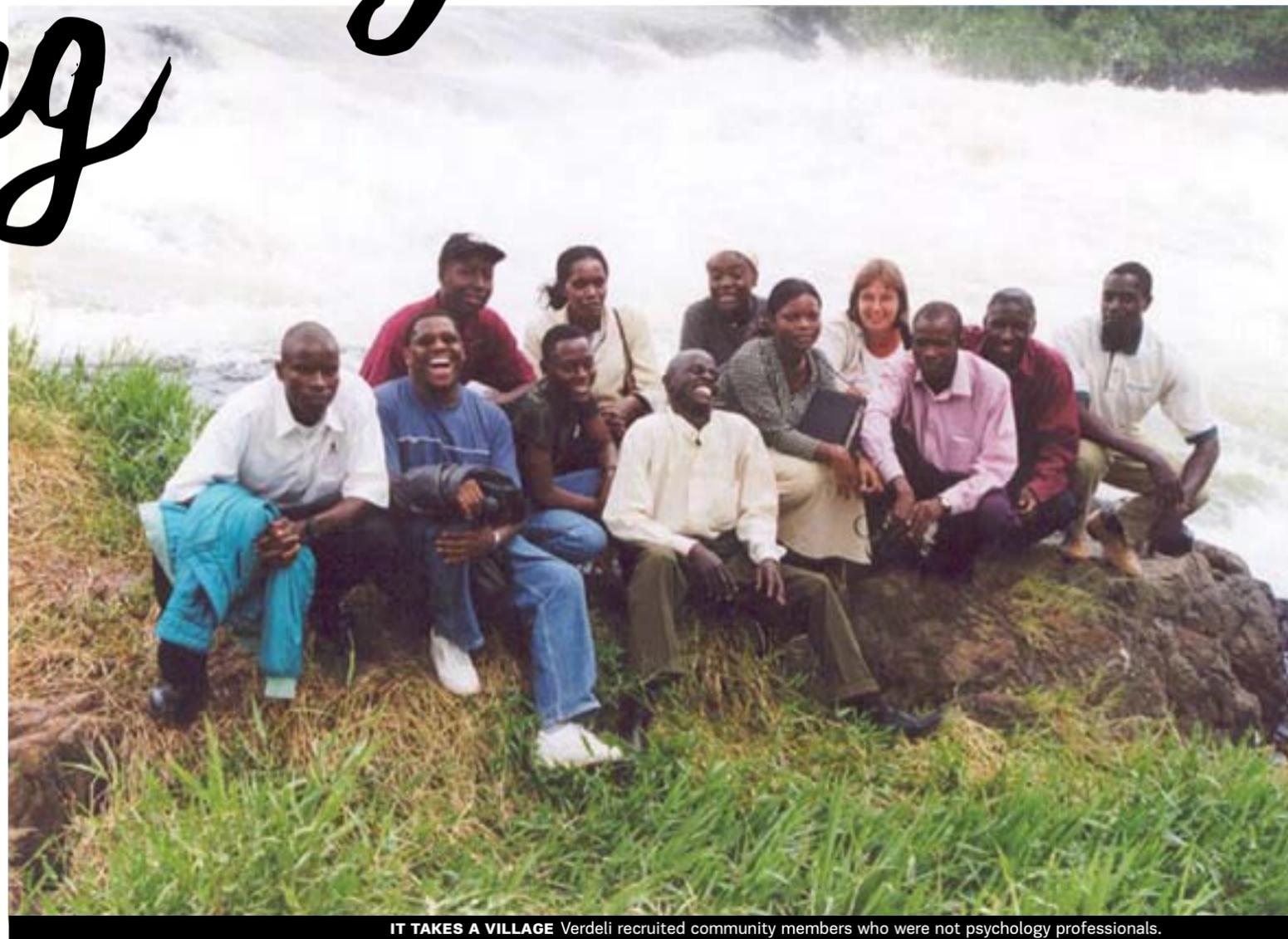
DID YOU KNOW? SOURCE: AMERICAN SPEECH/LANGUAGE/HEARING ASSOCIATION

TC

# A Community of Healing

Lena Verdeli has brought a talking cure to people living in the most adverse circumstances

By Jonathan Sapers



IT TAKES A VILLAGE Verdeli recruited community members who were not psychology professionals.

COURTESY OF  
LENA VERDELI

**A**rriving in southern Uganda in 2002, Teachers College psychologist Lena Verdeli knew she had her work cut out for her. The country had endured a brutal civil war and was still in the midst of a devastating AIDS epidemic. Vast numbers of people in the northern regions were living in internally displaced persons camps. A qualitative



LENA VERDELI

assessment of mental-health needs by Johns Hopkins University showed that many adults were so paralyzed by *yo'kwekyawa* and *okwekubazida* – self-hatred and self-pity – that they were neglecting their families and cutting themselves off from community resources.

Verdeli, Director of TC's Global Mental Health Lab, thought these states of mind sounded strikingly like depression, but she worried about “medicalizing” extreme suffering. After all, who wouldn't be depressed living under such adverse conditions? Still, she was encouraged by a field report from her colleague, Paul Bolton, a Johns Hopkins public health researcher, indicating that Ugandans themselves recognized they had a problem and were eagerly seeking help.

With few doctors available and no funds to provide medication, Bolton had recruited Verdeli to collaborate in a clinical trial of interpersonal psychotherapy (IPT), a time-limited treatment for depression, with standardized steps and inclusion criteria, codeveloped by her mentor, Columbia University psychologist and epidemiologist Myrna Weissman. Under an agreement with the nongovernmental organization World Vision, Verdeli and a colleague, Kathleen Clougherty, would train African mental health professionals employed by [World Vision](#) to lead group therapy sessions among the villagers.

Yet, almost as soon as they stepped off the plane, Verdeli and Clougherty learned from Bolton that World Vision had decided it could not spare its personnel. Instead, Verdeli and Clougherty would be working with the mental health workers' younger brothers and sisters – people who had no psychological training at all.

“Kathy and I just looked at each other and said, ‘Now we are here, why not?’” Verdeli says.

In the end, the raw recruits turned out to be a blessing in disguise. Since they came from the same communities as the study participants, they gave valuable input about the local culture, where people seemed to view themselves primarily as community and family members rather than as individuals.

“There is an old African saying, ‘People are people within people,’” Verdeli says. “It means that people are defined by other people, by a mutual and endless reflection of themselves in their community and group that constantly shapes and reshapes individual identity.”

Tossing aside their training guides, Verdeli and Clougherty asked their trainees open-ended questions in order to develop a culturally relevant context for understanding Uganda's malaise.

For example, Verdeli says, IPT theory identifies four categories of depression triggers: the death of a loved one; covert and overt disputes; life transitions such as job loss or divorce; and interpersonal deficits such as longstanding difficulties in initiating and maintaining relationships. However, during the discussions the trainees gave them examples that fit into the first three categories but not the fourth.



**THE GOOD NEWS** Even depression resulting from physical disaster can be treated.

“They basically told us, ‘We don't have that problem here, because we do everything in groups,’” Verdeli says.

The trainees also provided valuable insights in conducting role-play exercises designed to help people explore acceptable ways of becoming “unstuck” from oppressive situations. Sometimes they described solutions that might have eluded or even alienated someone with Western values.

For example, when a woman in Uganda discovers she cannot conceive, an acceptable option might be to ask a friend or a relative to marry her husband and give one of the resulting children to her to parent as her own. Or, when a man with AIDS insists that his wife have unprotected sex with him, she might ask an older member of her husband's family to act as her advocate, and thereby avoid the ostracism that will follow from resisting and being sent back to her parents' home.

A randomized, controlled trial of Verdeli's IPT program in southern Uganda was conducted. Participants who received the treatment reported an 80 percent reduction in prevalence of depression at the end of the trial. World Vision hired the trainees, who went on to treat – and train others to treat – some 6,000 people. Ironically, World Vision ultimately closed the program precisely because it was so successful (passing it on to volunteers) and turned its attention elsewhere – a common occurrence in humanitar-

ian development agencies.

Following the success of IPT in southern Uganda, Verdeli and Clougherty were asked by another NGO, [War Child](#), to adapt IPT for children in internally displaced persons camps in northern Uganda. Many of the children had previously been abducted by rebels in the Lord's Resistance Army, a militant cult accused of widespread human rights abuses. There were important differences in these populations. For example, unlike the adults in the south, many of the children had interpersonal deficits as a result of their traumatic developmental histories. “The kids had grown up without attachments, and sometimes with very limited language,” Verdeli says. “Sometimes their objects of attachment were the rebels themselves. The kids were very confused because some of the rebels were actually affectionate with them.” An IPT adaptation for these children was compared with an existing, play-therapy intervention and

was shown to be more effective in improving depression.

Verdeli has applied lessons learned from Uganda to her work elsewhere. For example, in order to ensure sustainability, her projects in Goa and Haiti are built around partnerships with local health care centers, government agencies and universities. Meanwhile, she and others are building the case globally for improving the treatment of depression in under-resourced areas. That's important, because as infectious diseases are increasingly brought under control, depression is emerging as the condition with the greatest impact worldwide, as measured by financial cost, death and other factors. The World Health Organization reports that 75 percent of the world's neuropsychiatric disorders occur in lower-income countries.

“International donors and agencies have known for a long time that depression is incredibly disabling,” Verdeli says, but they've focused on poverty, disease and other conditions that breed it. “Since our team and others showed through studies that distress can be significantly alleviated even in the context of extreme poverty, international agencies have started paying more attention.”

Teachers College and Columbia are capitalizing on this momentum, collaborating with the [New York State Psychiatric Institute](#) and [Columbia's Mailman School of Public Health](#) to create a Global Mental Health program that offers two different master's degree programs – one based at Mailman that emphasizes epidemiology and policy, and one at TC that emphasizes mental health assessment and treatment.

“Global mental health is going to be a major source of innovation, because people in under-resourced areas have to think out of the box to deal with the shortages,” Verdeli says. For example, in Haiti, community health workers do regular checkups with people afflicted with a number of health conditions – an approach Verdeli would love to see adopted in the United States: “Let's not forget we have a lot of under-resourced communities in our own backyard.” **TC**

**DID YOU KNOW?**

Depression affects 121 million people worldwide.

