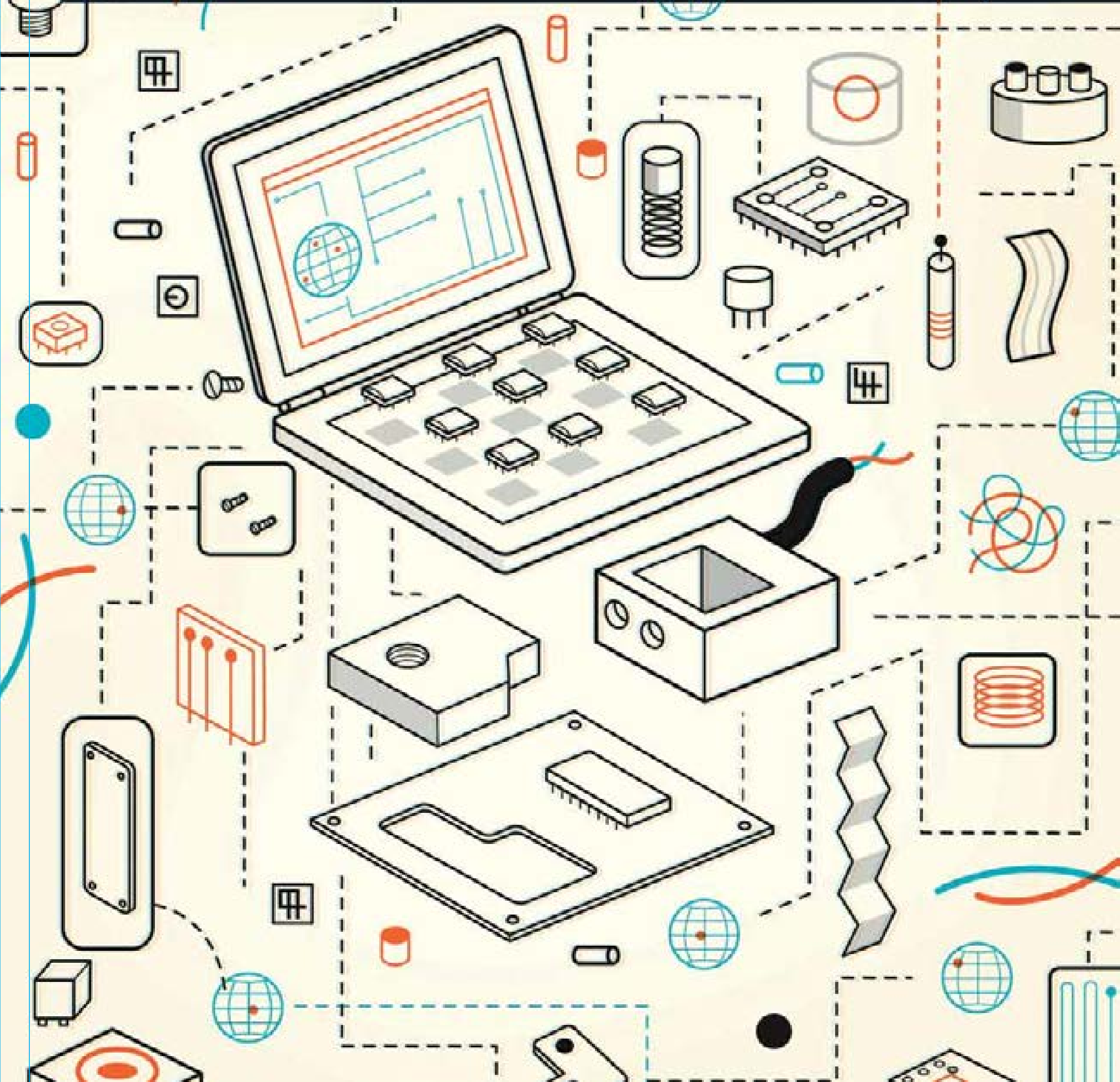
TUCK TODAY

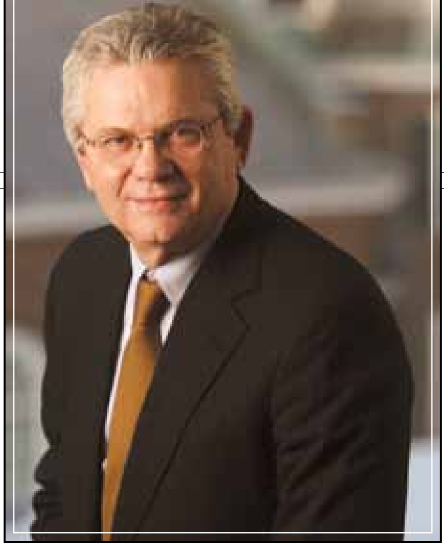
Fall|Winter
12

Tuck School of Business at Dartmouth

News. Ideas. People.




TEAMWORK IS GIVING 110%
TUCK ANNUAL GIVING
No one pulls together like our alumni. Tuck's annual giving rate continues to set the standard among business schools. And because every gift to Tuck Annual Giving supports Tuck's world-class programs, faculty, and students, you'll be doing your part to keep Tuck at the front of the pack too.
Tuck School of Business at Dartmouth
603-646-6477
tuck.dartmouth.edu
www.givetotuck.org


MARK WASHBURN

LETTER FROM THE DEAN

PLANNING FOR EXCELLENCE

At Tuck, we believe that self-reflection is an important part of learning. This applies to our MBA students, who gain valuable insight into their strengths and weaknesses as leaders during their two years with us. It also applies to the institution itself, where, through periodic strategic reviews, we can assess the impact and effectiveness of our activities and chart a direction for the future. We are engaged in such a process now, as is Dartmouth, and have working groups looking into three broad areas of strategic significance: the MBA program, Tuck's faculty, and its overall strategy.

The MBA program is the heart of what we do at Tuck, and we continually strive to advance it. But periodically, we also look at its key features and assess whether the time is right for major enhancements. For the current strategic review, we are concentrating on the second year—while also considering refinements to the first-year core curriculum—and are exploring the desirability of additional programming around global experiences and leadership skills. We are also looking at ways to give more students access to our hugely successful Research-to-Practice Seminars.

These enhancements are best achieved by having the "right" faculty—in scale *and* quality. And with 50 full-time faculty members, we are the smallest of the top business schools with whom we compete. While we will always be smaller in scale relative to our peers, our future success in a rapidly changing higher education landscape depends on our ability to achieve a minimum viable critical mass of faculty. No other top MBA program can match the level of access our students have to thought-leading faculty and we want to continue to lead in this most important marker of overall quality. Increasing our depth and breadth of faculty expertise will ensure that we do, and that Tuck continues its stellar trajectory of achievement. In line with our solar system model, in which the MBA is the center of our universe surrounded by other programs, we will consider adding appropriate ancillary programs that allow us to fund faculty growth beyond what the MBA program itself can support.

As always, we approach these deliberations with the success and welfare of our students and alumni in mind. Your support is vital to everything we do at Tuck, and we continuously strive to earn it.

Paul Danos

Paul Danos

DINODIA PHOTO

FEATURES

ON THE WEB tuck.dartmouth.edu/today

For exclusive news, multimedia content, and more

CONTENTS

Tuck vs. Vermont Law School,
South Royalton, Vt.

LAURA DECAPUA

TUCK TODAY

Volume XLII Number 2

Editor
Ed Winchester

Senior Editors
Kirk Kardashian
Catherine M. Melocik

Class Notes Editor
Catherine M. Melocik

Photo Editor
Laura DeCapua

Web Developers
Rebecca Waters

Tuck Today Advisory Board
Paul A. Argenti
David Celone
Erin Cochrane T'97
Paul Danos
Sydney Finkelstein
Robert G. Hansen
Kiki Keating
Steven Lubrano T'87
Penny Paquette T'76
Christopher Trimble T'96

Design
Flannel

Published Twice a Year by
Tuck School of Business at Dartmouth
Office of Communications
100 Tuck Hall, Hanover, NH
03755-9000 USA
603-646-3558
tuck.today@dartmouth.edu
www.tuck.dartmouth.edu/today

myTUCK

mytuck.dartmouth.edu

TUCKIES WANTED SEARCHABLE JOB POSTINGS

Nordstrom, Inc., Volvo Car Corp., and Temasek Holdings Ltd. are among the dozens of companies with recent listings on the Tuckies Wanted job board. The myTUCK-hosted job database allows you to sort postings by job function, industry, and location and have a daily digest delivered to your inbox.

TALKING POINTS FACULTY COMMENTARY

From McDonald's decision to put calorie counts on its menu to whether Huawei might participate in the Chinese military's cyberwarfare efforts, Tuck faculty offer insight on the news of the day in myTUCK's Talking Points section. Recent posts include Professor Peter Golder's take on Grey Poupon's controversial—and snobby—new social media strategy and Professor Ron Adner's analysis of the iPhone 5 launch.

MY ACCOUNT FASTER STATUS UPDATES

Keeping up to date with your classmates is getting easier, with changes to the My Account page that allow for faster edits to your personal information. As always, your personal data is kept private and secure in the myTUCK system.

VIDEO MAX OUT YOUR ONLINE NETWORK

Having a robust LinkedIn profile can boost your online career network. But there's much more you can do to maximize your web of virtual contacts. From finding hidden job postings in LinkedIn to sorting contacts in Excel to reaching Tuckies who graduated decades ago, myTUCK's Networking section has a wealth of career-related advice. Resources include slides from the Tuck Alumni Services Guide to Social Media, links to the web's best social networking articles and a LinkedIn presentation to Tuck. You can also use the Find a Classmate search tool from the Tuck Network or link to the 23,000-strong Dartmouth Career Network to help leapfrog the next rung on the career ladder. When you find the right spot, take a look at myTUCK's Negotiations page for a list of tips and a compensation checklist to make sure the offer meets your needs.

ROB BOSS

NEWSROOM

news || events || people

A Giant Passes

James Brian Quinn, William and Josephine Buchanan Professor of Management, Emeritus, **1928-2012**

BY ALEXANDRA HALL

THE PASSING OF JAMES BRIAN QUINN ON AUGUST 28, AT AGE 84, has reminded all who knew him, worked with him, and learned from him of his deep influence on their lives.

Quinn was known widely as one of the great legends of Tuck in the last half century—a much-beloved teacher, and a much-lauded authority in the areas of strategic planning, entrepreneurial innovation, and the management of technological change. He created Tuck's Business Policy and Technology and Policy courses, as well as one of America's first-ever courses on entrepreneurship; served as chair of the Academic Committee for President Clinton's Domestic Policy Review on Innovation and Productivity; and was a three-time McKinsey Award recipient.

And yet, despite these and so many other accomplishments, to most all who worked with him, he insisted on being known simply as Brian.

"He was one of the warmest and most approachable people you could find," says Penny Paquette T'76, assistant dean for strategic initiatives at Tuck, who knew Quinn as her professor and, later, as a colleague at Tuck. "Even so," she says, "It took me six months to feel comfortable calling him Brian rather than Professor Quinn because I was in such awe of him and the breadth and depth of his knowledge and intellect. I will miss him and what he represented."

Students loved (and sometimes feared) him for his rigorous classes, while faculty admired him for bringing real-life business scenarios to his students—and vice versa. "He took what was in a textbook and made it real," says Brian Deevy D'77, T'78, now CEO and chairman of RBC Daniels. "And he balanced his pragmatic feedback with personal connection. He was always critical and always sharp. But also always a wonderful person."

"There was never a student willing to enter his Business Policy class unprepared," laughs Jack Tankersley T'74, founder of Meritage Funds. "For two reasons: the most obvious was that all exams were unannounced; the second was that no one wanted to disappoint him."

While both are certainly true, it's the surprise tests that still haunt the dreams of some of Quinn's students. In that very Business Policy course for second-year students, he

TUCK PHOTOGRAPH ARCHIVES

practiced what he called the "Blue Eagle"—an unannounced test designed to keep every last student ready to deliver critical analysis on the spot. "I still have nightmares about it," laughs Deevy. "He never had scheduled exams. Instead, you'd show up at his classes and never knew on which day he'd pass out the blue books and you'd have a large part of your grade based on whether you were prepared to dissect a case study in them or not. We'd all try to spot him before class, to see whether he was carrying blue books with him, but I think he hid from us so we couldn't see. I'm getting sweats just thinking about them now."