**15%**

of the population from high-income countries and

**11%**

from low/middle-income countries are likely to get depression over their lifetimes.

BOTTOM LEFT AND TOP RIGHT: COURTESY OF LENA VERDELI; “DID YOU KNOW” SOURCE: WORLD HEALTH ORGANIZATION WORLD MENTAL HEALTH (WMH) SURVEY INITIATIVE

# AS NURSES GO, SO GOES HEALTH CARE

CURRENT TC FACULTY AND  
LEGENDARY ALUMNAE WEIGH IN ON  
WHY NURSING EDUCATION  
IS MORE IMPORTANT THAN EVER

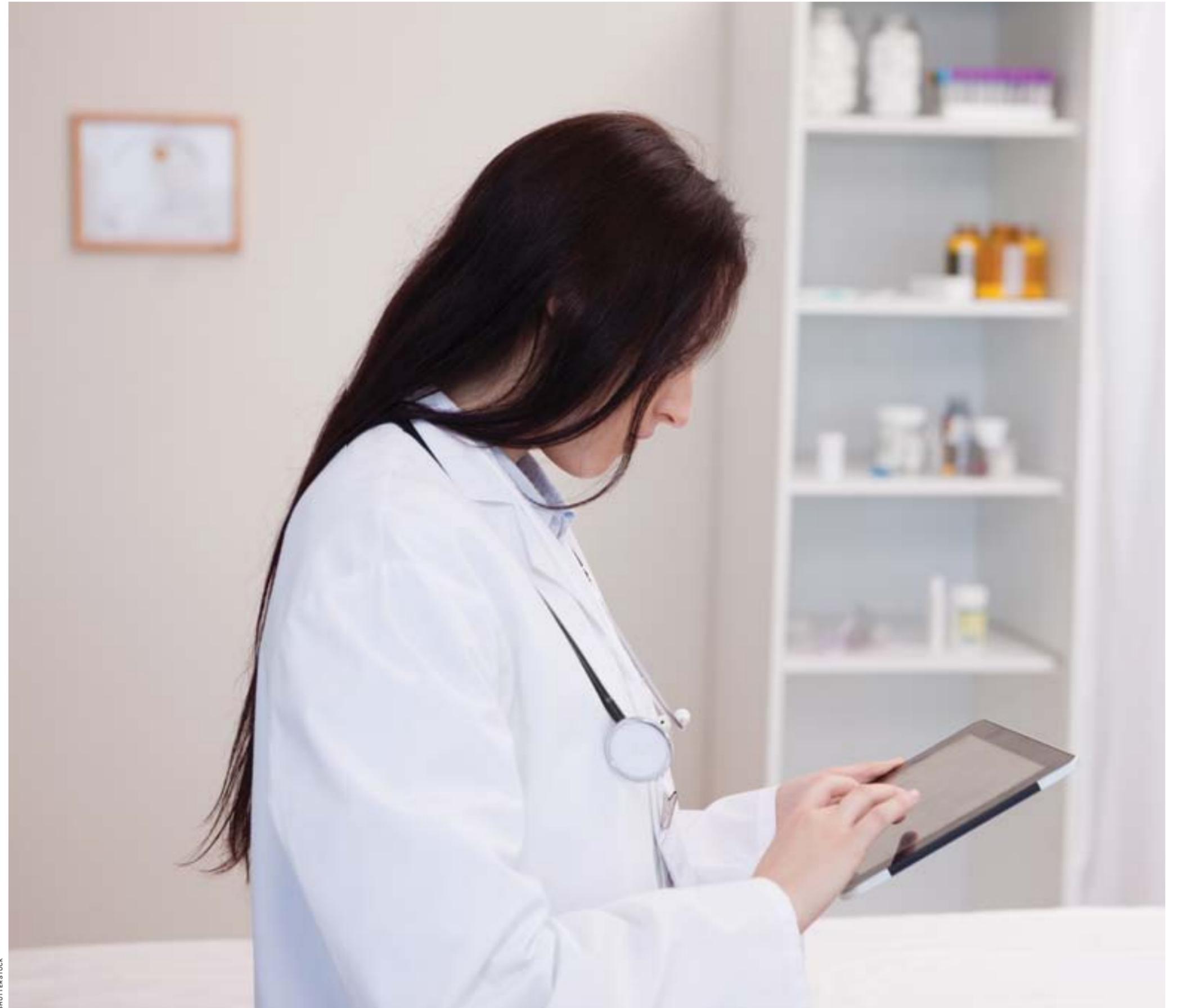
By David McKay Wilson

**“IF YOU WANT TO IMPROVE THE HEALTH CARE SYSTEM, NURSES HAVE** to be at the table,” says Margaret McClure (M.A. ’65, Ed.D. ’72), Professor and retired Chief Nursing Officer at New York University’s Langone Medical Center. “But those nurses need to be educated.”

Claire Fagin (M.A. ’51), former Dean of the University of Pennsylvania’s College of Nursing (and subsequently Interim President of Penn itself), calls nursing “the application of science in an artistic way” that requires its practitioners to be “very knowledgeable—about science, about humanity, about patient care.”

The vision of nurses as professionals who, like physicians, teachers and others in highly technical fields, must pursue lifelong learning, was born at Teachers College. Since [Mary Adelaide Nutting](#) launched the nation’s first nursing education program more than a century ago, the College has produced thousands of nurse educators. TC now serves the field through its [Diabetes Education and Management](#) and nurse executive programs.

“Today, we approach the education of nurses across the breadth of TC’s programs,” says Kathleen O’Connell, TC’s Isabel Maitland Stewart Professor of Nursing Education, and founding Director of the Diabetes Education and Management program, which was



SHUTTERSTOCK

launched with a gift from TC Trustee Marla Schaefer (M.A. '03). "Diabetes is a classic example of an area where the nursing field is making a huge impact, because diabetes is a disorder where most of the management occurs in the patients' homes. Education by diabetes educators is critical for success."

Elaine La Monica Rigolosi, Professor of Education and Director of the College's [Executive Program in Nursing](#), sees nurses as "leaders who are shaping health care" through their management and coordination of patient care and their growing executive function in many medical organizations. She says that now more than ever, all of these functions require the kind of interdisciplinary preparation found at institutions such as Teachers College. "Our society is increasingly diverse, and nurses need to be able to respond as well as to use skills in leadership, management, psychology and other fields. At TC, we've been pacesetters in the field."

McClure and Fagin – both lionized as "Living Legends" by the [American Academy of Nursing](#) – and several other prominent TC alumnae have adapted and re-adapted nursing science and practice to the challenges of new eras. Their work cuts

uate baccalaureate program to equip nurses as "primary practitioners" who conducted initial patient workups. Fagin later was a pioneer in shaping gerontological care and in "retirement" has helped create scholarships for nurse educators to conduct research. She believes the profession needs more people with doctorates who can build the discipline and research national policy issues – skills TC helped her to acquire.

"It was an atmosphere of intellectualism that I had never experienced before," Fagin says. "I felt truly educated."

McClure, who taught at TC from 1972 to 1981 and received the College's Distinguished Alumni Award in 1999, has led in encouraging more nurses to obtain four-year bachelor's degrees. She helped develop nurse-education standards for "magnet hospitals," a designation increasingly sought by top institutions across the country. In recent years, McClure also has developed seamless protocols for nursing students transferring from New York City community colleges to four-year state institutions. She obtained funding for a pilot program at Queensborough Community College and Hunter College, which is now being replicated at Lehmann Community College and Bronx Community College.

## Educating the Field



CLAIRE FAGIN



LAURA JANNONE



LUCILLE JOEL



RUTH LUBIC



MARGARET McCLURE



MATHY MEZEY

across hospitals, nursing homes, birthing centers, homes and schools and has helped shaped the careers of nursing professionals in advanced practice and those of nurse practitioners, nurse midwives and nurse specialists.

All agree that today, when nurses constitute the largest occupational sector in American health care and the defining challenge they face is the management of chronic disease, education is especially important.

Fagin, at 17, attended an undergraduate nursing program at Wagner College after being advised that colleges, rather than hospitals, represented the future of the profession. At Lehman College, she subsequently founded the nation's first undergrad-

"Nurses need more knowledge to give care in a more complex world," says McClure. "We've raised the ceiling – you can now get a Ph.D. in nursing – but we haven't raised the floor."

Indeed, while more than 300 universities offer programs that lead to a doctorate in nursing practice, tens of thousands of nurses continue to earn their R.N. credential from community colleges and a few remaining hospital-based diploma schools.

Lucille Joel (Ed.D. '70), Professor at Rutgers College of Nursing, says the push to boost the entry-level credential for nursing has had ramifications for the latter group.

"It's a shabby market for those nurses without a B.S.," says Joel, a past President of the [American Nurses Association](#) who is active in TC's Nursing Education Alumni Association. "Hospitals have come to expect it."

Joel, whose textbooks, [Kelly's Dimensions of Nursing](#) and [Advanced Nursing Practice Nursing](#), are widely used on the collegiate level, teaches an online course at Rutgers for R.N.s

seeking a four-year degree. She says nursing faculty positions have become increasingly difficult to fill. Funded by the [Robert Wood Johnson Foundation](#), Joel is devising new ways to attract nurses with advanced degrees to the professoriate.

"The salary scale in academia is much below the scale in the practice arena," says Joel, recipient of TC's Distinguished Alumni Award in 2012, "so it's a big challenge to get faculty to stay in academic practice."

Laura Jannone (Ed.D. '06), recipient of the New Jersey League 2010 Nurse Recognition Award, is Associate Professor in the School of Nursing and Health Sciences at Monmouth University, where she developed and directs a program to train school nurses. Jannone says school nurses play an increasingly important role as schools mainstream children who depend on medical technologies, such as insulin pumps for diabetics, which require daily monitoring.

More broadly, school nurses are typically the only on-site health professionals serving thousands of students and faculty.

"Our role becomes like a community-health position," says Jannone, who has testified before New Jersey officials to oppose efforts to eliminate nurses from schools. "You serve a high school with 1,500 kids, and it becomes quite complex."