But as Peter Volanakis D'77, T'82 points out, it was that class that first taught him to think like a senior-level businessman. One of the largest lessons, he said, was "the ability to sort and synthesize information from many sources, functions, and perspectives—often conflicting and confusing. He created classroom experiences that illustrated the fear, uncertainty, and doubt that surround major business decisions or strategic directions." And much of that ambiguity drove students to better define not just businesses, but themselves. "He helped me become comfortable with the untidiness of business," continues Volanakis. "He used his class as a call to action, to lead, to take risks personally, to be the person to define reality. I remember him once saying, 'If it isn't you who leads, then who?'"

As Bill Hart T'67 has written to his classmates since Quinn's passing, "He taught us how to think—he had little tolerance for loose logic, zero tolerance for BS. He also had a way of instilling in us a sense of responsibility for our commitments—for being prepared.... He never gave you the answer—just made sure you were asking yourself the right questions."

Moreover, as much as Quinn brought the real world into his classroom, his teachings continued beyond those walls. "He maintained such an incredible network of alumni of the MBA and executive education programs that connected him to the corporate world," observes Paquette. "And with those connections, he could be very effective in his research. They made it possible for him to learn firsthand about management practices for case writing and qualitative research."

Tankersley, who worked for a time as Quinn's research assistant, heartily agrees. "There was no Google back then; we had to write in to get annual reports and check facts, and we did it all by hand," he says. "Watching Brian understand a business from publicly available materials and make case studies out of them, it just provided me with such insight into that process."

So strong was his personal and professional connection to his students that Tankersley and a group of fellow students actually made Quinn an honorary member of their class of 1974. At the ceremony, they all surprised Quinn by showing up wearing custom-made bowties, all in Dartmouth green, yet in the shields were the initials JBQ.

Then, years later at Quinn's retirement, roughly 50 of his former students from various classes joined together to announce the creation of the J. Brian Quinn Professorship in Technology and Strategy at Tuck. "We were going to offer to buy him a car," chuckles Tankersley. "But he very quickly convinced us to spend a lot more money on something longer lasting for him." According to Deevy, another member of that group of 50, the decision was an easy one. "What do you do to thank a guy who's put that kind of time and effort in for you?" Deevy says. "It was a no-brainer for any of us to do."

Quinn also helped guide countless students into—and often through—their careers. "I was having a hard time sorting through offers and directions," says Volanakis, who then went to Quinn to discuss his possibilities. "He explained that in his experience, people were most successful and happy when their personal values were aligned with their company's. So he helped me articulate and explore those in some detail. Nowadays, everyone has value and mission statements, but 30 years ago the notion of values alignment didn't exist."

A 1949 graduate of Yale, Quinn earned an MBA from Harvard in 1951 and a Ph.D. from Columbia in 1958. He began teaching at Tuck in 1957, and continued until his retirement in 1993. He was the William and Josephine Buchanan Professor of Management, Emeritus. Quinn's list of accomplishments (both academic and personal) is lengthy and venerable, from fellowships from the Ford Foundation (1963-64), the Alfred. P. Sloan Foundation (1967-68), and the Fulbright Exchange program (1973) to international assignments as dean of the MBA program at the International University of Japan. In 1979, he helped open trade with China as part of an American team under the Commerce Department. He advised the new Gorbachev government on establishing a market economy in the Soviet Union in 1989, as one of the representatives of the National Academy of Sciences.

"He was a giant in the classroom, filling it with his enthusiasm, his intelligence, his knowledge, and his respect for the students."

—Jack Tankersley T'74, founder of Meritage Funds, former student of Professor James Brian Quinn

Getting On with Governments, Globally

As states play a larger role, new center focuses on intersection of business and government.

BY JASON MCLURE

It was early 2009 and the global financial markets were teetering. Zachary Segal D'98, T'06 moved from San Francisco, Calif., to Washington, DC, to work at the center of the fray: the Treasury Department's $700-billion Troubled Asset Relief Program (TARP), the bailout fund designed to stabilize the markets.

When he started work in the catacomb-like basement of the historic Treasury Building, next to the White House, Segal was struck by Treasury's close interaction with financial market players. "I remember walking down there in the basement and thinking, 'It's the auto companies on line one, it's a significant financial institution on line two,'" says Segal, a former Goldman Sachs investment banker.

Tuck's new Center for Global Business and Government aims to help prepare students for experiences like Segal's. Headed by Matt Slaughter, the Signal Companies' Professor of Management and a former member of the president's Council of Economic Advisers, the center focuses on preparing managers to better understand and shape the interactions between business and government, from Pennsylvania Avenue to Paris and beyond. Such a background is increasingly important in a world economy where national governments play a growing role in mediating global economic interactions—and where state-owned enterprises from emerging powers such as China and Brazil now compete internationally.

"The role of governments in direct and indirect ways regarding what global business can and should do is a major, major consideration for business leaders around the world," says Slaughter, who also serves as associate dean for faculty at Tuck. "There is a lot of interest in this issue of the intersection of global business and global governments, particularly as billions of people living in BRIC countries and beyond advance into the global economy."

As a successor to Tuck's Center for International Business, the new organization oversees a group of MBA fellows, providing students with the opportunity to travel internationally and conduct research with faculty. It also supervises a robust speaker series with a focus on international business and government, with guests such as Cynthia Carroll, Anglo American's former chief executive officer; Fred Hochberg, chairman and president of the Export-Import Bank of the United States; and Gary Chu, president of General Mills' Greater China subsidiary.

Additionally, the center produces case studies on global business challenges and organizes special events such as last year's Africa Highlight Week at Tuck, which featured speeches and networking events with leading African business executives, nonprofit managers, and academics. The center also organizes Tuck's successful faculty-led international Learning Expeditions, a half-term elective course. These trips of about 10 days feature intensive immersion in the business environment of countries as diverse as Israel, South Africa, and Japan.

"A lot of global learning has to happen, not just intellectually but experientially," adds Slaughter. "These Learning Expeditions are taking some of the best traditions of Tuck and translating them into a great educational experience around the world on global business topics."

The expeditions are meant to prepare MBA students for careers like that of Dan St. Martin T'02, director of Deere & Company's combine product line for Russia and the Commonwealth of Independent States. St. Martin was previously general manager of the farm-equipment manufacturer's joint venture in China, where it partnered with a state-owned company.

There, he quickly discovered that being in business with the Chinese Communist Party was quite different from selling agricultural equipment in traditional markets like the U.S. and Canada. The Chinese government was focused not just on selling agricultural machinery but in promoting the mechanization of agriculture through subsidies, a project that outlined what types of machinery the joint venture should produce.

"A government's objectives and strategies won't necessarily be at odds with business, but they're going to be clearly different," says St. Martin. "Similar to the game of chess, if you don't know the rules of the game you're going to lose."

Segal, who left his position as director of strategic initiatives and credit market programs in Treasury's Office of Financial Stability last year to return to the private sector, says that the leadership, management, and analytical skills he learned at Tuck are as vital to work in government as they are in the private sector. The salaries may be lower, but there are other forms of compensation, he adds. "It was really a highlight of my career," says Segal. "There is psychic income that cannot be underestimated."

Slaughter says that the increasing importance of international business and government relations is unlikely to recede soon. "Whatever country you come from, you will need to think about how to operate globally, both in terms of who your customers are going to be and who your colleagues are going to be," says Slaughter. "The demand in the world in companies and governments for leaders who can understand and try to resolve [global financial] complexity has never been higher." Learn more at www.cgbg.tuck.dartmouth.edu.

International Forum 2012

Faculty and students from Tuck and four other international business schools joined business leaders from multinational companies including Siemens, McKinsey & Company, Standard & Poor's, SAP AG, and John Deere in Paris November 16-17 for the Council on Business and Society's inaugural International Forum. Formed in 2011, the council is a partnership between Tuck, the business school at the University of Mannheim in Germany, ESSEC Business School in France, China's Fudan University School of Management, and Japan's Keio Business School. It aims to marshal member schools' combined research and teaching resources to foster debate about the role of business in an increasingly complex and interconnected world.

Speakers at this year's forum, which explored fundamental questions surrounding how companies are governed and led, included Tuck professors Pino Audia and B. Espen Eckbo and second-year students and Council Fellows Kevin Tay and Marret Arfsten, who gave a presentation on the media's impact on executive effectiveness. "The wide variety of keynote speeches, plenary panels, and small breakout discussions dealt with everything from shareholder power and responsibility to the German model for corporate governance," said Dean Paul Danos. "There was something for everyone." In January, Fundação Getulio Vargas–EAESP, a top Brazilian business school, will become the sixth member of the council. The next Council on Business and Society conference will be held in Tokyo in 2014.

—Jason McLure

PASSAGES

J. Peter Williamson, Laurence F. Whittemore Professor of Finance, Emeritus (1929-2012)

TUCK ARCHIVES

Emeritus Professor J. Peter Williamson died peacefully on July 30 in Hanover, N.H., after a brief illness. He was 82. Born and raised in Toronto, Williamson attended Trinity College School in Port Hope, Ontario, and graduated in 1952 from Trinity College at the University of Toronto with a bachelor's degree in maths, physics, and chemistry. He attended the Harvard Business School, where he received his MBA as a Baker Scholar and his DBA, and then received his LLB from Harvard Law School.

Williamson taught for several years at HBS and joined the Tuck faculty in 1961. He taught many finance courses at Tuck over the next 30 years and retired in 1992 as the Laurence F. Whittemore Professor of Finance, Emeritus.

Williamson loved teaching as well as mentoring young entrepreneurs. He also served on the board of The Common Fund and worked for many years for The Institute for Quantitative Research in Finance. After his retirement, and into his 80s, he continued to work as an expert witness, testifying in utility cases in the U.S. and Canada. He was a prolific author of books and journal articles. Williamson was married to Sybil Benton for 54 years, and together they raised three daughters.

A service to celebrate his life was held at the St. Barnabas Church in Norwich, Vt., on August 5 and was followed by a reception at The Dartmouth Outing Club. In lieu of flowers, donations to Heifer International were suggested.

CENTERS AND INITIATIVES

Revers Brings Energy to Tuck's MBA Program

In Spring 2011, a group of Tuck students met with senior associate dean Robert Hansen to persuade him to add a course on energy to the curriculum. They came bearing a well-organized presentation, as if they expected Hansen to be skeptical. But they might as well have been preaching to the choir. "You don't have to convince me," Hansen told them. "I know that you're right."

Daniel Revers T'89 had been thinking the same thing. As a co-founder of the energy investment firm ArcLight Capital Partners, he knows that the global energy industry is a \$6-trillion behemoth that touches all sectors of the economy. But it's not only large; it's also incredibly interesting. "Think about the complexity of extracting a molecule of gas from a well in Oklahoma and turning a light switch on in your office," says Revers. "There isn't a more complex product-delivery system out there," he says. In short, it's the perfect thing to study in business school.

Hansen granted the students' wish and brought a visiting faculty member to campus that fall to teach a course on energy finance and risk. It was a big hit. Revers has taken a giant step further, endowing the Revers Professorship of Business Administration and forming the Revers Energy Initiative Fund. Both are devoted to exploring the business of finding, delivering, and selling energy. "There is really nothing out there like this," says Revers. "And if there's any place that can take on something like this and produce something of value, it's Tuck. The scale of the school is right to create customized programs and build the effort incrementally."

LATIN AMERICA

South of the Border

Militaries aren't the only organizations putting boots on the ground to further their strategic objectives. A year after successfully launching its European Advisory Board to leverage alumni connections on the continent, Tuck has instituted a Latin American Advisory Board as well.

The new board, says executive director of development Erin Cochrane T'97, "gives us friends in the region dedicated to helping us be more effective in admissions, job placement, student projects, research, and building our brand."

The board—comprising 18 Tuck alums with strong ties to Latin America—met for an inaugural meeting September 20 in Sao Paulo, Brazil. Assistant Dean Penny Paquette attended. "It was a lively group," she says, and one that quickly focused on a goal of "broad brand building in the region" with special emphasis on building relationships with specific companies and countries.

"In the past," Paquette says, "while we have been strong in some aspects of our relationships with companies, we have not broadened the relationship. Now we can concentrate on filling out the matrix of things we can do with them."

MARK WASHBURN

GIVING

Class of 1987 Hits 99 Percent

Tuck's 2012 annual giving campaign matched the record giving rate of 2011, with more than 70 percent of active alumni donating. That total was bolstered by the class of 1987's 99 percent giving rate in honor of its 25th reunion. "The 25th reunion giving committee simply would not settle for less," says John Torget, director of development and annual giving.

Much of the success is due to the efforts of the roughly 600 alumni volunteers who solicit on the school's behalf. "With this group of 600 volunteers we're able to reconnect with people's passions and they remember their experience at Tuck," says Torget.

Alumni contributions totaled $5.7 million during the 2012 campaign, about the same level as 2011. Those figures are up from 2009, when the financial crisis caused contributions to dip below $5 million after reaching a record $5.9 million in 2008.

"In 2011, we really pushed to increase the giving rate," says Torget. "For us to come back and match that a second year in a row, we're incredibly proud and grateful."

MARK WASHBURN

CENTERS AND INITIATIVES

Tom Naughton Comes Home

As the founder of NeoCarta Ventures, an investor in early-stage IT companies, there is nothing Tom Naughton D'89, T'96 enjoys more than listening to entrepreneurs and handing them money to pursue their ideas.

Now Naughton brings that passion to his alma mater as the new executive director of the Tuck Center for Private Equity and Entrepreneurship, a resource for students, alumni, and practitioners on the inner workings of an economic engine that drives global innovation and productivity.

Naughton got his start in private equity while a student at Tuck. "I was vaguely interested in marketing when I came here," he says, "but then I was invited to an interview with a private equity firm." He got the job and then parlayed it into a full time position in General Electric's private equity group, investing in companies that would show NBC (then owned by GE) how to grow with the Internet. After three years at GE, Naughton struck out on his own and formed NeoCarta Ventures, in Boston.

When the chance came to work with Colin Blaydon, the William and Josephine Buchanan Professor of Management and faculty director of Tuck's Center for Private Equity and Entrepreneurship, Naughton knew the job was the perfect fit. "I think what I bring is some real-world experience and enthusiasm," he says. "And because I still sit on some boards of companies my firm has invested in, I can bring that practical knowledge too."

CENTERS AND INITIATIVES

Allwin Initiative Evolves

This past summer, the Allwin Initiative for Corporate Citizenship became the Center for Business and Society. According to executive director Pat Palmiotto, the name change is "an opportunity to express the breadth of programming we have generated over the last decade, and that the support of the Allwin family has enabled us to move from an initiative to a center that can support faculty research."

One such faculty member is Andy King, a professor of business administration who specializes in industry self-regulation and teaches the core course Competitive and Corporate Strategy and the elective Business Strategy for Sustainability. In addition to his research, King will partner with the center to host the 2014 conference for the Alliance of Research on Corporate Sustainability.

As part of the center's broader reach, it will work with the new Council on Business and Society, a global alliance of business schools fostering a greater understanding of how business leaders can better serve not just shareholders but stakeholders at large. "This is an exciting way in which we can help our students begin to see how the world's challenges are met with different approaches," Palmiotto said, "in the U.S. and elsewhere."

With a stronger faculty connection and more global opportunities, Palmiotto sees the center as a place that can provide both an overview of the intersections of business and society and opportunities for students who want to dig deeply into particular issues, such as environmental sustainability, educational reform, and nonprofit corporate partnerships.

"The questions this center deals with are messy," Palmiotto said, "and there are no clear answers. We want our students to be prepared to deal with them and lead the conversation."

tuck.dartmouth.edu/today NEWSROOM

IDEAS

teaching || research || opinion

MARIA ZUCCA

ILLUSTRATION BY MARIO ZUCCA

FACULTY OPINION

Give Me Your Skilled, Your Educated

SKILLED IMMIGRANTS HAVE LONG SUPPORTED U.S. JOBS AND LIVING STANDARDS. DESPITE THIS, U.S. POLICY TOWARD THEM HAS BEEN FAR TOO RESTRICTIVE.

By **MATTHEW SLAUGHTER,** ASSOCIATE DEAN FOR FACULTY AND SIGNAL COMPANIES' PROFESSOR OF MANAGEMENT

PRESIDENT OBAMA THRUST immigration back into the spotlight earlier this year with his executive order halting deportations for certain young illegal immigrants. In the context of America's jobs crisis, however, this is the wrong immigration issue to focus on. Our most pressing immigration problem will march across platforms at American colleges and universities this spring—skilled foreign-born graduates whom we do not adequately incentivize to stay and work here.

At Tuck Investiture last year, I proudly read the names of 277 MBA graduates. The Tuck class of 2012 was 35 percent foreign-born, representing countries from Australia to Zimbabwe. Many of these graduates chose Tuck over peer schools abroad because they aimed to apply their world-class U.S. education in the U.S. labor market. The same is true across academic fields. Today nearly 42 percent of all U.S. doctorate-level science and engineering workers are foreign-born.

Won't more immigrant graduates staying in America mean fewer jobs for Americans? No. On the contrary, they will create jobs for Americans—in large corporations and new companies alike. Large companies that hire skilled immigrants tend to hire more U.S. nationals as well. Bill Gates has testified that for every immigrant hire at Microsoft, an average of four non-immigrant employees are hired.

As for start-ups, a 2007 study by researchers at Duke and UC Berkeley found that 25 percent of all U.S. high-technology firms established between 1995 and 2005 had at least one foreign-born founder. In 2005, these new companies employed 450,000 workers and generated over $50 billion in sales.

Skilled immigrants have long supported U.S. jobs and living standards. They bring human capital, financial capital, and connections to opportunities abroad. Despite all this dynamism, U.S. policy toward skilled immigrants has long been far too restrictive. The H1-B program, which accounts for nearly all of America's legal skilled immigration, imposes a cap of 85,000 visas annually—65,000 with at least a bachelor's degree and 20,000 with at least a master's degree. For years, demand far exceeded the supply. In 2007, the year before the financial crisis struck, more than 150,000 H1-B applications were submitted on the first day.

Since the financial crisis, America's immigration policy has further tightened. Buried in the American Recovery and Reinvestment Act of 2009 was the Employ American Workers Act, which restricted H1-B hiring at any U.S. company that received government support from either TARP or new Federal Reserve credit facilities. This act foolishly hurt hundreds of finance companies by limiting their talent pool precisely when they needed new talent the most.

I saw the damage done by this misguided legislation firsthand. Within days of the president signing it into law, a number of U.S. banks reneged on job offers extended months earlier to foreign-born MBA students. Six Tuckies were soon in my office, confused and upset at suddenly facing unemployment. By graduation only one had secured employment in America, after randomly winning a visa lottery. The other five all secured jobs—but all abroad. All five said they would probably never return to the U.S. because of the Employ American Workers Act. The long-term result? Lost ideas. Lost jobs. Lost taxes. These five graduates exemplify the worrisome reality that America's attractiveness is waning for talented immigrants from dynamic countries. In the past decade, the share of doctoral-degree recipients in science and engineering from China and India who report definite plans to stay in America has been falling. A recent survey by Duke University researcher Vivek Wadhwa found that 72 percent of Indian immigrants who returned to their home country said that opportunities to start their own businesses were "better" or "much better" there than in the U.S. For Chinese immigrant returnees, the figure was an alarming 81 percent.

We need to reverse this trend if we hope to overcome our jobs crisis, the depth of which is sobering. The 111 million private-sector jobs in America today are the same number there were 12 years ago. Leaders in Washington can keep fiddling with haphazard fiscal incentives or temporary proposals whose political rationale trumps economic ones. Or they can instead rebuild the foundation of new-business formation, innovation, and investment that ultimately creates jobs. Opening U.S. doors much wider to skilled immigrants educated here should be a cornerstone of any pro-growth policy. It is a graduation gift that the Class of 2012 and all of America deserve.

tuck.dartmouth.edu/today IDEAS

FACULTY Q&A

Core to Corporate

Q&A WITH STEPHEN POWELL, PROFESSOR OF BUSINESS ADMINISTRATION AND FACULTY DIRECTOR OF THE FIRST-YEAR PROJECT

By **CATHERINE M. MELOCIK**

Most Tuck alums know Professor Steve Powell as their Decision Science professor from their first year at Tuck. But current students and recent alums also know him in his capacity as faculty director of the First-Year Project (FYP) core course, a term-long, project-based course that provides students with the opportunity to apply what they learn in the first-year core to a real-world problem in a corporate, nonprofit, or entrepreneurial project. Powell redesigned and constantly refines the current FYP course to ensure that students gain practical experience in project management and tailor their learning from the project course to their individual goals.

Why have an experiential learning project as part of the core curriculum?

The MBA is a professional degree. Our students are going out into the working world full of really valuable theories and applications that we give them, but it's all secondhand experience. Even a case study, by definition, is secondhand. And there are some really important skills that can't be taught in the classroom. We want our students to get out of the classroom and confront the real world, but do it within a structure that is focused on learning. Students often like to think that the goal of FYP is pleasing the client, but that's a means to an end, not the goal. I always remind myself and my team that the goal here is to educate our students. It ties back into research that says humans aren't going to learn in a systematic, dependable way without structure.

Can you talk more about that research?

Experiential learning is a challenge. There's some research that motivates a lot of what I do, as a "designer" of the FYP course, which shows that humans do learn from experience, but typically not very well. One problem is that we are very good at generalizing from our experience, but we often generalize erroneously. The second problem is that we don't learn the things we need to learn dependably unless we have some assistance. That's a lot of the motivation for how I've structured the course. It's experiential learning, but it's within a structure—we know what we want students to be able to do differently by the end of the course and we structure the course to achieve those goals.

What else was the motivation for the course structure?

One of the skills we teach in the course is project management. We've built a structure around the same process that every good project manager uses—precise project scoping, careful work planning, storyboarding, and so on. Those are three specific skills that are in high demand wherever work is organized around projects, including consulting companies. Another is to get students in a situation where they have to apply their tools—what they learned in the classroom, anything else they knew prior to working on the project. I also think you learn by trying something out and seeing that it fails. Once students get deeply into a project and see what really happens, they might see that something doesn't really work the way they thought it would. And another motivation is about learning to use experts. That's a combination of respecting expertise and knowing what expertise is—how to find it, how to use it, how to talk with experts.

It sounds like there's some humility involved in this.

It's a mixture of humility and self-confidence. Because you've got to have some self-confidence to go into an expert's office and ask them a question but be confident that you're not going to be blown away by the answer.

How are the projects structured?

There are five students per team, and students choose their own teams. Teams also choose their own projects, and both the team and the project are subject to our approval. We require that each team select an engagement manager, and each team works with a faculty adviser, who meets with them weekly and coaches them through the process. After the project is complete, and the presentation has been made to the client, students write a team debrief, which includes a section from each of them individually, answering a set of questions that basically asks, What did you learn from the process? Not What did you learn about marketing or statistics, but What did you learn from the project process and the teamwork interaction? We do that

MARK WASHBURN

because the research shows that people learn better when given the opportunity to reflect. And to reflect seriously, you really have to write something.

Is there an ideal FYP client or project?

Sure. The ideal project would be one that is a real business problem that's timely, one that the client genuinely wants the answer to and will act on. But it can't be too big or too small. If it's really mission-critical, or too big and vague, then it can't be done in 10 weeks. Second, the ideal client will be available to the team—engaged, in on the phone calls. And they need to make their data available, because the students will be doing original research—surveys and analysis, structured interviews, or intense spreadsheet modeling.

You also work with an FYP team of your own, right?

I do. I directly manage staff and a team of 10 faculty advisers for the course. Becky Rice is the director of the FYP. She takes the lead in working with potential clients to identify good projects and with students to match them to projects that serve their goals. Her experience in career development is invaluable—she really gets students to think about how to use the FYP for their own personal and career goals.