Complexity also challenges nurses who practice in nursing homes, where patients have physical, cognitive and functional disabilities. Mathy Mezey (Ed.M. '73, Ed.D. '77), Professor Emerita, Senior Research Scientist and Associate Director of the [Hartford Institute for Geriatric Nursing](#) at NYU's College of Nursing, recently developed placement for nursing students in nursing

homes and is working on protocols to encourage more nurses to specialize in geriatric care.

"Nursing homes are great places to learn how to interview and interact with people," says Mezey, co-editor of [The Encyclopedia of Elder Care](#). "The patients you see on Monday and Tuesday will still be there when you come back a week later, so student nurses see that their actions are making a difference."

Nursing, like other helping professions, including social work and medicine, suffers from a dearth of professionals who choose to specialize in the care of the elderly, Mezey says. She has worked with the [American Association of Colleges of Nursing](#) both to develop curriculum materials for geriatric studies and to encourage nursing schools to require courses in geriatric nursing. On the graduate level, Mezey has worked with the AACN to develop web-based resources and cases studies to help faculty introduce mandated changes that will require nursing schools to merge their adult and gerontological programs into combined advanced practice programs.

"This should markedly increase the numbers of advanced practice nurses who can care for older adults," she says.

"Nurses need more knowledge to give more care in a complex world." — Margaret McClure

On the other end of the life spectrum, Ruth Lubic, (B.S. '59, M.A. '61, Ed.D. '79), has championed personalized care during labor and childbirth, particularly for women in low-income neighborhoods. Lubic – the first nurse to win a MacArthur "genius" award – is a leader in creating opportunities for nurse-midwives to deliver newborns in nurse-run settings. She founded New York City's Childbearing Center on East 92nd Street in 1975 and co-founded the National Association of Childbearing Centers. She also has helped establish 230 free-standing birth centers across the country – work that earned her the Foremother Award for Lifetime Achievements from the [National Research Center for Women and Families](#).

Her most recent project – the [D.C. Developing Families Center](#), which she founded in 2000 in the nation's capital – provides comprehensive care to low-income, predominantly African American patients. The family health and birth center, which is run on a nurse-midwifery model, has delivered improved outcomes, with fewer pre-term births, low-birth-weight newborns and deliveries by cesarean section.

"When I was in nursing school in the 1950s, the treatment of women giving birth was almost barbaric," Lubic recalls. "They'd be put under general anesthesia and cuffed to the table. They weren't allowed to touch the baby. How could women mother after such an experience?"

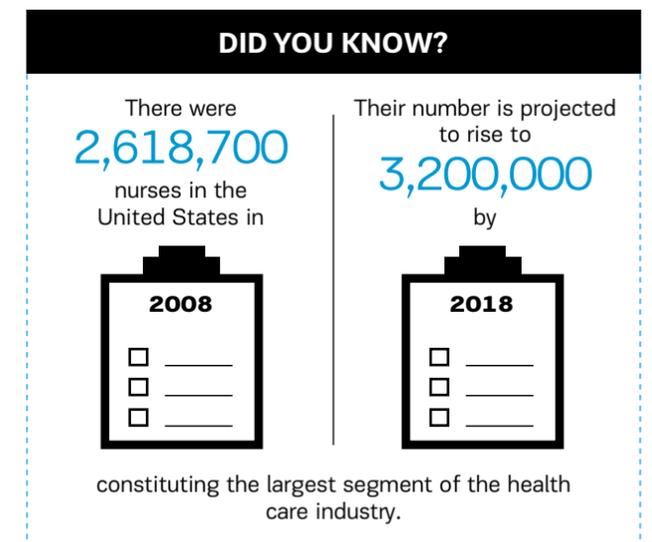
She's now raising funds to implement the D.C. Developing Families Center model across the country. "There are so many places that want to replicate what we've done," she says. "We need to carry it further, to make sure all families have the best chance to raise healthy children who can succeed in their educational efforts."

TC

"Diabetes is a classic example of where nursing is making a huge impact, because most of the management occurs in patients' homes." — Kathleen O'Connell

FROM LEFT TO RIGHT, TC FILE PHOTOS; COURTESY OF LAURA JANNONE; COURTESY OF LUCILLE JOEL; TC FILE PHOTOS; COURTESY OF MARGARET McCLURE; COURTESY OF MATHY MEZEY

"DID YOU KNOW" SOURCE: JOHNSON & JOHNSON, THE CAMPAIGN FOR NURSING'S FUTURE



# Not Very Tall, But Bigger Than Life

**E. John Rosenwald Jr. is not only a master fundraiser, but also a fount of wisdom and a force of nature who can prod institutions to reinvent themselves**

**By Joe Levine**

# B

ack in 2009, E. John Rosenwald Jr. brought a proposal for a new academic concentration to the new president of Dartmouth College, Jim Yong Kim.

"[Kim] was a biomedical researcher who spent his life saving the world – working on drug-resistant tuberculosis, HIV/AIDS and river blindness," says Rosenwald, alumnus and Chair-

man Emeritus of Dartmouth's Board of Trustees. "So my idea was that we'd have a central building, with wings for the study of terrorism, the environment, HIV/AIDS, nutrition, developing seeds to grow food in areas without water, and so forth. We

could build a new major called Save the World. Wouldn't that have been great?"

Rosenwald shakes his head. "I'm a disciple of [legendary advertising guru] [David Ogilvy](#), and one of his favorite sayings that I've adopted is, 'You don't sell the steak, you sell the sizzle.' If I say 'steak,' you picture cold, red-and-white pieces of meat at the butcher's. But if I say 'sizzling steak,' your mouth waters. And that's really the major challenge in philanthropy, because people are getting sick and tired of routine asks – a new tennis court or swimming pool, or to endow money for financial aid. Those are all very good things, but the trick is to come up with something really compelling and different. How do I make potential donors' mouths water?"

At 82, Rosenwald is an indefatigable five-foot-five dynamo who puts in full days as Vice Chairman Emeritus of JPMorgan Chase. He then heads off to the many business meetings, galas, dinners and other events that fill the calendar of a man whose valued advice, support and leadership have landed him on boards – and frequently at the head of capital campaigns – of an astonishing number of major organizations. These range from the Central Park Conservancy and the Environmental Defense Fund to the Metropolitan Museum of Art and NYU Langone Medical Center, to Teachers College.

Rosenwald likes to joke that the grueling pace has worn him down. A slate in his office that is engraved with his sayings proclaims, "When I started out in this business, I was six-foot-three with long blond hair." Yet he seems clearly energized by all of his nonprofit board work, which has prompted fellow board members to regard him as a fount of wisdom, an impact player and a primal force of nature.

"He's not very tall, but he's larger than life," says Sue Ann Weinberg, a friend since the two were teenagers and his fellow trustee on TC's board, where Rosenwald, who joined in 2002, oversees the committee on development. "Having him on your team says to anyone who knows him that you're going to be successful. And a lot of people know him."

Rosenwald is widely recognized as a master fundraiser. In 2000, [The New York Times reported](#) that he had generated more than \$2 billion for good causes, using the 10 principles he calls "Rosie's Rules." (A sampling: "Nobody is insulted by being asked for too much." Another: "The sale begins when the customer says no.")

At the same time, Rosenwald also possesses a skill perhaps even more valued when money is tight and the competition for philanthropic dollars is fierce: the ability to prod institutions to think differently about what they do.

"I've been with John on numerous occasions when he's spoken to boards, and when they say, 'Well, we need more money,' he typically asks them, 'Why? What are you going to do with it? What's the end route?'" says fellow TC board member Jim Benkard, who is a senior partner at the law firm Davis, Polk & Wardwell. "He's an investment banker, so he thinks in that linear way. And more often than not, he ends up telling his board colleagues, 'You're not shooting high enough,' because he believes that you should always be in capital campaign mode. You never stop."

Rosenwald himself puts the matter in starker terms. "I was



**SELLING THE SIZZLE** For Rosenwald, it's about making donors' mouths water.

PHOTOGRAPH BY HEATHER VAN LUXEM LEWIS. "DID YOU KNOW" SOURCE: COUNCIL FOR ADVANCEMENT AND SUPPORT OF EDUCATION

## DID YOU KNOW?

Fundraisers for schools, colleges and universities in the United States estimate that giving to education grew

**4.9%**  
last academic year.

They predict further growth of

**5.9%**  
for the current academic year that began July 1.

once quoted in a special issue of *Forbes* magazine, next to Disraeli, saying that the difference between the for-profit and non-profit worlds is that in business, everything is dog-eat-dog, and in philanthropy, it's just the opposite."

He grins. "Change is constant, and you need to be flexible. The most dangerous words are 'We've been doing business this way for many years, so there's no need to change.' That mindset is cancer in both the nonprofit and business worlds, because sooner or later, economics are going to get you. Take the automobile industry. Chairmen come and go, boards of directors come and go, but the United Auto Workers – the tenured faculty of General Motors – is always there. Management and unions sometimes don't get along very well, but every three years they have had to sit down in a room together and draw up a new contract. Sometimes there was a strike, sometimes not, but eventually a deal was cut, and immediately thereafter the board of directors – let's call them the board of trustees – got together and raised the tuition, or in this case the price of cars, to cover the cost of the new contract. And that was the way business was done until the late '80s, when an alarm went off: 'Hey, imports have taken 55 percent of the American auto market.'"

Rosenwald sees an analogous trend in American higher education, where the Ivy League institutions keep raising their tuition year after year.

"For years the Ivies have said, 'Hey, we get 10 applicants for every available opening, our kids get into the best graduate schools – we've been doing business this way for many

**“Philanthropy is the rent we pay for the space we occupy.” — E. John Rosenwald Jr.**

years and there's no need to change," he says. "But they can't keep doing that, because there's new competition out there. When you read about Nobels being given out, the University of Texas and the University of Washington are right up there with Harvard, Yale and Princeton. And there's distance learning, too. So, standing still just doesn't work."

Rosenwald himself was educated at elite private institutions – Deerfield Academy, Dartmouth, and then Dartmouth's Amos Tuck School of Business. His passion for philanthropy stems first and foremost from a clear-eyed recognition of just how much these educational institutions have contributed to his own success.