We also have support for the teams from other groups at Tuck, including development and alumni services and the Career Development Office. Gregg Fairbrothers D'76 and Joaquin Villarreal T'08, manager of Tuck's Entrepreneurship Initiative, have been terrific in working closely with me on developing the e-ship component of the FYP. And I work closely with Pino Audia and Richard McNulty, from the Center for Leadership, to learn how FYP can support what they do in their work with students.

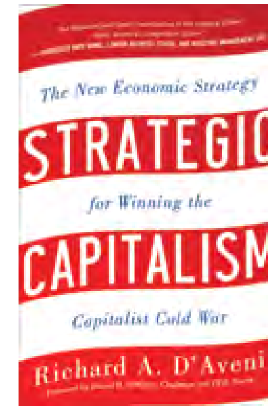
How does leadership develop out of the FYP?

A different kind of self-awareness comes out of FYP. Accepting criticism is a new thing for some people. FYP isn't a uniform love-fest. I really want this course to confront students in the spring term. And say, OK, now we're taking it up a notch. You're more on your own, you have more freedom, you are going to be expected to be creative. Expectations are very, very high. But you're here at Tuck to become excellent.

tuck.dartmouth.edu/today IDEAS

RESEARCH

How Should the U.S. Compete With China?



A NEW BOOK BY RICHARD D'AVENI, THE BAKALA PROFESSOR OF STRATEGY, LAYS OUT THE STEPS FOR AN AMERICAN RESURGENCE.

By **MARCIE GOOD**

During one of Richard D'Aveni's recent research trips to China, a senior official of the Communist Party gave him an alarming insight into his nation's way of thinking about business with Americans. "He told me, 'The idea that American companies are going to come here, take major market share, and exploit us the way the British did is ludicrous. It will never happen,'" recounts D'Aveni, the Bakala Professor of Strategy at Tuck.

The official was referring to the 19th-century Opium Wars, which were fought for the right to sell the illegal drug to the Chinese. After the Chinese were defeated, the British forced them to sign unfair trade treaties with Western nations that gutted China's economic power. "China thinks in terms of centuries," D'Aveni warns. "It has histories of dynasties that have come and gone for thousands of years."

His new book, "Strategic Capitalism: The New Economic Strategy for Winning the Capitalist Cold War" (McGraw-Hill, 2012), sets out to bust the myth that the United States' current business relationship with China is good for the U.S. economy. For example, studies done by the American and the European Chambers of Commerce show that two thirds to three quarters of firms that open shop in China don't show any greater growth or profit than they make at home. "But once you've spent a billion dollars building your plant there, you're in," D'Aveni says. "What do you tell Wall Street, that you closed the factory and that your growth promises were fantasies? Your company stock would collapse."

The book gives examples of companies lured to China by the enormous market and then ambushed by a system with legal, financial, and industrial policies weighted against them. In 2003, General Motors Corporation filed suit against Chery Automobile Company Ltd., accusing the Chinese state-owned enterprise of copying its Chevy Spark with its Chery QQ. The cars, GM claimed, "shared remarkably identical body structure, exterior design, interior design, and key components." The suit was settled in 2005 with GM promising not to sue Chery again, and the Chery QQ continues to outsell the Spark four to one. Under Chinese law, there's no such thing as intellectual-property theft.

For D'Aveni, such conflicts were a sign that China was following its own rule book, to the detriment of U.S. firms expecting a level playing field. This is something D'Aveni had seen before, in other contexts. As the originator of the term hypercompetition, D'Aveni first proffered the idea that today's firms compete by intentionally disrupting their competitors' business models. He has also written about the phenomenon of "commoditization," in which competition among firms is so fierce that the only differentiating feature among products is price. "I started to realize two things," he says. "Commoditization is coming largely from China, and their low prices are the core problem for many U.S. companies. Secondly, that hypercompetition between corporations has now become competition between capitalist systems."

D'Aveni visited China several times, interviewing many Tuck alumni now working there in a variety of industries. They connected him with government officials, Chinese billionaires, and U.S.-China joint ventures. He concludes that we're competing in an economic Cold War, and the book lays out a shocking case: our trade deficit with China has grown 27 times since 1990; the U.S. has lost leadership in many industries; it depends on China for supplies in critical industries; and it owes China $1 trillion. The Chinese are winning with their own system of "managed capitalism," with such key elements as protection of home markets, government subsidies for domestic industries, theft of intellectual property, lean social programs, artificially low interest rates, an artificially undervalued currency, state-owned enterprises acting in the interests of the Chinese government, cyberwarfare, and unfair labor practices.

In sum, the system works for national growth rather than profit maximization of firms. "The Chinese have invented a new form of capitalism that is undermining the strengths of democracy and our capitalist system," D'Aveni explains.

The first step for the U.S. to compete with the Chinese is to rebuild its own financial health: bring down the debt-to-GDP ratio and stop depending on the Chinese for money and goods. D'Aveni advocates a shift that Americans will find very difficult: stop thinking ideologically and start thinking strategically. Our laissez-faire, social-market form of capitalism is obsolete. A new strategic-capitalist system should develop specialized technocratic organizations to set industrial policy, similar to the Federal Reserve Board or the Federal Aviation Administration.

"People who are against the government ought to take a look at our successful industries: aerospace, avionics, telecommunication, satellites, computer software, operating systems, applications, pharmaceuticals, agriculture,"

tuck.dartmouth.edu/today IDEAS

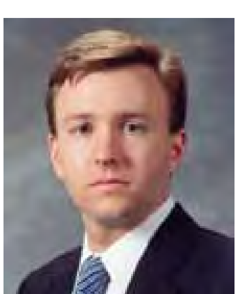
NEWS

New Faculty at Tuck

In July, Tuck welcomed **GIOVANNI GAVETTI** to Tuck as associate professor of business administration. Gavetti came to Tuck from Harvard Business School, where he served as associate professor of business administration from 2000 to 2006. Before Harvard, he taught at The Wharton School at the University of Pennsylvania, where he received his master's and doctoral degrees, and at the Università Bocconi, where he earned his bachelor's degree. Gavetti's areas of expertise include cognition, evolutionary theory, organizational learning, and strategy and strategic change, and his research focuses on the cognitive foundations of strategy. He currently serves on editorial boards for the European Management Review, Industrial and Corporate Change, and Organization Science.

PROFESSOR RON ADNER was promoted to full professor and now serves as professor of strategy and entrepreneurship. Adner has been at Tuck since 2008 and teaches both the Entrepreneurship and Innovation Strategy elective and the Research-to-Practice seminar Strategy in Innovation Ecosystems—one of the first RTP seminars at Tuck and one by which Adner, Dean Danos noted, "through his outstanding work in that format, helped [to] define the RTPs as a unique hallmark of Tuck's learning environment." Adner's research in the technology-strategy area focuses on the demand-side perspective on industry and technological evolution, choices by firms in starting and abandoning innovation initiatives, and the availability of other product offers to consumers. His book *The Wide Lens:* A New Strategy for Innovation was published in Spring 2012.

At Tuck since 2007, **PROFESSOR PINO AUDIA** was promoted to full professor and is now professor of management and organizations at Tuck. Audia designed Tuck's current leadership curriculum and developed its Center for Leadership, where he serves as faculty director; he also teaches the core Personal Leadership course. Dean Danos noted that the course "has been a very successful and key part of Tuck's curriculum since its inception." Audia also brings his leadership research to his teachings in Tuck Executive Education programs and the Master of Health Care Delivery Science program. His research studies how organizations and organizational populations evolve, and his core course focuses on helping students learn about their strengths and weaknesses as leaders and the leadership demands of specific organizational settings.



PROFESSOR JONATHAN LEWELLEN was promoted to full professor and serves now as professor of finance. Lewellen teaches the core Capital Markets course and teaches in the Tuck Business Bridge Program; he is also a research associate for the National Bureau of Economic Research in their asset-pricing program. In announcing the promotion, Dean Danos said, "In his teaching, Professor Lewellen combines capital markets evidence with theory and principles toward the goal of helping students make good financial decisions, at both a personal and a corporate level." Lewellen's research focuses on the cross-section analysis of stock returns, the time-series behavior of stock prices, and the determinants of corporate investment and financing decisions. He has been at Tuck since 2005.

PROFESSOR ROBERT RESUTEK was promoted to associate professor of business administration. Resutek joined Tuck in 2008 and works in the financial-accounting area. He worked to develop the Financial Reporting and Statement Analysis elective, which is designed to build on the core Financial Accounting course with a grounding in accounting research. Dean Danos noted that the Financial Accounting course Resutek teaches for Dartmouth undergraduates "has been a huge success, filling two sections of students and giving those students a solid foundation to enter the business world and to further understand business in general." Resutek's research focuses on how accounting information is interpreted by investors and how that interpretation affects equity prices.

MANAGING THE FBI

A 25-YEAR VETERAN OF THE FEDERAL BUREAU OF INVESTIGATION, **SEAN JOYCE T'87** HAS SEEN HIS SHARE OF CRIMINALS. NOW SECOND IN COMMAND AT THE 36,000-EMPLOYEE AGENCY, JOYCE SAYS HIS BUSINESS SCHOOL EDUCATION HAS NEVER BEEN MORE IMPORTANT.

BY KATE SIBER D'02

> "The management end of running a business—dealing with people in particular and thinking through business processes and methodology—really help build robust processes in government."
>
> – MARK GIULIANO

SEAN JOYCE WAS IN A SAILBOAT FLOATING OFF THE CARIBBEAN ISLAND OF BONAIRE WHEN A PLANE APPEARED OUT OF THE DUSK. BUZZING OVERHEAD, THE AIRCRAFT SWOOPED DOWN AND DROPPED A SERIES OF PLASTIC-WRAPPED BALES INTO THE CHURNING OPEN SEAS. JOYCE AND SEVERAL OTHER FBI AGENTS CLAMBERED ABOARD A ZODIAC TO RETRIEVE THE CONTRABAND. THE BALES WERE STUFFED WITH LARGE QUANTITIES OF COCAINE.

It was 1993 and Joyce was a special agent for the FBI's Miami Field Office, working on Colombian narcotics cases. For months, he had cultivated sources with connections to the powerful Cali cartel. With their help, Joyce tracked a major cartel figurehead through the streets of Miami. Finally, he and his team arranged for what they called a "test load" by working undercover with cartel representatives in Colombia, and sailed to designated coordinates in the Caribbean Sea for the operation.

After unloading the bales of cocaine onto a Coast Guard boat that night, the team returned to Miami and waited. More than a week later, the cartel, unaware of the trap, divulged the drop-off location at a house in a Cuban neighborhood. Determined not to let the cocaine "walk," agents hid tracking devices in the bales, outfitted the delivery cars with kill switches, and surveyed the drop-off location with fixed-wing planes. In the evening, agents, including Joyce, swarmed the house and hauled away the drug traffickers, which led to arrests of two of the Cali cartel's most powerful operatives.

Sean Joyce knows it was at least partly his penchant for adventure that led him on an unusual career path from business school to the Federal Bureau of Investigation, first as a case agent in Texas in 1987 and now in higher management as second-in-command. After one year in his position as deputy director, he is finding that his background in business has never been more critical to success.

Growing up in Brockton, Mass., Joyce focused on having a career in business. So after attending Boston College and working at Raytheon and Arthur Anderson—before it became Accenture—it was no surprise that he landed in business school. Between his years at Tuck, Joyce went to

Boston for an internship at Merrill Lynch Capital Markets. There, he specialized in sales and trading, and by the end of recruiting had job offers from both Merrill Lynch and Goldman Sachs. He declined both.

"I guess I took a right turn," he said. "I enjoyed business but had a different calling."

Instead, he found a position working as a case agent for the FBI in Texas, investigating cases involving fugitives, bank robberies, kidnappings, and extortions. From there, his resume reads more like a good detective novel than a CEO's curriculum vitae. In Miami, he tracked down Colombian drug lords as part of the office's SWAT team, and in Quantico, Va., he served on the FBI's Hostage Rescue Team, where he helped find Mir Aimal Kasi, who murdered two CIA agents in 1993, in Pakistan. After working as a legal attaché in the Czech Republic and Slovakia, the FBI international liaison in the region, he moved to Washington, D.C. There, since 2007, he has climbed the ranks with an unusual rapidity. In just four years, he went from running the FBI's International Operations Division as assistant director, and then oversaw counterterrorism, counterintelligence, weapons of mass destruction, and intelligence programs as the executive assistant director of the FBI's National Security Branch. In September 2011, Director Robert Mueller chose him as deputy director of the bureau.