"My father never had a lot of money – it was a struggle for him to get us through school and college – but both my parents were involved in charity work," he says. "I saw the joy my mom got from serving on the board of Mount Sinai, or that my dad got at the 92nd Street Y. So my philosophy – philanthropy is the rent we pay for the space we occupy – comes from them. But if you attend an institution like Dartmouth,

you're forced to look back and say, 'I must credit my college in some part for my success.' On top of that, I tell people, 'Even paying full tuition covered only a quarter of the cost of your education. The rest comes from annual giving and the endowment, and goddammit, you have a responsibility to take care of those who come after you.'"

Rosenwald has been hugely successful in business. He capped his 54 years at Bear, Sterns & Company by serving as Co-president and Vice Chairman of the firm. Now Vice Chairman Emeritus of JPMorgan, he always has made philanthropy an equal priority.

"So many of my colleagues say, 'I don't mind giving money, but don't ask me to ask someone else to give,'" he says. "I'm good at that, and I started early. Hey, someone has to do this stuff."

He served as class agent for his Dartmouth cohort and headed the alumni fund, a number of capital campaigns and then the Board of Trustees. He joined the board of NYU Medical Center at the invitation of billionaire philanthropist Laurence Tisch. From there, the demand for his services grew, and his dance card became so full that when Teachers College first came asking, he said no.

"One of my closest friends is [former New York State Senator] Roy Goodman, whose wife, Barbara, was then Chair of the board of TC. She invited me to lunch and breakfast with [then-TC President] Arthur Levine, I don't know how many times. I kept saying, 'I have too many things on my plate.'"

"Finally one day, I said to Arthur, 'I'm angry at the statement you keep making that no major urban public school system in the U.S. has ever been fixed.' And I promised him that with the first board I retired from, I'd join TC's."

Indeed, Rosenwald believes that the College's ability to lead the way in fixing urban schools is the "sizzle" that will make it an inevitable choice for philanthropists who care about the

nation's future. He served on the search committee that chose Levine's successor, Susan Fuhrman, and is a huge admirer of Fuhrman for her work in launching a public elementary school under the auspices of the University of Pennsylvania when she was dean of Penn's Graduate School of Education. Recently, he gave \$1 million in support of the new [Teachers College Community School](#) created under Fuhrman's leadership. In doing so, he was enacting the first and most important of Rosie's Rules – "Don't ask anyone to do anything you haven't done yourself."

Yet Rosenwald was clearly engaged on a broader level, as well. "Giving our students real experience, on the ground, where they can learn the goods, the bads and the uglies of teaching, is so important," he says. "When I visited there, I saw a teacher ask a six-year-old, 'How much is eight plus seven?' And when the kid said 'fifteen,' the teacher, instead of just congratulating him, said, 'How do you know?' And he said, 'Well, I know that eight plus eight equals sixteen, so eight plus seven is one less.' So the whole business of learning how kids learn, in addition to how to teach, is very exciting." **TC**

# ALUMNI NEWS



**AT GRADUATION ONCE MORE** Members of the Alumni Council, from left: Marion Boulton Ed.D. '96, Fred Brodzinski Ed.D. '91, Tara Niraula Ed.D. '02, Adam Vane M.A. '01, Peter Mook Ph.D. '73, David Hoff M.Ed. '73, Kathy Morin Ed.D. '85, Patrick McGuire Ed.D. '94, Diane Sunshine M.A. '66

PHOTOGRAPH BY ALEJANDRA T. MERHAB

## Your Alumni Council Wants You!

(Re)Connect Alumni to Teachers College. Nominate yourself or a fellow alum who is passionate about TC and would like to serve a three-year term as a volunteer on the Alumni Council to shape future alumni programming. [www.tc.edu/alumni/GetInvolved](http://www.tc.edu/alumni/GetInvolved)

## ALUMNI ASSOCIATION PRESIDENT'S MESSAGE

Dear Fellow Alumni,

At TC, fall is all about new beginnings. A new academic year brings new students, new classes and a fresh slate of plans for the year ahead. This year your Alumni Association's Council is gearing up to celebrate 125 years of Teachers College and hoping this milestone will further connect you to the TC community. We hope you reflect upon your time at TC with nostalgia and that you will share your fondest memories with us. Join us at one of the many events scheduled for the coming months to continue the learning process you began as a TC student and to expand your network of like-minded peers.



I also invite you to join us in shaping the programming for this milestone year and future years. You can participate by applying to join the Alumni Council or by volunteering to serve as an Affiliate Member. If you are interested in learning more about either of these roles, visit [www.tc.edu/alumni](http://www.tc.edu/alumni) or contact the Office of Alumni Relations at [tcalumni@tc.edu](mailto:tcalumni@tc.edu) or 212-678-3215.

Stay tuned as we roll out an exciting lineup of events that will extend across the country. Academic Festival 2013 – on April 13 – will of course be the marquee celebration for alumni and the greater TC community. So mark your calendars to be back on campus for Festival, when the Alumni Association will also honor our Distinguished Alumni as part of the festivities. You can find more information about how to nominate someone for 2014 on page 59.

We will be asking you – the Alumni Association – to play a large role in the coming year's events because, after all, you are such a large part of what makes Teachers College great. We hope that throughout 2013, you will connect virtually by sharing your stories and memories from TC either online or via social media. We also hope to launch a yearlong service project, for which we will track all of your volunteer efforts on the alumni website to showcase TC's impact in communities across the globe.

Please send any suggestions you have to Rosella Garcia, Director of Alumni Relations, at [garcia@tc.edu](mailto:garcia@tc.edu).

Thanks for all of your contributions. I look forward to connecting with you at one of our events this year.

Sincerely,

Adam Vane,  
President, Teachers College Alumni Association

## TEACHERS COLLEGE ALUMNI ASSOCIATION

The Teachers College Alumni Association is led by the Alumni Council, which consists of 35 members who represent all 90,000 graduates. The Council partners with the Department of Development and External Affairs to advance the goals of the College by providing alumni with opportunities to remain involved in the life of the College through social activities, volunteer efforts and financial support.

### EXECUTIVE COMMITTEE

PRESIDENT

Adam Vane

PRESIDENT-ELECT

Patrick McGuire

### STANDING COMMITTEE CO-CHAIRS

#### AWARDS & RECOGNITION COMMITTEE

Diana Newman

Mitchell Thompson

#### INTERNATIONAL OUTREACH COMMITTEE

Marion Boulton, Fred Brodzinski

#### NOMINATING COMMITTEE

Susan Diamond, Patrick McGuire

#### PROGRAMS & RESOURCES COMMITTEE

Peter Dillon, Jeffrey Putman

#### MEMBERS-AT-LARGE

Maritza Macdonald,

Maryalice Mazzara, Tara Niraula

#### HISTORIAN

James J. Shields

Meet the full Alumni Council  
[www.tc.edu/alumni/councilmembers](http://www.tc.edu/alumni/councilmembers)



**2012 AWARD WINNERS** Shown with TC President Susan Fuhrman (second from right) are, from left: Lucille Joel (Ed.D. '70), Professor, Rutgers College of Nursing; Betty Perez-Rivera (Ed.D. '03), Director of the East Harlem Asthma Center of Excellence; John King (Ed.D. '08), New York State Commissioner of Education; the internationally recognized consultant Robert Schaffer (Ed.D. '52); Harold Noah (Ph.D. '64), TC Professor Emeritus and former Dean; and Kevin Jennings (M.A. '94), CEO of the non-profit Be the Change.

## ALUMNI NEWS

### Distinguished Alumni & Early Career Awards

TC alumni have a long-standing history of making their mark on the world. Do you know a graduate who has made an impact in his or her community and is worthy of this distinction? Awards are presented annually at Academic Festival by the Alumni Association. For more information or to nominate someone today for the 2014 Distinguished Alumni and Early Career Awards, visit [www.tc.edu/alumni/DAANominationForm](http://www.tc.edu/alumni/DAANominationForm)

### Events

#### A TECHNOLOGY SHOW-AND-TELL

Current TC student Michael Ticknor (right) and adjunct faculty member Nabeel Ahmad (Ed.D. '09) demonstrated IBM's learning analytics system at an event held this past July at the company's offices in midtown Manhattan.



#### A SCREENING FOR "THE 99"

Cosponsored by TC's Maxine Greene Society and the Office of Alumni Relations, Isaac Solotaroff screened his documentary *Wham! Bam! Islam!*, in California in September. The film is about the making of the comic book series "The 99," created by TC alumna Naif Al-Mutawa (who was also on hand). Below: Solotaroff with Elizabeth Pouso-Jorgenson (M.A. '98)



COURTESY: ADAM VANE

CLOCKWISE FROM TOP LEFT: ANNEMARIE POYO FURLONG; HEATHER VAN UXEM LEWIS; ROSSELLA GARCIA

# ACADEMIC FESTIVAL 2013

TEACHERS COLLEGE COLUMBIA UNIVERSITY



## Celebrating a Tradition for Tomorrow

Our fifth annual signature homecoming event will anchor the 125th anniversary celebration on campus. Academic Festival will explore the many trailblazing “firsts” that constitute the College’s legacy and continue to shape its future.



SAVE THE DATE:  
**APRIL 13**

Visit [www.tc.edu/festival](http://www.tc.edu/festival) for more information about the speakers and sessions

**Stay tuned for the announcement of this year’s Keynote Speaker!**

### THE DAY WILL INCLUDE:

- **Breakout Sessions featuring alumni, students and faculty who represent all 10 of the College’s academic departments**
- **Distinguished Alumni and Early Career Awards**
- **Fun for learners of all ages**

## CALLING ALL ALUMNI



Update your information and share your story.

[www.tc.edu/alumni/update](http://www.tc.edu/alumni/update)

Connect to TC Alumni

[www.tc.edu/alumni/connect](http://www.tc.edu/alumni/connect)



# CLASS NOTES

## ARTS AND HUMANITIES

### APPLIED LINGUISTICS

**Mirta Martes-Rivera** (M.A. '87) teaches as a seasonal instructor at the University of Puerto Rico-Rio Piedras campus. After her time at TC, she attended the Harvard Graduate School of Education, where she took a course with Noam Chomsky. She has taught in both the higher education system and the public schools in several states. She also writes for Puerto Rico’s leading newspapers.