[redacted] "I guess I took a right turn. [redacted]
I enjoyed business but had a different calling."
[redacted]

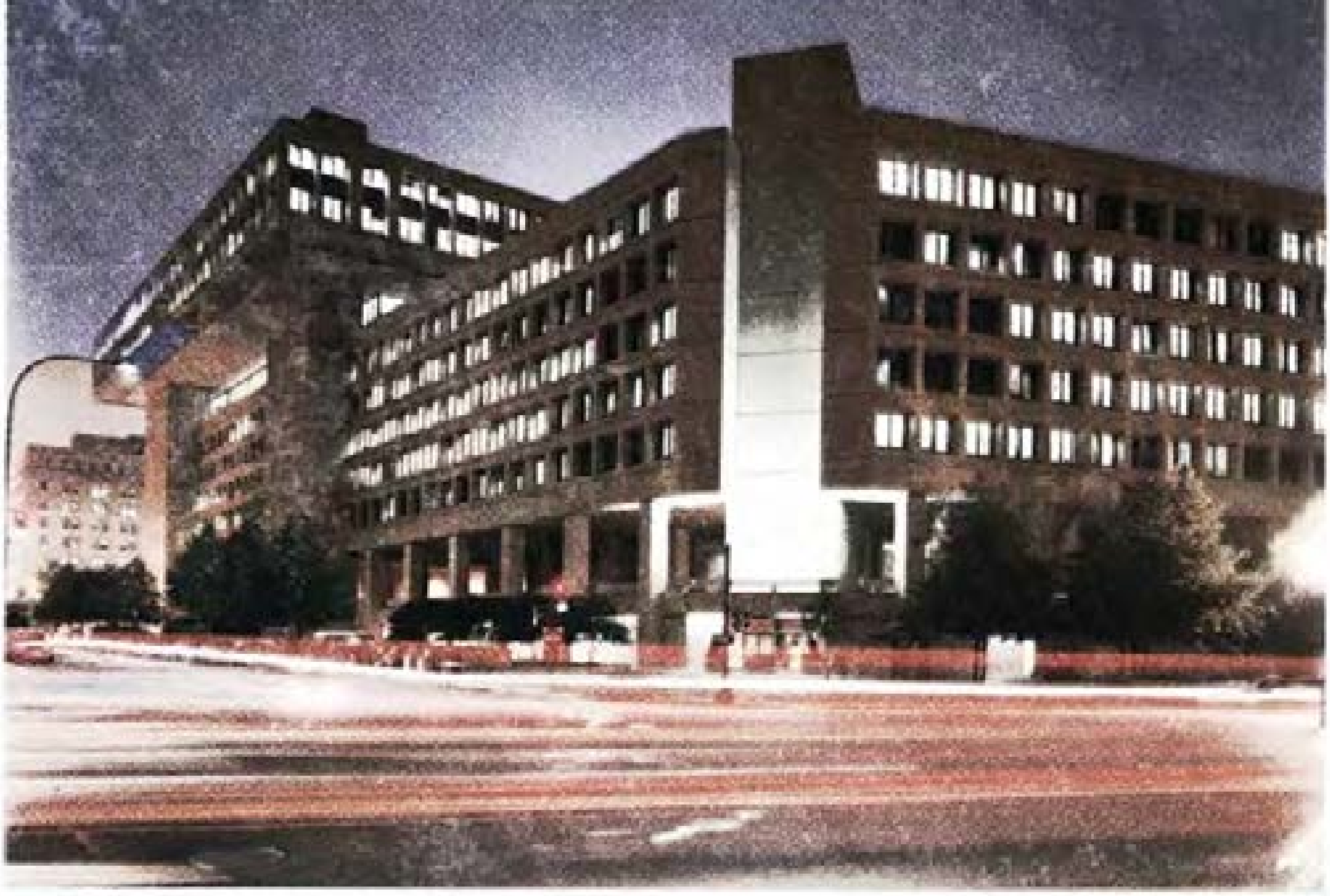
Now Joyce's duties are largely administrative and most of the doors he opens he doesn't have to knock down, though his field experience complements a deep knowledge of the inner gears of the FBI. Under the director, Joyce now runs an organization of nearly 36,000 people, with 56 field offices and a budget of $8 billion. In terms of management, the job is surprisingly similar to running a very large business—but with potentially much higher stakes.

In recent years, threats have evolved, especially in the FBI's counterterrorism efforts, with more homegrown violent extremists, splinter terrorist groups, and uncertain power shifts as a result of the Arab Spring. There are also, of course, threats that come out of nowhere, such as the July shooting at a movie theater in Aurora, Colo., or the August shooting at a Sikh temple in Oak Creek, Wis.

Meanwhile, the mission of the FBI has evolved to meet the changing threat. A stronger impetus for organization-wide changes came on Sept. 11, 2001. Barely a week had passed after Director Mueller assumed office—on September 4—when the planes crashed into the twin towers, changing everything.

Before 9/11, the bureau was still largely reactive, rather than collecting and analyzing intelligence to thwart potential adversaries. Even some key elements of the agency's infrastructure were basic. For example, on that terrible day in 2001, there were situations in which the FBI's antiquated computers were unable to send emails with attachments, so some photographs of the hijackers arrived by FedEx. The FBI needed a drastic overhaul, and the new director, Mueller, was charged with the tremendous task.

In addition to focusing on upgrading the FBI's computer systems, Director Mueller called for a reengineering of FBI structure and operations to closely focus the bureau on the prevention of terrorist attacks, countering foreign intelligence operations against the U.S., and addressing



cybercrime-based attacks and other high-tech crimes—all the while ensuring that the bureau remained dedicated to preserving civil rights.

Much of Joyce's job involves overseeing the massive changes the FBI is still implementing to become an intelligence-driven organization. One not-so-simple goal is to establish the sprawling agency as the leader in cyber operations, something exemplified by Next Gen Cyber, an initiative focused on combating computer intrusions and network attacks.

It starts with basic training. Under Next Gen Cyber, every special agent will be able to perform basic technological tasks, like unloading the data from a cell phone on-site. On a higher level, the FBI has established Cyber Intrusion Task Forces and Child Exploitation Task Forces in all 56 field offices to spearhead the fight against hacking and Internet-related child prostitution and pornography. There is also the National Cyber Investigative Joint Task Force, which is how the FBI coordinates efforts among governmental agencies to prevent cyber attacks, such as hacking that could knock down an electrical grid in a major city, detonate a bomb remotely, or deliver malicious code to millions of Internet users.

Other initiatives more manifestly require business savvy. The FBI not only created a Directorate of Intelligence but streamlined the communication and coordination of intelligence across the bureau and its divisions. With a strategic execution team, the bureau standardized the structure of all field offices and established dedicated teams for intelligence collection and reporting.

"The management end of running a business—dealing with people in particular and thinking through business processes and methodology—really help build robust processes in government," says Mark Giuliano, Executive Assistant Director of the National Security Branch of the FBI. "Even in the FBI, it's critical that we not just build a personality-driven legacy. It's important to find a way to analyze how we are performing versus both our mission and how we are spending the taxpayer's dollar. I know Sean has tried very hard to do that."

Joyce has also helped the organization widely implement the Balanced Scorecard, a tool typically used by large businesses and organizations to improve communications and evaluate performance against strategic goals. Another initiative, the Leadership Development Program, fosters comprehensive career development at every stage, from running enrichment programs for young special agents to helping retiring executives find suitable jobs outside of government.

"I really think Director Mueller and many of the executives before me have done a phenomenal job, but we're still changing and hopefully I have played some role in transforming the FBI into what we call a threat-based intelligence-driven organization," says Joyce. "That's where I think a lot of my Tuck background has truly been an asset as far as really dealing with people, managing change in an organization, actually implementing and executing change, and effectively communicating that change."

Joyce himself is quick to downplay his own accomplishments over the last few years and defer credit to the director and his team. He is the first to admit that he has made every mistake in the book—and learned from them. But he is also driven, passionate about the mission of the FBI, and, by his own admission, impatient. It is perhaps this impatience and this demand for excellence that helps Joyce motivate his team to make the barrage of institutional changes the FBI is still implementing.

"He's very driven, focused on problem-solving, and a very practical person," says Gordon Dyal T'87, chairman of investment banking at Goldman Sachs and a friend of Joyce's. "With his skill set, he obviously could have done a lot of things. I'm not surprised that he's been successful in the FBI, both as an individual agent as well as in management."

Today, the positions of director and deputy director at the bureau are jobs in which success is measured, largely, by one overarching metric: whether or not we are attacked again in the same way we were attacked on Sept. 11. It's difficult to imagine how to live with the weight of such a burden, and perhaps unsurprising that Sean Joyce practically lives at work. But he has faith in his team and faith in the systems and structures that he has helped build.

Still, he goes to bed every night knowing that the first thing he will do in the morning, when he arrives at the monolithic J. Edgar Hoover Building in Washington, D.C., is listen. He'll listen to a litany of real threats and false alarms—sometimes difficult to distinguish—with the attorney general and top executives from the FBI and CIA. To an outsider, the FBI's work inevitably appears to be a maze of unanswerable questions, and it's difficult to imagine living in peace under these conditions. For Sean Joyce, it's not. In his confident Boston accent, he simply says, "I sleep pretty well at night."

[redacted] "A lot of my Tuck background has truly been an asset as far as really dealing with people, managing change in an organization, and actually implementing and executing change." [redacted]

OPERATIONS' Intricate Science

FOUR TUCK FACULTY MEMBERS OFFER RESEARCH-BASED INSIGHT INTO THE VULNERABILITIES THAT EXIST IN THE GLOBAL SUPPLY CHAIN, HOW THEY IMPACT CONSUMERS, AND WHAT FIRMS CAN DO TO PROTECT THEMSELVES.

BY MICHAEL BLANDING

ILLUSTRATIONS BY HARRY CAMPBELL

"THE PROBLEM WAS THE GAME HAD CHANGED OVER TIME, BUT MANAGEMENT METHODS WERE STILL TRAPPED IN AN EARLIER TIME. THAT'S A COMMON STORY WITH LARGE COMPANIES."
—M. ERIC JOHNSON

IN THIS AGE OF GLOBALLY INTEGRATED PRODUCTION, PEOPLE ARE USED TO GETTING WHAT THEY WANT. MOST CONSUMERS, HOWEVER, HAVE ONLY A VAGUE UNDERSTANDING OF THE VAST NETWORKS OF SUPPLIERS INVOLVED IN THE PROCESS.

In search of profits and efficiency, companies have made a science of supply chains, connecting networks of suppliers in far-flung parts of the planet in order to build and bring their products to market. "In the past 10 years, supply chains have become much more global and more disaggregated," says Brian Tomlin, associate professor of business administration at Tuck. "There are many, many more companies involved between raw materials and consumers, which has created a much more complex supply chain."

It all works incredibly well—until it doesn't. Like a breeze from the proverbial butterfly's wings, a disruption anywhere can send ripples up and down the supply chain, affecting products, companies, and even entire industries. When there are breaks—natural disasters, contamination, labor shortages, or internal coordination issues—it not only wreaks havoc on the production lines of well-known brands, it can also directly affect the availability of products we find on the shelves. Here, four members of Tuck's operations faculty offer their research-based insights into the vulnerabilities that exist in the supply chain, how they impact consumers, and what firms can do to protect themselves.

AUTOMOBILE MICROCONTROLLERS IN JAPAN

The magnitude 9.0 earthquake and tsunami that hit Japan in March 2011 was a disaster of nearly unfathomable proportions. In addition to the damage at the Fukushima-Daichii nuclear power plant, the quake hurt factories that produce electronics and other goods. While the major Japanese automobile manufacturers emerged from the tragedy relatively unscathed and were able to resume production in short order, their recovery was limited by damage to just one critical link in the supply chain.