### ART AND ART EDUCATION

**Betty Kipniss MacDonald** (M.A. '60) writes art reviews for *The Journal of the Print World* about exhibits at the National Gallery of Art, the National Portrait Gallery and other major venues in the Washington, D.C. area. She is also a printmaker who creates etchings, monotypes, and watercolors. Her work is included in collections around the world.

**Richard Risio** (M.A. '99) is teaching Art, LGBT Studies and Urban Agriculture at City-As-School High School in New York City’s West Village.

### TEACHING OF ENGLISH

**Karen (Booker) Estrada** (M.A. '08) and her husband, Erick, are delighted to announce the birth of

their son, Etienne, on May 4, 2012. He weighed 7 lbs. 14 oz. and was 20.5 inches long. The Estradas are currently living in Columbia, MD.

### TESOL

**Diana Berkowitz** (M.A. '76, M.E. '80, M. Phil. '86, Ph.D. '86) has been Director of the CUNY Language Immersion Program at Queensborough Community College (CUNY) since 1999. She was recently named Director of the new CUNY Start Program at the College. Diana also oversees the coordination of the college’s ESL and GED programs for Continuing Education.

**Kent Doehr McLeod** (M.A. '00) began the next phase in his ESL/EFL career at EARTH University in Costa Rica in July 2012.

**Robert Fredericks** (M.A. '89) has lived and worked in Oaxaca de Juarez, Mexico for the past 20 years. He provides translations for the publication *Horizontes*. His article *Ciudades Inteligentes y el Destino Humano* was featured in the most recent issue of *Boletin Horizontes* (<http://horizontes18.com/boletin/boletin-horizontes-numero-8/>).

### SOCIAL STUDIES EDUCATION

**Judy Dick** (M.E. '09) is

writing a series of elementary school textbooks for Behrman House Publishers. The books are *Our Community* <http://www.behrmanhouse.com/sample-pages/building-jewish-identity-1> and *Sacred Time* <http://www.behrmanhouse.com/sample-pages/building-jewish-identity-2>.

## BEHAVIORAL SCIENCES

### NEUROSCIENCE & EDUCATION

**Evelyn Arana** (M.S. '09) began a Ph.D. program in Public Health at Drexel University in September 2012.

### PHYSIOLOGY

**Robert Cavalier** (Ph.D. '61) has constructed a new evidenced-based method for faculty development and evaluation. This innovative system supports local faculty culture in allowing instructors to test their assumptions about teaching and write their own survey items for student feedback. For more information, visit [www.instructorperformance.com](http://www.instructorperformance.com).

## COUNSELING & CLINICAL PSYCHOLOGY

### COUNSELING PSYCHOLOGY

**Mari Alschuler** (M.A. '87, M.E. '88) completed a Ph.D. in Leadership & Educa-

tion in July 2012 at Barry University in Miami Shores, FL. Alschuler has accepted a position at Virginia Intermont College as BSW Program Coordinator & Assistant Professor of Social Work.

**Ara Brown** (M.E. '02, M.A. '03) recently earned his Doctorate of Education in Education Leadership from the University of Pennsylvania.

**Alan Gurman** (M.A. '70, Ph.D. '71) retired as Emeritus Professor from the Department of Psychiatry, University of Wisconsin Medical School. He is now Clinical Professor of Psychology in the Clinical Psychology Doctoral Program at the university and Clinical Professor of Psychology/Teaching Faculty at The Family Institute at Northwestern University in Evanston, IL. This coming academic year, he will also serve as a Visiting Professor of Psychiatry at the Harvard Medical School/Cambridge Health Alliance.

### GUIDANCE

**Robert Harcourt** (M.A. '61) has been at the Institute of American Indian Arts (IAIA) for 47 years. The Institute celebrated its 50th Anniversary over the summer. Harcourt serves on the IAIA Foundation Board of Directors.

## CLASS NOTES

### CURRICULUM & TEACHING

#### EARLY CHILDHOOD EDUCATION

**Lorna Edmundson** (M.E. '71, Ed.D. '75) is drawing on her 40 years of experience in leadership roles at six colleges and universities in her new work as a consultant, assisting college presidents in solving strategic problems and internationalizing campuses. Edmundson recently returned from Hong Kong and Nanjing, China, where she made presentations on campus internationalization at two universities and at the conference of Women's

Education Worldwide. She serves as a consultant with Credo Higher Education, Ann Duffield and Colleagues, and the American Bilingual Preschools in Nanjing, China. At the United Nations, Edmundson represents the Georgian Women's Business Association. She remains active in the International Women's Forum and Delta Kappa Gamma Society International. She writes: "Teachers College gave me a great education."

#### EDUCATIONAL ADMINISTRATION

**Edward de Villafranca** (M.A. '03) has started his own business after more than 17 years at the Peddie

School. He spends much of his time in Montreal, where his family is located, but also works with families around the globe. He writes: "It's a very exciting time!"

**Margaret Terry Orr** (M.A. '77, M.E. '77, M.Phil. '79, Ph.D. '79) co-authored *Preparing Principals for a Changing World: Lessons From Effective School Leadership Programs*.

### HEALTH AND BEHAVIOR STUDIES

#### APPLIED EDUCATIONAL PSYCHOLOGY

**Caroline A. Carroll** (M.A. '73) teaches English privately to Chinese children in New

York City's Chinatown and to overseas students via Skype.

#### SPECIAL EDUCATION

**Joan (Mulcahy) Thompson** (M.A. '59) married Colonel John Carl Thompson on Valentine's Day 2011. She served the United States in Japan and Germany, setting up special education and speech therapy classes for the dependent children of the military. She also established hearing testing at base hospitals. While overseas, Thompson hosted her own radio and TV shows and acted in and directed plays. She has written the story of her training days at the Lexington School for the Deaf, which she

attended at the same time she was studying at TC.

### HUMAN DEVELOPMENT

#### DEVELOPMENTAL PSYCHOLOGY

**Jacqueline Esmez** (M.A. '90) is in the process of writing a children's book.

**Richard DiCecio** (M.E. '80, M.A. '66) is Treasurer and Past President of the Columbia University-Teachers College chapter of Phi Delta Kappa.

**Edith S. Marks** (M.A. '70) entered the Board of Education as a teacher and retired 17 years later, having risen to the position of Supervisor of Trainers in Special Education. Upon retiring, she wrote *Coping with Glaucoma* and two years later followed with *Glaucoma: Patient to Patient*. Marks is known worldwide as a patient-expert on glaucoma, having appeared on radio and television. She also writes fiction, including the novel *Ground Cover*. She has served on the Board of the West Side Community Garden in Manhattan. At 88, Marks is still active and serving as Co-chair of the Glaucoma Support and Education Group.

### INTERNATIONAL & TRANSCULTURAL STUDIES

#### ANTHROPOLOGY

**Olga González** (M.A. '96, M.Phil. '96, Ph.D. '06)

authored *Unveiling Secrets of War in the Peruvian Andes* (University of Chicago Press, 2011).

### MATHEMATICS, SCIENCE AND TECHNOLOGY

#### COMPUTING IN EDUCATION

**Mary Larkin** (M.A. '84) has been awarded the *Southern Indiana Review's* Mary C. Mohr Editor's Prize for Fiction. Larkin has been nominated for the Pushcart Prize and the AWP Intro Journals Award. She is the recipient of Hollins University's Andrew James Purdy Award for outstanding fiction and is a Fellow of the Virginia Center for the Creative Arts.

#### SCIENCE EDUCATION

**Ngozi N. Osuagwu** (Ed.D. '87) just concluded a Presidential Visitation Panel on Repositioning Colleges of Education in Nigeria (with a view to improve curriculum and instruction). She would like to collaborate on improving teacher skills "to cope with the 21st Century learner."

### ORGANIZATION AND LEADERSHIP

#### ADULT EDUCATION

#### GUIDED INTENSIVE STUDY

**Douglas Scherer** (Ed.D. '10) has written *Using Reflective Learning in Information Technology Crisis Resolution*, a chapter that will appear in *Contemporary Perspectives on Technological Innovation, Man-*



## NEED WE SAY MORE?

Supporting our students and providing financial aid is Teachers College's highest funding priority. At a time of rising academic costs, decreasing access to student loans and a heightened need for exceptional educators in our communities, scholarship support is essential.

**With your help, the very best students can continue to attend Teachers College and make a positive difference in the world.**

*Make your gift to the TC Fund today.*

Please make a secure donation online at [www.tc.edu/donate](http://www.tc.edu/donate) or contact Colleen Tabor, Associate Director of the TC Fund, at 212-876-4067.

**TEACHERS COLLEGE**  
COLUMBIA UNIVERSITY

*"I am so proud to be able to support the legacy of the Genishi Family Scholarship Fund because I relied on scholarships from my college days onward. I know how important such support is. My estate plans include a gift to the Family Fund."*

—Prof. Celia Genishi, Curriculum & Teaching  
Genishi Family Scholarship Fund and  
Grace Dodge Society member since 2001



For more information on gift annuities, bequests or other planned gifts, please contact:

Louis Lo Ré  
Director of Planned Giving  
212-678-3037 or email: [lore@tc.edu](mailto:lore@tc.edu)



agement and Policy, Volume 2. The work echoes his latest research interest in mindfulness and reflective learning in real-time crisis management. He presented his dissertation-based paper, *Doing the Right Thing: Executive Mentors and Caring Leader Development*, at the 2010 Academy of Management annual meeting. In 2011, he launched the voicesofthecollege.com podcast, an ongoing series of interviews about the leadership journey, with an emphasis on authentic, sustainable, and socially conscious leadership. Scherer is in the process of finding a broader venue to distribute and share these interviews. Meanwhile, he is completing his eighth year as a Vice President at Citigroup, where he leads a technology team for a global clientele. Scherer welcomes discussion on all of these topics at ds356@columbia.edu.

**EDUCATION LEADERSHIP**  
**Christopher Lehman** (M.E. '07) co-authored *Pathways to the Common*

Core: *Accelerating Achievement* (Heinemann 2012) (<http://www.amazon.com/Pathways-Common-Core-Accelerating-Achievement/dp/0325043558/ref=sr>).

**HIGHER AND POSTSECONDARY EDUCATION**

**Huda Bibi** (Ed.D. '90) established a non-profit, non-governmental organization whose mission is to develop the abilities of children and youth so they may succeed. For more information, visit [www.taaheel.net](http://www.taaheel.net).

**Anne Pruitt-Logan** (M.A. '50, Ed.D. '64) has published, *Faithful to the Task at Hand: The Life of Lucy Diggs Slowe* (State University of New York Press, 2012).

**INQUIRY IN EDUCATION ADMINISTRATIVE PRACTICE**

**Roger Wayne Keller** (Ed.D. '07) was featured in the October 2012 issue of *Architect* magazine under the AIA Voices section.



**TIGHT-KNIT IN TOKYO** TC alumni gathered in Tokyo in October to meet Thomas James, Provost and Dean of the College. Alumni Relations is partnering with James to launch a Provost on the Road Series this year. Alumni pictured here prove the bonds to TC and each other are quite strong – even from half a world away. (Left to Right) Stacey Vye (M.A. '02), Arthur Nguyen (M.A. '11), Jennie Roloff Rothman (M.A. '10), Mayu Kate (M.A. '12), Eddie Sanchez (M.A. '12), Linamaria Arroyave Valdivia (M.A. '12), Robert Morel (M.A. '12) and Jennifer Toyoshima (M.A. '11).

ALEJANDRA T. MERHEB

# IN MEMORIAM



**Ernst Z. Rothkopf**

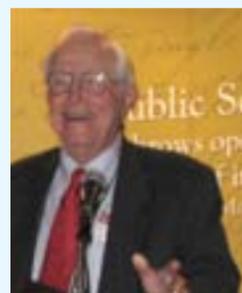
Ernst Z. Rothkopf, Cleveland E. Dodge Professor of Education Emeritus, died in July at age 87. Rothkopf, who had fled Nazi-occupied Austria as a boy, worked at the U.S. Air Force Personnel and Training Research Center, where he helped invent teaching machines and programmed instruction. He subsequently headed the Learning and Instructional Research Department at Bell Labs, studying “mathagenic” activities that promoted students’ ability to process instructive stimuli. At TC, Rothkopf explored the ways that people learn from written text and championed the idea of a national programming language, with a uniform interface for different data, for teachers of core subjects.



**Shirley S. Passow**

Shirley S. Passow, wife of the late TC Emeritus Professor A. Harry Passow and mother of two TC graduates, died in May. Shirley Passow briefly taught English in Erie County, New York, and subsequently became an urban planner and then an attorney who rose to become Deputy Attorney General of New Jersey. Passow, who with her husband was dedicated to improving race relations, generously supported TC’s Annual Fund and a scholarship established in her husband’s honor. With her son, alumnus Michael Passow, she was also a member of the College’s Grace Dodge Society.

FROM LEFT: TC FILE PHOTOS; TC FILE PHOTOS; COURTESY OF JEAN FAUST; TC FILE PHOTOS; COURTESY OF RIGRODSKY FAMILY; PHOTOGRAPH BY ERICA STATION



**Carroll F. Johnson**

TC alumnus and former faculty member Carroll F. Johnson, who presided over the integration of the White Plains, New York, school district – the first U.S. school system to voluntarily institute a racial desegregation plan – died in October at age 99. Johnson, who attended a one-room school in Georgia, was a nationally revered figure whose 1964 integration plan served as a model for desegregation efforts nationwide. As an adviser to school districts across the country, Johnson devised a process that ensured community members a voice in superintendent hiring decisions. During the 1960s and '70s, he also spoke widely on how to handle student unrest, particularly in response to racial issues.



**Irvin Faust**

TC alumnus Irvin Faust, a highly accomplished novelist and short story writer who also served as an influential college guidance counselor in Long Island’s schools, passed away in July at the age of 88. Among Faust’s best-known works are his 1965 short story collection, *Roar Lion Roar* (which drew its title from Columbia University’s fight song), and the novels *The Steagle* (1966), *Willy Remembers* (1971) and *John Dandy* (1994). Faust loved working with students and said that the experience had a great impact on his writing. He earned two master’s degrees and a doctorate from TC.



**Jane Franck**

Jane Franck, director for 25 years of what was then TC’s Milbank Memorial Library, died in May at age 91. Franck significantly added to the library’s depth and influence, purchasing resources for the library’s art collection and establishing its Special Collections Department. Franck presided over the installation of the library’s first computers in 1985, led the first inventory of the library’s entire collection, and forged a partnership that established seven Internet information centers in Kosovo. In 1994, Franck established the Julie Louise Franck Fellowship, an endowed fellowship in special education named for her daughter, a TC alumna who had passed away the year before at age 37.



**Seymour Rigrodsky**

Professor Emeritus Seymour Rigrodsky, who served as chair of TC’s Department of Speech Pathology, Language and Audiology, passed away earlier this year. He was 82. Rigrodsky, who received his bachelor’s and master’s degrees from Brooklyn College and his Ph.D. from Purdue University, was steadfastly committed to helping developmentally disabled children and adults. He served as a consultant to several institutions and veterans hospitals in New York City. Prior to joining TC’s faculty, he taught at the Vineland Training School in New Jersey and the University of Connecticut at Storrs.



**Ulysses Byas**

Ulysses Byas (M.A. '52), a nationally recognized champion for black schools, passed away in early August at age 88. Byas twice dropped out of high school in Georgia but eventually earned a master’s degree at TC and a doctorate from the University of Massachusetts–Amherst. In 1957, as principal of an all-black school in Gainseville, Georgia, he convinced the white public that black schools needed more funding and better resources. Later, as superintendent in Macon, Georgia, he was among the first African-Americans to head a racially mixed district. He later served as superintendent of schools in Roosevelt, New York, where a school was named for him.

— REBECCA CHAD AND HEATHER SMITELLI

## A VERY PATIENT ADVOCATE

**BY THE TIME** her fifth child, Joseph, was born in 1963, Ruth Christ Sullivan (M.A. '53) was an experienced public health nurse who'd run children's health workshops in rural Louisiana. She knew what kids were like – enough to know that Joseph was different.

An extremely agile and bright child, he began rocking at 18 months old. He also stopped talking, screamed all night long and avoided eye contact. "I had seen just about any disability you can think of," Sullivan explains. "What I was seeing didn't fit with anything I had ever seen or heard of." When none of the doctors in her area could enlighten her, Sullivan took her son to a monthly clinic held by an out-of-town psychiatrist who was up on current research. He spoke the words that changed her life:

"Your child is autistic."

The term "parent activist" didn't yet exist, but Sullivan quickly became one. As she met with psychiatrists and read the literature, she discovered that medical wisdom blamed autism on "refrigerator" mothers who did not love their children. Infuriated, she reached out to other parents of autistic children, in 1965 cofounding the Autism Society of America (now known as the [National Society for Autistic Children/Autism Society of America](#)).

Her efforts were sorely needed. Children with autism generally were not welcome in the public schools, which balked at the expense of providing one-on-one attention. "They stayed at home, and they were hidden," Sullivan says. "Either they were in an institution, or the family took care of them – meaning the women, of course, for the most part." In fact, placements were so scarce that when the Sullivans found a school in Huntington, West Virginia, offering classes for kids with autism, they moved there from upstate New York.

Finding a program for her son only made Sullivan more aware of the vast unmet need nationwide. "There was nothing in the law that said schools had to take kids with autism. I knew I had to start at the federal law level."

When Sullivan began lobbying with the Autism Society of America, the organization had so little money that she once camped out at the airport until she could hitch a ride on a private plane headed east to Washington. Her work helped



Raising a child with autism was hard, but getting the nation to understand the disorder really required Ruth Christ Sullivan to take the long view

BY EMILY ROSENBAUM

lead to the passage of the Education for All Handicapped Children Act (Public Law 94-142) in 1975, but children with autism were not protected under the Act. Sullivan continued to lobby, organizing parents to go to D.C. "We had a breakfast one time where we invited all the legislators on important committees," she recalls, "and we made sure to seat them all next to kids and their mothers, so they could see what autism was." Finally, in 1991, the [Individuals with Disabilities Education Act](#) was passed, specifically guaranteeing children with autism the right to an education.

Still, it wasn't until the movie *Rain Man* came out in 1988, starring Dustin Hoffman, that autism really penetrated the national consciousness. Hoffman interviewed Ruth and Joseph Sullivan as he prepared for his role as an adult with the disorder. Sullivan, ever alert to opportunity, suggested that the movie open in Huntington, and Hoffman agreed. [Huntington's Autism Services Center](#), which Sullivan founded, used proceeds from the opening to purchase the first of 13 group homes for autistic adults.

Joseph Sullivan now lives in one of those homes and holds a part-time job. Ruth Sullivan, now 88, retired five years ago after a career that included founding several local and state chapters of the National Society for Autistic Children as well as the organization's National Information and Referral Service. She also led the creation of the [National Association of Residential Providers for Adults With Autism](#) and assisted in founding the National Autism Society of Argentina. Somehow, she also found time to launch and direct the center in Huntington, providing three counties with an increasingly broad range of educational and support services.

Two years ago, Sullivan received TC's Distinguished Alumna Award – the latest in a series of well-deserved honors. She takes walks, goes to movies and tries to sleep late whenever she isn't fielding calls from worried parents or interested journalists. "There were a lot of hard times and very little sleep. I've been trying to make up for it," she says. That, and straightening up around the house. "Most people my age have already done their 25 years of cleaning closets, but I'm just getting to it."

TC

**LAST YEAR**, moments before the first big show of their recent monthlong tour of Central Asia, the dancers of [New York's Seán Curran Company](#) received an ominous warning.

"We were told that the future of modern performing arts in Turkmenistan was on our shoulders," says Elizabeth Coker Girón (M.A. '10), the company's associate artistic director and a current TC doctoral student in [Motor Learning and Control](#).

The caution, from U.S. embassy staff hosting the company in Ashgabat, Turkmenistan's capital, was no exaggeration.

In 2001, the country's eccentric dictator, Saparmurat Niyazov, had banned ballet, opera and other arts deemed inconsistent with national values. Though Niyazov died in 2006, there had not been a single modern dance performance in the country prior to the Seán Curran Company's State Department-sponsored tour.

Raising the stakes further, the current president would be watching the show via a live feed. A massive portrait of him would hang behind the dancers as they performed.