Most vehicles produced today are rolling computers. Every vehicle brought to market now has about 100 tiny computer chips called microcontrollers that run everything from airbag deployment and engine control to the on-board navigation system. Luxury vehicles have about double that. And many are made in a single plant by a single company: Renesas Electronics. Through consolidation and technological innovation, Renesas has managed to corner the market on automotive microcontrollers, producing 40 percent of them worldwide. The jewel in the company's manufacturing system is its Naka plant, located just north of Tokyo, which also bore the brunt of the earthquake's wrath.

"What happened is that the earthquake shook the building and dislocated one wall from the rest of the factory," says Margaret Pierson, an assistant professor of business administration at Tuck, who co-wrote a case study on the company last year. While that might not seem like major damage, consider that the complex microchips in automobiles are manufactured in an environment cleaner than your standard hospital operating room. One small piece of dust in the wrong place can ruin a production run. "You can imagine what it means when a wall is knocked off," Pierson says. Following the earthquake, the building had to be repaired and the clean room environment reestablished before the machines could be turned back on and damage to these tools assessed. The tools were then recalibrated and test runs of product were created before Naka could begin to fill orders again.

Many major automotive manufacturers relied heavily on Renesas and were hit hard by shortages. In Japan, Nissan lost $434 million, Honda $550 million, and Toyota $1.2 billion, suffering a four-point loss in market share as plants sat idle waiting for the crucial components. (Renesas itself posted a loss of nearly $800 million in 2011.) Shifting production to another plant until Naka got back on line wasn't feasible for some of the products manufactured there. "Every time there is an upgrade in technology the chip size is reduced and the production lines at Naka were the most advanced within Renesas," explains Pierson, "the production equipment costs increase because the production processes must be performed on a smaller scale, requiring more sensitive tools." A factory like Naka might need hundreds of tools costing in the neighborhood of $1 million each, along with a few costing upwards of $50 million. This puts the total value of a single production line close to $1.5 billion, as Pierson notes in the Harvard Business School case, "Renesas Electronics and the Automotive Microcontroller Supply Chain."

"It may not be feasible to duplicate all that equipment across two facilities, even though a backup option would certainly have been very helpful following the disaster," says Pierson. "By late 2011 many boards were taking a fresh look at these cost tradeoffs."

While Renesas mounted a tremendous recovery effort, manufacturers were faced with hard choices as they experienced short-term inventory shortages. In many cases, they sacrificed optional components such as navigation systems, making them scarce for consumers. The companies that fared the best had designed their vehicles such that they could use the same parts across many models—allowing for flexibility in which models they produced when their inventory of parts became limited. Similarly, companies that invested in more backup inventory had an easier time managing the supply disruption.

Flexibility and inventory both play a role in risk management, adds Brian Tomlin. "There is a trade-off between cost and resiliency. Companies need to ask themselves, 'How resilient do I want to be versus how cost-efficient do I want to be?'" In cases where companies can source components from multiple suppliers or rely on backup suppliers in times of emergency, it might make sense to keep inventories low. However, when companies rely on very specialized or expensive parts, they do so at their peril. "What really good companies do is look at the various components in their supply chains and ask if they can be reasonably sure they can rely on a backup," he says. "If they can't, they better invest in some inventory."

BRIAN TOMLIN
ASSOCIATE PROFESSOR OF BUSINESS ADMINISTRATION

DISK DRIVES IN THAILAND

The 2011 fall monsoon season saw the worst flooding in Thailand in 50 years. More than two-thirds of the country was inundated in the deluge, which destroyed ancient temples, disrupted rice production, and shuttered hundreds of factories. The computer hard drive industry was hit particularly hard. Over the past decade, drives have become increasingly more commoditized, so companies have specialized in particular components. These were assembled by a series of subcontractors. With such an interconnected production process along the supply chain, it made sense from a cost and efficiency perspective for the companies to be situated near one another. At the time of the floods, nearly half of the hard drives in the world were produced in Thailand, and most of them by two companies: Seagate and Western Digital. (Shortly before the floods, the two companies had announced a planned acquisition of the hard drive units of their largest competitors, Samsung and Hitachi, though these deals were not completed until later the same year.)

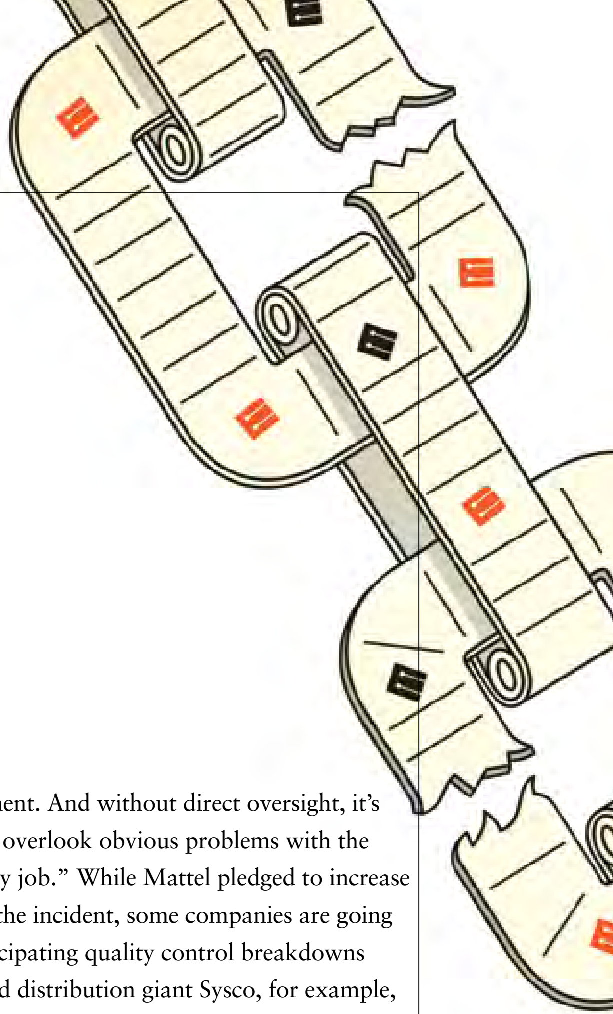
The same consolidation that led to efficiency, however, also made the industry vulnerable to large-scale disruption. Dozens of factories were submerged or lost power, paralyzing crucial segments of the supply-chain. One single industrial park near the ancient Thai capital of Ayutthaya was home to a half dozen separate subcontractors; when power was knocked out, the government ordered a mandatory evacuation, bringing production to a halt. Disk drive prices doubled as output shrank by 30 percent, just in time for the Christmas retail season. Some computers were simply unavailable, while others increased in price, and the effect spread to other companies, such as Google, which relies heavily on hard disk storage. While the price increase has since plateaued to a 10–40 percent jump, it is not expected to return to pre-flood levels until 2014.

Making the situation worse, says Pierson, was a phenomenon she calls "recovery congestion." Just as companies compete for customers and suppliers, they also compete for resources when disasters occur. "There is a limited amount of emergency assets, such as diesel generators and construction equipment, as well as a limited infrastructure over which to move these assets around," says Pierson. "As factories become concentrated in one place, they compete for necessary resources for recovery when a disaster occurs. In the case of Renesas in Japan, many automotive companies as well as the tool manufacturers, were able to assist in the plant's recovery efforts. In the case of the Thai floods, Western Digital's assembly lines were damaged as well, so they did not have the same ability to assist in their suppliers' recovery efforts."

In this case, Seagate was better able to weather the storm. Not only had it acquired a firm that operated outside the region, but its manufacturing plant in Thailand was located on higher ground less affected by the rising waters. In the last quarter of 2011, Seagate shipped more than double the number of hard drives than its rival—some 47 million compared to 29 million—allowing it to pass WD as the number one firm in the market. "This competitive upside to being able to recover faster can be difficult for firms to forecast," says Pierson, "but following these and other recent supply chain disruptions many firms are taking a second look at their supply chains not just as a cost center but also as a source of strategic advantage."

> "MANY FIRMS ARE TAKING A SECOND LOOK AT THEIR SUPPLY CHAINS NOT JUST AS A COST CENTER BUT ALSO AS A SOURCE OF STRATEGIC ADVANTAGE."
> —MARGARET PIERSON

MARGARET PIERSON
ASSISTANT PROFESSOR OF BUSINESS ADMINISTRATION



MATTEL IN CHINA

Supply-chain disruptions don't just affect the availability of products. They can also have an impact on quality. Such was the case in 2007 when a child became sick from lead poisoning after playing with a toy car produced by Mattel. The toys were eventually found to have contained nearly 200 times the legal limit for lead, and the company was forced to recall more than 18 million toys worldwide for toxic components and other problems. Seemingly overnight, Mattel went from being the most respected toy company in the world to the least. Angry and concerned parents steered clear of Mattel products in the run-up to Christmas and the company posted a $30-million loss for the quarter.

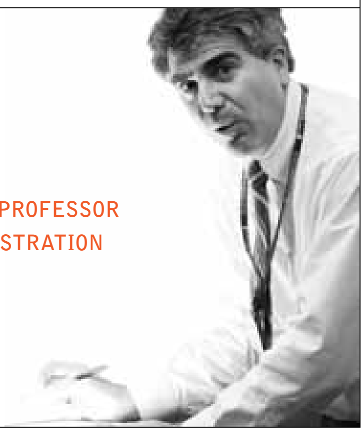
M. Eric Johnson, associate dean for the MBA program and Benjamin Ames Kimball Professor of the Science of Administration, says Mattel should have known better. "Mattel had been in China long before it was cool," says Johnson. "They [had been there for] 25 years, and had deep, deep experience working in the country." The problem, he says, was that the firm had slowly changed its model of manufacturing over time. When Mattel first entered China, it was strictly as an assembly operation for materials sourced from all over the world. Eventually, multinational suppliers relocated to China to be closer to the parent company. Then, slowly, Chinese firms developed to source the material. Finally, Mattel outsourced the assembly as well.

In the end, all it took was one subcontractor to undermine the entire chain. Mattel had given its subcontractors in China a list of eight approved companies it could use for painting. But in an effort to lower costs, one subcontractor employed an unauthorized supplier that used the lead-based paint for the production of one specific toy—a Hot Wheels car based on a character from the Disney movie "Cars."

"You can always point to the vendors, but in the end it was Mattel's problem," says Johnson, who has visited Mattel's factories in China and leads Tuck MBA students in an annual tech-toys ranking. "The problem was the game had changed over time, but management methods were still trapped in an earlier time. That's a common story with large companies, where risks creep in without constant due diligence to look at what is changing."

In such cases, institutional inertia is often caused by a structure that fails to delegate direct responsibility to any one person or department. And without direct oversight, it's easy for individuals to overlook obvious problems with the excuse that "it's not my job." While Mattel pledged to increase monitoring following the incident, some companies are going a step further and anticipating quality control breakdowns before they occur. Food distribution giant Sysco, for example, routinely holds "Black Swan Meetings" (named after the book by Nicholas Taleb about unlikely but catastrophic events) to identify weaknesses in the supply chain.

To underscore the point, the company holds the meetings on Friday the 13th, and encourages everyone in the room to brainstorm the direst scenarios—no matter how unlikely—so that executives can walk backward to make sure proper safeguards are in place. "It almost seeks a gimmick, but the idea is giving a name to something that otherwise would go unexamined," says Johnson. "Sometimes these risks are nobody's job and everybody thinks someone else has it covered. The 'Black Swan' idea is aimed at trying to change that kind of thinking."



M. ERIC JOHNSON
BENJAMIN AMES KIMBALL PROFESSOR
OF THE SCIENCE OF ADMINISTRATION

PHARMACEUTICALS IN THE UNITED STATES

Supply-chain quality-control issues are not limited to subcontractors in developing countries. There have been several major incidents in the United States in the last few years that have had a profound impact on the health of thousands of people. In 2009, biopharmaceutical company Genzyme discovered that a virus had contaminated production of three of its drugs at a plant in Allston, Mass. Two of them, Cerezyme and Fabrazyme, were the only drugs approved by the Food and Drug Administration for Gaucher and Fabry diseases, genetic disorders that can affect metabolism and cause extreme joint and bone pain and bodily deformities. In the previous year, the two drugs accounted for more than a third of Genzyme's revenues ($1.7 billion of $4.6 billion total), and closure of the plant amounted to nearly $600 million in losses for the company. More crucially, because this was the only plant in the world that produced the drugs, thousands of patients would now go without treatment for their diseases.

"The economics of pharmaceuticals doesn't lend itself to having an idle plant that might be used when needed," says Brian Tomlin, who used Genzyme as an example in a book he wrote on supply-chain risk." At the same time, because it's extremely important for pharmaceuticals to be uniform wherever they are produced—both for quality control and regulatory reasons—it's difficult to have a second plant to simultaneously produce the same drug. "For FDA approval, you need to show that the process is identical. Otherwise you run the risk that there are enough differences that you need to sell it under a different label."

As with car manufacturers in Japan, Genzyme had covered itself with an inventory stockpile in the event of a shortage. At the time, however, the company had made the decision to ramp up production of another drug in the same plant, leading to a smaller backup supply of the contaminated drugs. And since the stockpile was also held in the same facility, the company also had to prove that the backup inventory hadn't been contaminated by the virus before it could release it to the market. In order to compensate for the loss, Genzyme communicated with doctors and patients to direct the drug to patients that needed it the most, and to sign up other patients for clinical trials of another experimental drug. In the meantime, the FDA had fast-tracked the approval of other drugs produced by two of Genzyme's competitors for the same diseases. "The long-term implications of the disruption was that it created a much more competitive environment for Genzyme," says Tomlin.

The example highlights not only how fragile the supply chain can be, but also the limited recourse companies sometimes have in the case of a disruption. While inventory helped to offset the losses to some extent, it's nearly impossible to have enough of a stockpile on hand for the worst-case scenario. In 2010, Johnson & Johnson also faced a plant closure of one of its plants in Pennsylvania that produced Tylenol and other over-the-counter drugs; due to the scope of the problem, that plant isn't expected to reopen until 2013. "Even the most conservative company is not going to hold three years of inventory," says Tomlin. Other strategies, such as insurance for business disruption, won't compensate a company for certain issues—like viral contamination—and even if they did it couldn't make up for market share lost to an opportunistic rival. "The nightmare scenario is when I am interrupted but my competitor is not," says Tomlin.

AIRLINES, CALL CENTERS, AND HEALTH CARE

When we think of supply chains, we're likely to picture physical networks of production with some kind of tangible good as an end product. As we move to an increasingly service-based economy, however, equally complex networks are developing in order to deliver services as well.

Take airlines. Since the emergence of low-cost carriers such as Southwest, larger airlines have been relying more and more on alliances and code-sharing with other airlines in order to compete, oftentimes concentrating on long-haul flights and relying on regional partners for shorter trips. Depending on the number of connections, it is possible that a passenger will be served by two or more different airlines on a single trip. But as anyone who has ever booked a flight online knows, prices can vary dramatically depending on date, time, and carrier. For the airlines themselves, such differences are even more crucial as they negotiate how to share the proceeds from a particular flight. While it might make intuitive sense for the companies to split the profits according to the miles flown by each carrier, in reality that might lead to unfair arrangements, such as when a United flight from Rochester to JFK is near empty and a Lufthansa leg from New York to Berlin is packed.

"If either partner doesn't get enough revenue sharing, they might save the seat for their own passengers," says Rob Shumsky, a professor of operations management at Tuck who has researched the airline industry. The implications for that might trickle down to consumers, he says, both in the availability of flights to some destinations and in the price they ultimately pay for their tickets.

Customer service call centers are another service supply chain that can have a significant impact on consumers. We all know that, to reduce costs, many firms have established call centers in developing countries such as India. What you may not know, however, is that the arrangements companies have with their subcontractors may have a dramatic effect on the service you receive. "You might call for tech support, and unbeknownst to you, the first people you talk with are from an outsourced call center, but if they can't solve your problem, you might be transferred to an engineer employed by the original manufacturer in a different country," says Shumsky.

For companies, there is a risk in having so many links in the chain dealing directly with consumers, requiring a trade-off between cost and quality. "If you just put the emphasis on quality, then costs can skyrocket," says Shumsky, citing cases in which customer service representatives are incented not to escalate calls to more experienced—and costly—engineers. "If you've ever gotten frustrated with people not letting you talk to the people who actually know what they are doing, then it may be because of how that contract was written," says Shumsky.

An even more crucial example of the importance of service supply chains can be found in health care, where the increasing complexity of the system has led to rampant specialization, while efforts to contain costs have led to a bewildering level of subcontracting. "If someone is having a heart attack on the sidewalk, I have counted at least nine different independent organizations involved in getting that person to a hospital bed," says Shumsky, including the ambulance company, the hospital, the emergency service (which some hospitals outsource), the radiology lab, and independent physicians. "And that's not even counting the people who serve meals and do laundry. You have an incredibly elaborate web."

Without proper coordination, the results can be tragic. When that happens Shumsky says the tendency is for people to focus on a weakest link, be it administrators or health care providers, "because we tend to personalize problems with services," says Shumsky, who teaches in Dartmouth's Master of Health Care Delivery Science in addition to the Tuck MBA program. "But I believe that the underlying problem is that there is no organized system that coordinates the activities in the supply chain."

Shumsky is hopeful that innovations such as the creation of accountable care organizations, which organize groups of health care providers to work together, will help matters. "The idea is to coordinate them so they'll have the same incentives in cost rather than thinking about what is the highest bill they can get from this procedure," says Shumsky. In practice, however, this is easier said than done—technological and cultural differences, hierarchies, and historical antagonisms all contribute to barriers between providers that get in the way of good care.

ROBERT SHUMSKY
PROFESSOR OF OPERATIONS MANAGEMENT

DINODIA PHOTO

INNOVATING FOR INDIA

A UNIQUE EXECUTIVE EDUCATION PROGRAM SHOWS THE POWER OF THE CONSORTIUM MODEL TO FOSTER INNOVATION IN INDIA AND BEYOND.

BY KIRK KARDASHIAN

BY KIRK KARDASHIAN

Vijay Govindarajan, the Earl C. Daum 1924 Professor of International Business, has been studying innovation for decades, and it's given him a knack for creating profound but simple theories. Take his "three-box" theory of innovation. In the first box are all the activities a company must do to manage the present. The second box is about selectively pruning away the past to make room for new growth. And the third box is about "creating the future."

The third box is where Indian companies need to be now, Govindarajan says. The Indian economy grew aggressively from 1990 to 2010, mostly by providing outsourcing and cost control. But the world is a different place today. "I think the efficiency game is over," he says. "If Indian companies want to be really competitive globally, they have to innovate."

If you talk to executives at Indian companies, you learn that Govindarajan's innovation imperative for India is spot-on. These executives know their companies need to make dramatic shifts in their thinking and culture to be competitive in the economy of the future, and they are using expertise from Govindarajan and other professors in Tuck's new Innovation Leadership Consortium (ILC) to help them get there.

The ILC is a unique program for a select number of noncompeting companies that combines the best qualities of open-enrollment and custom executive education models. By offering the benefits of a diverse group of participants, along with the chance to collaborate on the design of the program, a consortium model of executive education is an effective way to inject fresh ideas, skills, and perspectives into executives in a wide range of areas.

To recruit firms for the program, Tuck set up a half-day workshop in Mumbai with senior HR representatives. "We put a 'strawman proposal' on the table for discussion," says Phil Barta, associate director of executive education and director of custom programs, "and the companies came back and asked, 'How can we best integrate additional faculty and executive perspectives?' We worked with them to revise the design. That's something we'd regularly do in a custom program. We partner with the client very closely to shape the learning initiative."

All four companies that attended the workshop agreed to take part in the consortium: HSBC, Tata Consultancy Services (TCS), Johnson & Johnson India, and Mahindra & Mahindra. The companies selected executives from a range of departments, including insurance, branding, strategic planning, client management, R&D, and compliance. The program would take place over the course of three one-week modules during 2012 and 2013.

The ILC is directed by two distinguished Tuck faculty: Govindarajan and Praveen K. Kopalle, a professor of marketing. The program includes sessions taught by innovation and leadership experts, including professors Chris Trimble, Alva Taylor, Pino Audia, Ron Adner, and Robert R. Halperin.

The first module, which took place at Tuck in April of 2012, gave participants the important innovation concepts that would be the foundation for future learning. It included sessions such as "Strategy is Innovation," "Strategy Under Uncertainty," "Organizing and Planning for Disciplined Innovation," among others. "The team came back very, very impressed," says Tushar Murdeshwar, the head of marketing for Johnson & Johnson's Indian consumer products division. "The feedback was so positive that the management board will really be able to identify broad projects we can begin working on right away."

Module 2, held in Hyderabad in October, shifted the focus from the classroom to the field, with its theme of "Consumer-Centric Innovation." And Kopalle was the perfect faculty member to direct this block of learning, having spent the first half of his life in India and returned to the country for the past five years as a visiting scholar at the Indian School of Business at Hyderabad. Consumer-centric innovation "is how to design products and services by examining the customer first," he says. "You put on the hat of the anthropologist and watch consumers in their natural habitat to try to understand their pain points."

This concept is brought to life with the action learning projects, during which each company delves into an innovation challenge it wants to surmount and then fleshes out the solution with faculty and their peers. Mahindra & Mahindra offers a good example. Best known as an automobile manufacturer, the company joined the consortium because it has made innovation one of its strategic imperatives. One part of its action learning project is to design a scooter specifically for Indian women. During the course of the project, company executives identified the target market and spoke with women in their homes and work environments.

The third module—"Leading Innovation Into Action"— rounds out the action learning projects and offers participants the chance to interact with successful Indian innovators. Govindarajan will moderate a panel of innovators that includes a lead developer of the Tata Nano (the $2,000 car), a representative of an Indian cardiac hospital that does $2,000 open-heart surgery, and an executive from the Mumbai Tiffin Box Suppliers Association, which delivers millions of hot lunches everyday in Mumbai with almost zero mistakes. Govindarajan will also moderate a panel of CEOs from the same companies.

Even though participants have only completed two modules as of this publication date, the impacts of the consortium are already becoming clear. Yes, action learning projects are giving the companies dynamic information to put into use immediately, but the program as a whole is teaching something more lasting and resilient: the habits of conceptualizing, testing, and tinkering. And it is giving companies insights into the types of organizational structures that will foster creativity.

TCS is seeing "that the innovation engine and the current performance engine need to be driven by two different sets of people," says Himanshu Saxena, the head of strategic alignment and leadership management For Johnson & Johnson, Murdeshwar says the exposure to different companies and the consortium's principles has broadened participants' idea of what is possible: "People who would have been more risk averse in smaller units are now more open to risk taking."

Ultimately, Govindarajan hopes, the impact won't be felt in these companies alone. For someone who grew up near an Indian slum, any work in India must also be *for* India—so that businesses not only serve the "bottom of the pyramid" but also help the less fortunate move up. "If this program can influence 100 executives over a 10-year period to make good decisions and innovate, that will contribute to India's growth," Govindarajan says. "That's my larger ambition."

DINODIA PHOTO

The ILC is a unique program for a select number of noncompeting companies that combines the best qualities of open-enrollment and custom executive education models.

ALUMNI NEWS

As vice president of sustainability at Gaylord Entertainment, Andy Mims T'02 has taken a common-sense approach that has proven to be good for the bottom line and for the environment. See story, page 45.

PHOTO COURTESY ANDY MIMS

Mission Critical

Twenty-one years ago, Carolyn McGuire T'83 helped form Community Consulting Teams of Boston. It's still going strong today—and facilitating a lot of good work.

By Julie Sloane D'99

KATHLEEN DOOHER

Carolyn McGuire T'83

It all started when Carolyn McGuire T'83 opened her mailbox to find a letter from Tuck. As she read it, she learned that a new group of graduates from top business schools was forming in the Boston area to provide pro bono consulting services to local nonprofits. She was intrigued.

It was 1991, and McGuire was doing "the big juggle": raising three preschoolers while taking on sporadic consulting and teaching work. This new project, modeled on a similar and successful program at Stanford, seemed like the perfect thing to keep her business brain engaged.