"Of course, that wasn't in our stage set!" says Girón.

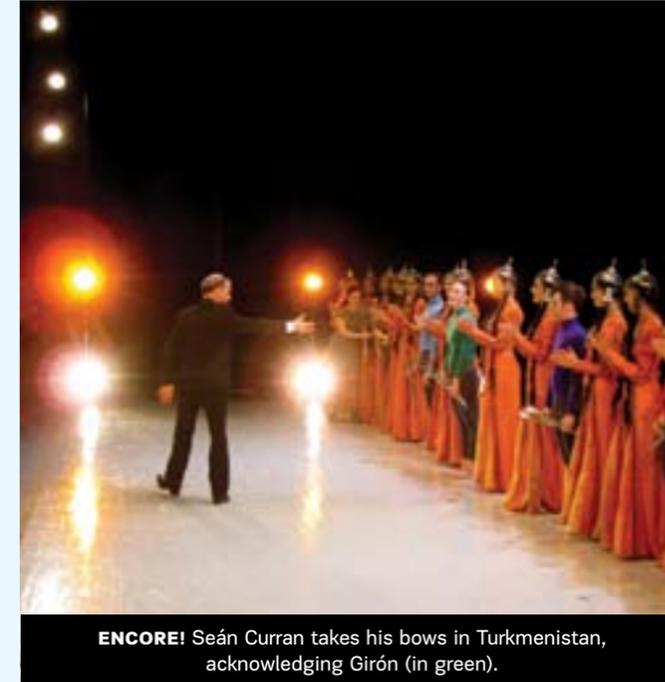
Yet despite the pressure and the odd setting, the performance turned out a greater success than Girón had allowed herself to hope for.

"After the show people were screaming and crying," she says. "They were asking for autographs. People were asking us to sign their bodies!"

The response, from a public starved for new performance, was testament to the power of dance to spark emotions. It underscored the ties between movement and imagination – a relationship that Girón explores as both a dancer and a scientist.

In Turkmenistan, Kazakhstan and Kyrgyzstan, the Seán Curran Company faced an arduous travel schedule and poor working conditions. Theaters were old, and some stages were even pocked with holes. One dancer broke his foot in the final

## PUTTING HER BEST FOOT FORWARD



ENCORE! Seán Curran takes his bows in Turkmenistan, acknowledging Girón (in green).

As both a dancer and a scientist, Elizabeth Coker Girón explores the ties between imagination and movement

BY SIDDHARTHA MITTER

says, with relevance to dance as well.

"I'm interested in how motor imagery changes the way people actually move," she says.

While many of her colleagues form their research questions by working with clinical populations, Girón says she finds her ideas in the studio, interviewing numerous dancers to better understand how motor imagery feeds back into performance in the dance setting.

"Dancers are so smart," she says. "They have a very systematic way of thinking. I think it comes from the way they are trained."

For Girón, who once thought she'd become a physical therapist, the emerging field of dance science is allowing her to fulfill her dream: "I get to be an academic and still be in the studio."

TC

## A FENCER WITH AN EDGE

FOR MANY OLYMPIC athletes, the toughest challenge is to avoid being intimidated by the competition.

Maya Lawrence (M.A. '05) had to fight her impulse to go make friends.

"I found myself wanting to float around and meet as many people from different countries as possible, but I had to remember to keep my focus," recalls Lawrence, who helped lead the U.S. women's fencing team to a first-ever bronze medal in London this past summer.

Education may partly explain that cosmopolitan outlook. Lawrence, who fences épée, grew up in ethnically diverse Teaneck, New Jersey, the daughter of a father who was a sports referee and a mother who was an art teacher (and also a TC alumna). After majoring in political science at Princeton and receiving her master's degree in TESOL (the teaching of English to speakers of other languages) from TC, she worked as a language assistant in a high school and taught English to businesspeople.

Around that time, Lawrence, who didn't start fencing until she was 15 – significantly later than most Olympians – was also rising rapidly in the women's épée rankings, and she needed to train at least four hours a day. With a sponsorship from the U.S.

Fencing Association and the New York Athletic Club, she moved to Paris, where her coach, Daniel Levavasseur, runs an organization called Escrime Sans Frontières, or Fencing Without Borders.

Lawrence says her TC degree has helped her not only support herself as an English teacher abroad but also make the jump to living in a foreign country.

"If you're not used to being in a foreign environment, it can be quite overwhelming," she says. "I wasn't scared to go, and the fact that I had previously been surrounded by people from many countries of the world is one reason why."

In Paris, Lawrence trained with top fencers from Brazil, Venezuela, Tunisia, Australia, Italy and Cameroon. In the summers, Levavasseur also invites international teams, including the Swedes, the Chinese (who took gold in London), the Koreans and the Russians, to take part in his training camps.

That experience, along with having twice recovered from anterior cruciate ligament injuries, gave Lawrence an extra toughness that served her well in London. The American team was



Her familiarity with other cultures helped Olympian Maya Lawrence in London

BY JEANNE JACKSON-DEVOE

young and less battle-tested than many other teams, having won only a couple of medals in international competition during the run-up to the Olympics. Lawrence – at 32, the second-oldest member of the team – was a steadying influence.

"There are some athletes out there, in fencing specifically, who don't handle the bad times as well as she has," says Michael Aufrichtig, the head men's and women's fencing coach at Columbia and Chairman of the New York Athletic Club. "When something goes wrong, she doesn't complain, and she doesn't find excuses. She just tackles it."

As it turned out, Lawrence needed to summon all her internal resources. During the individual competition, she drew a first-round bye and won her first match in the second round against Mara Navarria of Italy, but then lost to another Italian, Rossella Fiamingo. "It was hard to bounce back from that," she admits. "I had to convince myself that, even though I wasn't happy, it was still the best result I had ever achieved."

Then came the team competition, and after losing to Korea, the eventual silver medalist, the Americans found themselves facing Russia, a perennial power. Motivated by their presumptive underdog status, Lawrence and her teammates pulled

out a victory. "No one expected us to get a medal, so it was really great to come out and show them we could do it," she says. "Up on the podium, I felt it was just as special for us as it was for the other two teams."

After a vacation in the south of France, Lawrence was back training by September. Still, she took a break to visit the White House, where, with other Olympic athletes, she met President Obama, First Lady Michelle Obama and Vice President Joseph Biden.

Might another Olympics be in store? All Lawrence knows is that she would like to compete internationally for at least another year. Her goal is to achieve a solid result at the 2013 World Championships in Budapest next summer.

"I feel that all fencers, and probably all athletes, can't really let go until they've accomplished a lot of the things they want to," Lawrence says. "I feel like I could keep going until my body gives out. You have to be kind of obsessive and manic to be an athlete. Letting that go and doing something else can be difficult because you have to find out how to replace it." **TC**

## RUNNING THE NUMBERS

AS A MARATHON enthusiast – she's completed six – Sonali Rajan (Ed.D. '10) can personally attest that she focuses better at work after a solid morning run. But as a behavioral scientist with a particular interest in helping at-risk youth, Rajan, a TC alumna who recently returned to the College as Assistant Professor in the Department of Health and Behavior Sciences, is in constant search of harder evidence connecting the physiological and the behavioral.

"I like statistics," says Rajan, who uses numbers to help determine which kinds of health and behavioral interventions are most likely to succeed. "We have many school-based programs and services – very good programs and services – that only target, for example, drug prevention. There's nothing wrong with that, but realistically we can't be implementing 12 programs in a day. We need to be addressing the overall quality of health among our kids in a very synergistic way."

Rajan coauthored the middle school curriculum for [Girls on the Run International](#), an after-school program that uses this kind of synergistic model. Volunteer coaches guide young girls, ages 8-13, through a series of lessons about health-related issues such as nutrition and bullying, while also getting their feet moving. In designing the curriculum, Rajan also developed a formative evaluation to help predict instructor adherence to different lessons, then used those results to improve the curriculum for the following year. She sees this kind of data-driven research as essential to designing curricula and improving the efficacy of health education programs and other behavioral interventions.

"We have all these programs, but we're not making enough headway" against the societal issues they're designed to address, she says. By using statistical data to inform the development of programs that will address key noncognitive skills (such as decision-making or social and emotional coping mechanisms) in a variety of contexts, Rajan hopes to increase the quality of health, particularly among children and early adolescent youth.

It's no accident that Rajan takes a synergistic approach



New TC faculty member Sonali Rajan employs statistics to identify programs that address overall health in a synergistic way

BY EMILY ROSENBAUM

use stress-reduction techniques they've previously learned in 10-week group sessions.

Rajan explains that she and Leonard's research team are looking to employ interventions that are even more immediate. "We're testing out a series of them – a text message that has a calming message, a video with a peer saying something encouraging, a picture of their baby sleeping to remind them that this will pass."

Much of Rajan's future work will focus on evaluating the feasibility and efficacy of school-based programs that educate teens on noncognitive skills, such as making choices. "The pathologies underlying risky decisions that youth make each day – and how they make them – are very similar across the board," she explains, "whether they choose to overeat or undereat or engage in substance use or to not use condoms. At the end of the day, they're learning to make decisions, and they're learning how to navigate their world." **TC**

## HELPING ALL WOMEN TO HAVE IT ALL

**PEOPLE CONSIDERING NEW** jobs often look for clues that their prospective employer shares their values.

For Danielle Moss Lee (Ed. D. '06), who recently became Chief Executive Officer of the [YWCA of the City of New York](#), the writing was literally on the wall.

That would be the motto of the 154-year-old institution, which is the country's oldest YWCA: "Eliminating racism and empowering women."

"For some people empowering women means only helping disadvantaged women, but I think there are so many areas where women are underrepresented, despite the fact that girls are going to college more," Lee says. "There are still salary disparities, there are still opportunity disparities."

Lee, 43, comes naturally to her sense of mission. Her grandmother grew up in poverty and worked as a domestic at the age of eight. Later, she worked three jobs to support her children and buy her own home.

Lee herself is the daughter of a photographer and a research librarian who once taught in the New York City schools. She attended Swarthmore College and earned her doctorate in Educational Leadership at Teachers College, where she recently joined the College's 125th Anniversary Steering Committee. She credits the College with making her a "huge advocate of public education," adding that "just getting to see the systemic challenges in public education was really eye-opening." She believes teachers, and public education in general, are the current focus of an attack that is "just a distraction that prevents us from looking at systemic inequality."