In accepting, she became one of three founding members of Community Consulting Teams (CCT) of Boston. While the other early members relocated from Boston within a few years, McGuire found an enduring passion in CCT and has been a leader, in different capacities, in the all-volunteer organization for 21 years. Along the way, CCT has involved close to 100 other Tuck alumni, as well as hundreds more from Wharton, Kellogg, Sloan, Yale, and other schools.

CCT offers its free consulting services to 501(c)(3) nonprofits in six areas—arts, education, social services, environment, youth services, and health care—and targets groups with at least three employees and budgets in the $500,000 to $5 million range. Each year, McGuire and her fellow board members find critical, focused projects and enable each organization to more effectively serve its constituencies. Then, from January through May, teams of six to 10 MBA volunteers commit an average of 12 to 16 hours per month to their assigned project. Volunteers run the gamut from retirees looking to stay engaged to busy working professionals who squeeze in project time while they're on the road.

"Whether we're developing a financial plan, a segmentation strategy, an assessment of operations, or a communications strategy," says McGuire, "the constant theme is that we're providing the nonprofits with critical strategic guidance at a critical time."

For example, an all-Tuck project team led by Peter Clay T'83 and Liz Thorne T'90 worked this past year with Children's Trust Fund, a statewide public-private partnership aimed at preventing child abuse and neglect by supporting families with training and education. CCT's focus was to hone the group's marketing and communications plan; as a result, the fund was able to unify its branding and construct a social-media strategy to reach more young parents. ("The Tuck School rocks!" its executive director told the crowd at CCT's year-end celebration.)

Since 1991, McGuire estimates CCT has completed 125 projects for 100 different clients, ranging from the Boys & Girls Clubs of Boston to the Asperger's Association of New England to the Commonwealth Shakespeare Company.

"Carolyn is the heart of the organization," says Kathy Schaller T'94, who has been volunteering with CCT for four years. "She wouldn't be the kind of person to say, 'I built this,' even though she certainly has been one of the key people in building CCT. Her leadership style would always be to collaborate and foster teamwork."

Among her longtime collaborators are Andrea Ploss O'Neill D'82, T'87, who has co-led the board on and off with McGuire for the past decade. And the current board chair is also a Tuck graduate—Carol Gibbons Krauss T'80.

Though many of the Tuck alums at CCT—including McGuire—didn't have prior training or experience in the nonprofit world, the collaborative team atmosphere at Tuck prepared them well for the experience.

"Bringing different people together means bringing together different skills and experiences," says McGuire. "Learning from them makes you a better consultant; you have no choice but to learn that at Tuck."

With her youngest child now in college and CCT in the capable hands of a newly expanded board of directors, McGuire says she would consider a return to the for-profit world in which she spent the first decade of her career. "I spent many years being really focused on CCT," she says. "And I have no regrets."

tuck.dartmouth.edu/today

ALUMNI INTERVIEW | By Christopher Percy Collier

Andy Mims T'02

In the hospitality business, where customers expect fresh sheets and towels every night and TVs and air conditioners can run in empty rooms for days on end, sustainability can become an afterthought. But **Andy Mims T'02**, vice president of sustainability at Gaylord Entertainment, a hotel and convention-space business with 9,000 rooms and 10,000 employees, has been working to crack the code. Employing an efficiency-first model that came from, among other sources, his 92-year-old grandmother, Mims adopted a common-sense approach that included capital improvements, operational enhancements, and behavioral change. In two years, he has added $10 million to the bottom line, driven expenses as a percentage of revenue down from the historic average of 3.7 percent to the current all-time low of 2.5 percent, and created benefits for customers, employees, local communities, and the environment.

PHOTO COURTESY ANDY MIMS

Q: How did you enter the arena of corporate sustainability?

I joined a venture capital firm after Tuck, and while I was there, clean-tech investments became really hot. And the majority of the investments were going to the supply side of energy—renewable fuels, solar energy, etc. That left some big funding gaps for areas like energy efficiency, environmental services, and agriculture. Meanwhile, my wife had already made the jump—she started a company called Mod Green Pod, which makes organic upholstery and nontoxic wallpaper. Then, in 2010, we found out that our second child had the same food allergies that his older sister had had as an infant. For me, that was the final push that I needed. And shortly after he was born, I decided to leave venture capital to take the job with Gaylord.

Are there unique challenges in the hotel industry?

There are close to five million hotel rooms in over 50,000 properties in the U.S. Those properties run 24 hours a day, 365 days a year. Gaylord's properties range in size from two to four million square feet. We have approximately 9,000 guest rooms, close to 50 food and beverage outlets, two massive swimming pool complexes, and an enormous amount of meeting space. And we serve, on average, a meal every 2.5 seconds. We use a huge amount of resources, and improvements in efficiency can be found everywhere. But guest satisfaction is the name of the game in hospitality, so it's important to avoid lessening the guest experience.

How have you attacked sustainability at Gaylord?

I took the first six months to get to know the operations before being able to create a series of long-term goals—a 20 percent reduction in energy consumption and emissions by 2015, for example—and more specific annual goals. We then created property teams, assigned responsibilities, and put in place a system for tracking and reporting progress. The last step, which took a year to put in place, involved tying a significant percentage of senior management's incentive compensation to meeting certain targets.

Can you provide an example of a sustainability success story at Gaylord?

We found we were sending between 250 tons of soap and shampoo to the landfill each year—a lot of those amenities were being used once and thrown away. So we reduced the portion size, improved the packaging to minimize waste and ensure recycleability, and addressed the formula. Today, our formulations are free of things like parabens and phthalates. We also partnered with a company that collects, sterilizes, repackages, and distributes all of our used soap to people across the planet who don't have access to hygiene products. The kicker is that we will save between $300,000 and $500,000 annually as a result of the reduced portion size and will send zero product to the landfill.

How did Tuck prepare you for your role as VP of sustainability?

Sustainability gets a bad rap sometimes because there are too many "experts" out there who don't have a solid understanding or appreciation of business fundamentals. Sustainability is an incredibly broad area, but at its core, it's all about strategic change—identifying areas for improvement across the entire organization, prioritizing projects based on potentially dozens of different criteria, and making change happen. And while I didn't take any courses specifically on sustainability, what I learned prepared me to handle something as broad an area as it is. I got a lot out of my time up there, but, most importantly, Tuck is where I met my wife, Lisa.

tuck.dartmouth.edu/today

ALUMNI NEWS

Newsmakers

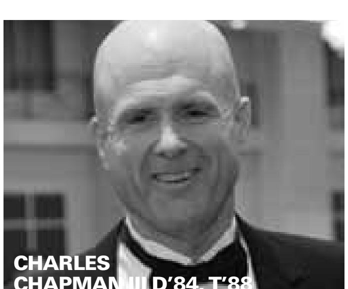
By Patti Bacon

Rohan Palekar T'91 has been appointed senior vice president and chief commercial officer for Avanir Pharmaceuticals. Avanir acquires, develops, and markets therapeutic products for disorders of the central nervous system. Palekar has more than 20 years of experience in the biopharmaceuticals industry.

Massachusetts Gov. Deval Patrick appointed **Pamela Carrington Scott T'75** to the Salem State University Board of Trustees. Scott, the president and CEO of consulting firm LVCC, Inc., has a long history of involvement in educational, social services, and arts-focused organizations. She recently served on Tuck's board of overseers.


PAMELA CARRINGTON SCOTT T'75

Charles Chapman III D'84, T'88 is the new chief operating officer at the Panera Bread Company. Chapman has more than two decades of experience in the restaurant industry, having worked previously as COO at International Dairy Queen and Bruegger's Bagels. Panera owns and franchises more than 1,500 bakery-cafes in the U.S. and Canada.


CHARLES CHAPMAN III D'84, T'88

Stephen Socolof T'87, managing partner at New Venture Partners, has been named chair of the National Venture Capital Association's Corporate Venture Group Advisory Board. The board's mission is to create educational and networking opportunities for corporate venture programs of all sizes, business types, and charters and build better communication and cooperation among corporate venture groups, venture capitalists, startups, and entrepreneurs.


STEPHEN SOCOLOF T'87

Energy-services holding company South Jersey Industries has announced the election of **Sarah M. Barpoulis T'91** to its board of directors and to the board of directors of its subsidiary company, South Jersey Energy Solutions. Barpoulis, the founder of Interim Energy Solutions, a private energy consulting firm that focuses on risk management, has extensive experience in the power industry.


SARAH M. BARPOULIS T'91

Ryan Kitchell T'02 has been promoted to chief financial officer of Indianapolis-based hospital system Indiana University Health. The promotion follows his other recent promotion to president of IU Health Plans. Before joining IU Health, Kitchell served in Indiana Gov. Mitch Daniels' administration—first as public finance director and later as director of the Office of Management and Budget.


RYAN KITCHELL T'02

Cloud-based customer communications provider SoundBite Communications has announced the election of **Rodger Weismann T'66** to its board of directors. Weisman has more than 40 years of experience in financial and leadership roles in technology-based companies and served most recently as a senior vice president and chief financial officer for Phase Forward, a creator of software applications for managing clinical and medical data in health sciences organizations.


RODGER WEISMANN T'66

Christopher Williams T'84 has been elected to the board of directors of Cox Enterprises, a communications, media, and automotive-services company of more than 50,000 employees with offices in 16 countries and revenues of nearly $15 billion. Williams is the founder, chairman, and chief executive officer of The Williams Capital Group L.P., an investment bank that serves corporate, municipal, governmental, and institutional investors. He currently serves as chair of Tuck's board of overseers.


CHRISTOPHER WILLIAMS T'84

Daniel J. Schmechel T'90 has been appointed chief financial officer for Ecolab Inc., a global provider of water, hygiene, and energy technologies and services to diverse markets, including hospitality, health care, and industry. Schmechel, who has been with Ecolab since 1995, has served in numerous financial capacities in the organization, most recently as executive vice president of finance.


DANIEL J. SCHMECHEL T'90

BIND Biosciences has named **Andrew J. Hirsch T'97** its chief financial officer. "Andrew has been an outstanding performer in the biotechnology industry," said Scott Minick, BIND's president and CEO, "[with] major accomplishments with high-growth companies in financing, M&A transactions, strategic planning, and investor relations." BIND Biosciences specializes in developing targeted, programmable therapeutics for treating disease.


ANDREW J. HIRSCH T'97

Scott Harrison T'03 has been appointed executive vice president and chief financial officer of FM Facility Maintenance, a facilities-maintenance management company for businesses with multisite retail locations.


dinner menu
served after 5:30
JOVINO
PLATES
TACOS
BURGERS
GRILLED
DRINKS
DRAUGHT
BOTTLED
XPS
It's My Tuck
Daniella Reichstetter T'07
San Francisco, CA
myTUCK
Introducing myTUCK, a new, customizable web portal that gives alumni unprecedented access to all things Tuck.
mytuck.dartmouth.edu

LAURA DECAPUA

Tuck Reunion 2012

A record 495 alumni gathered in Hanover on a beautiful October weekend for Tuck Reunion 2012. If you include spouses, friends, kids, and dogs, the number of visitors neared 850. They had a diverse array of activities to choose from, including a cookout, golf, children's adventures, and a family hike up Gile Mountain. There were also opportunities to indulge in the academic side of Tuck, with "Back in the Classroom" sessions by professors Sydney Finkelstein, Punam Keller, and Matthew Slaughter. On Sunday, alums traded places with faculty at the front of the classroom to lead panel discussions on second careers and entrepreneurship. The stars of the show, however, were Dartmouth's co-ed *a capella* group—the Dodecaphonics—who performed for the classes of 1987 (in recognition of their 99 percent giving rate in 2012) and 2007 (for having the highest percentage of classmates who made at least one update to their myTUCK profile since the website's launch in May).

—Kirk Kardashian


FOLLOW THE LEADER
You Tube
1900
TUCK
tuck.dartmouth.edu/today
news || events || people

www.tuck.dartmouth.edu/today

Tuck School of Business at Dartmouth

100 Tuck Hall
Hanover, NH 03755-9000 USA

News. Ideas. People.