After beginning her career as an assistant principal at the Grace Lutheran School in the Bronx, Lee held a number of leadership positions at nonprofits, including Assistant Executive Director of the [Morningside Alliance](#) and President and CEO of the [Harlem Educational Activities Fund \(HEAF\)](#), an after-school



As the new leader of the nation's oldest YWCA, Danielle Moss Lee is reaching out to overcome disparities for women at all levels

BY JEANNE JACKSON-DEVOE

program that emphasizes leadership and college preparation.

In the latter job, which she held for a decade, Lee says she learned the importance of young people organizing their own events, such as college or green career fairs, as a way of developing leadership skills.

"Danielle is someone who really has the management skills and understanding and the connections and networks," says Marcia Sells, Chair of the YWCA Board.

Lee, who has a 16-year-old daughter, says her goal at the YWCA is to reach out to women "from all walks of life" to address issues like fair pay and access to health care. She cites a recent, much-debated article in *The Atlantic*, "[Why Women Still Can't Have It All](#)," by Anne-Marie Slaughter, a political scientist at Princeton. "I think what we've failed to do as a country is to ask the question of who defines what 'it all' is," she says. "Any time women start talking about work-life balance, people hear 'weakness,' 'lack of professionalism,' 'not ambitious enough.'"

The YWCA offers after-school programs for children and high school students and a variety of programs for women, such as computer training, child care and workforce development. Lee also wants to involve more young women in leadership and to encourage girls to pursue STEM careers. She believes that any effort to connect with young people must employ social media such as Facebook, and that the

creation of youth councils or youth advisory groups can help with outreach, both to parents and children.

"When I was at HEAF, we worked with an immigrant family that was reluctant to let their daughter leave home and go to Yale," she recalls. "We spent a lot of time talking with the family, and finally they decided to let her go. She graduated with honors and went on to medical school. So making a difference requires learning to listen as much as you talk, and to strike a balance. It's a dialogue, not a monologue." **TC**

**JUST BEHIND THE** security desk at the [Alfred E. Smith public school](#) campus in the South Bronx, a doorway opens onto a vivid expanse of well-tended plants.

It's a green roof, a feature of environmentally friendly design that offers natural cooling to the low-lying building below. The roof provides a host of educational benefits for Nathaniel Wight (M.S. '05) and his students in the year-old [Bronx Design and Construction Academy](#) (BDCA), one of three high schools at the Smith campus.

One hot afternoon this past June, Wight and Noel Cruz, who had just finished his freshman year, showed off a research project that Cruz and his classmate Elton Hollingsworth had presented with Wight the previous month at the [World Renewable Energy Forum](#) in Denver. Both 14 at the time, Cruz and Hollingsworth were the only high school students at the meeting, which included scientists from 54 countries and was keynoted by U.S. Energy Secretary [Steven Chu](#). Cruz had never been in an airplane before.

"Noel and Elton did the whole presentation," says Wight, who earned his TC degree in speech/language pathology and then a master's degree in engineering from Columbia. "They're the primary investigators."

For their presentation project, Cruz and Hollingsworth built four scale models of rooftops, two of them green and two with gravel alone. One of each type also featured solar panels. The boys were comparing the different setups, alone and in combination, which Cruz says have different consequences for cooling, the efficiency of the solar panels, and the biodiversity and health of the vegetation on the green roof.

Along with the full-size green roof and the scale models, Wight and his students have created an entire program of experiments and installations at the site. Their work has been supported by grants from several organizations, including a [Jaffe Service Learning Grant](#) that Wight, who served as a Peace Corps volunteer in the Dominican Republic, obtained through [TC's Peace Corps Fellows](#) program.

## UP ON THE ROOF



Alumnus Nate Wight and his students are creating an environmental literacy lab atop their school in the South Bronx

BY SIDDHARTHA MITTER

"Yesterday we came out and harvested the lettuce," Wight says, pointing to a row of vegetable planters. "We ate salad from the roof for our last staff meeting."

Nearby sat a water pump, a solar panel charging its battery. A weather station measured solar radiation, temperature, humidity and wind speed. Another device compared water runoff from the main area, with its 27 varieties of sedum – a plant adept at retaining water – with runoff from a control zone.

"In this city, if it rains more than one-tenth of an inch, there's sewer overflow," Wight says. "All that gray water gets dumped in the river. Here, 95 percent of the water hitting this roof is being retained."

Working with nature comes naturally to Wight, who grew up in the Pacific Northwest on one of the San Juan Islands, where there was a one-room primary school and no paved roads. Island residents participated in sustainable agriculture and aquaculture practices. Initially

they used diesel generators, but later solar panels and wind turbines, to meet energy demand.

"We lived off the land," Wight says. "Now people always laugh – 'What are you doing here in the big city?' Part of the excitement is to bring awareness of ecological systems to the city."

Cruz, who was born and raised amid the urban bustle of the Bronx, says his parents taught him from childhood to think environmentally.

"My parents have shown me a lot about technology, taught me a lot about being green. I told them I want to be an architect and aerospace engineer, and they're guiding me in that direction. They told me the thing now is sustainable building."

BDCA is a new kind of building trades school, where students prepare not only for the best jobs in their field, but also for higher education. Wight, who is leading development of the science curriculum, gestures at the roof. "The two shouldn't be exclusive." **TC**

## LOOKING KIDS IN THE EYE, EVERY DAY

“IMAGINE A LOUD rap at your door at five a.m., and an un-abashed woman saying, ‘Wake up, I’m driving you to school today so you stop ditching class!’”

Speaking at a memorial service in 2010, Tiffany Griego Crowe was recalling her former teacher Betty Fairfax.

A pioneering African American educator and counselor in the Phoenix, Arizona, public schools from the segregated 1950s until her retirement in 2006, Fairfax got involved in the small details of her students’ lives.

“Betty believed in home visits,” says her sister, Jean Fairfax, a longtime civil rights activist. “She would spend nights, weekends, holidays going to see students in troubled areas. Her goal was to make students responsible for the preparation of their own careers, and she expected accountability from them – as well as from school and district officials.”

Fairfax was a celebrated figure in Phoenix, where she began as a science and physical education teacher at all-black Carver High School in 1950 and, after desegregation, became counselor and Dean of Students at Central High School. She earned numerous civic awards, and in 2007 the Phoenix school district named a new high school after her, the first time it had ever so honored one of its employees.

Fairfax was also a philanthropist who offered grants to encourage students to persevere. In 1987 the two Fairfax sisters promised 92 eighth-graders \$1,000 for each year of college if they finished high school. They made the same commitment to the 500-strong first class at the [Betty H. Fairfax High School](#).

And at TC, where Betty Fairfax came for additional studies in the 1940s after earning her master’s in education from Western Reserve University in Ohio, the Betty Fairfax Professional Development Fund has, since 2003, made several hundred small grants, typically around \$500 each. The grants help minority students and others cover such things as research costs and dissemination.

Equity in education was a life mission for both sisters, says Jean Fairfax, who spent many years as an organizer with the [American Friends Service Committee](#) and the [NAACP Legal](#)



Educator, counselor and philanthropist  
**Betty Fairfax**  
believed in involving herself in students’ lives

BY SIDDHARTHA MITTER

incarcerated youth and help them learn. “That experience stays with me to this day,” Bristol says. “It makes me realize the urgency of my work.”

The second grant covered part of Bristol’s costs to attend and present at the 2011 meeting of the [American Educational Research Association](#) in New Orleans, as it did for others. That’s a benefit Jean Fairfax believes is especially important. “When several TC students are able to attend these important meetings and then come back to campus fresh from that experience, it has to make a real impact on the College,” she says.

Through the fund, scores of TC students also have received some of the motivational strength that Betty Fairfax gave to so many students in Arizona over the years – a gift that she distilled in her trademark phrase: “Now make me proud!” **TC**

[Defense Fund](#) before moving to Arizona to live with Betty in 1985.

“I was involved in cases to dismantle state segregation of public education,” Jean Fairfax says. “But Betty was a counselor, dealing with specific students. Betty had to look the kids in the eye every day.”

In encouraging students to achieve in the face of inequity, Betty Fairfax could point to her own example. The daughter of a social worker and a Cleveland water department employee, she excelled in high school in the 1930s, athletically as well as academically.

At Washburn University in Kansas, she was not allowed to eat in the cafeteria with white students. She finished her undergraduate degree back in Ohio, at Kent State, and started teaching in 1940 in the Cleveland public schools. She moved to Arizona when Phoenix’s black schools recruited for teachers with master’s degrees.

By supporting the professional development of students who work on minority education issues, the Fairfax Fund at TC – initially set up as a challenge grant, with a 3-to-1 match by the college – has been doing its part to foster greater student accountability.

TC doctoral candidate Travis Bristol, who has received two Fairfax grants in the last three years, says he used one grant to cover transportation and supplies for a research project at the jail on Rikers Island, studying strategies teachers use to engage

COURTESY OF JEAN FAIRFAX

# Who should have a will? Everyone.

<b>What will be your legacy?</b>	important document you ever sign	Without a will, the court makes
<b>What you want it to be.</b>	Making a will is fraught with emotion and that’s why most of us put it off for as long as possible. Young or old, married or unmarried, with or without children, you need a will. A will could be the most	and can help avoid future misunderstandings and legal expenses. <b>Where do I start?</b> <b>Planned Giving.</b> The Planned Giving Office at Teachers College can provide you with all the information you need for smart estate planning — wills, bequests, trusts and IRA gifts.



**For information**, please contact Louis Lo Ré at the Teachers College Planned Giving Office at 212-678-3037 or at [lore@tc.edu](mailto:lore@tc.edu).

### OLD DOORS, NEW ERA

To coincide with its 125th anniversary celebration, TC is restoring the 80-year-old exterior entrance doors to Russell Hall. The work has exposed a medallion and shield that says “Teachers College – Incorporated 1892. (Founded in 1887, TC reincorporated under its current name five years later.) The medallion is inlaid with a tree – perhaps the tree of life, a symbol of interconnection and knowledge.

