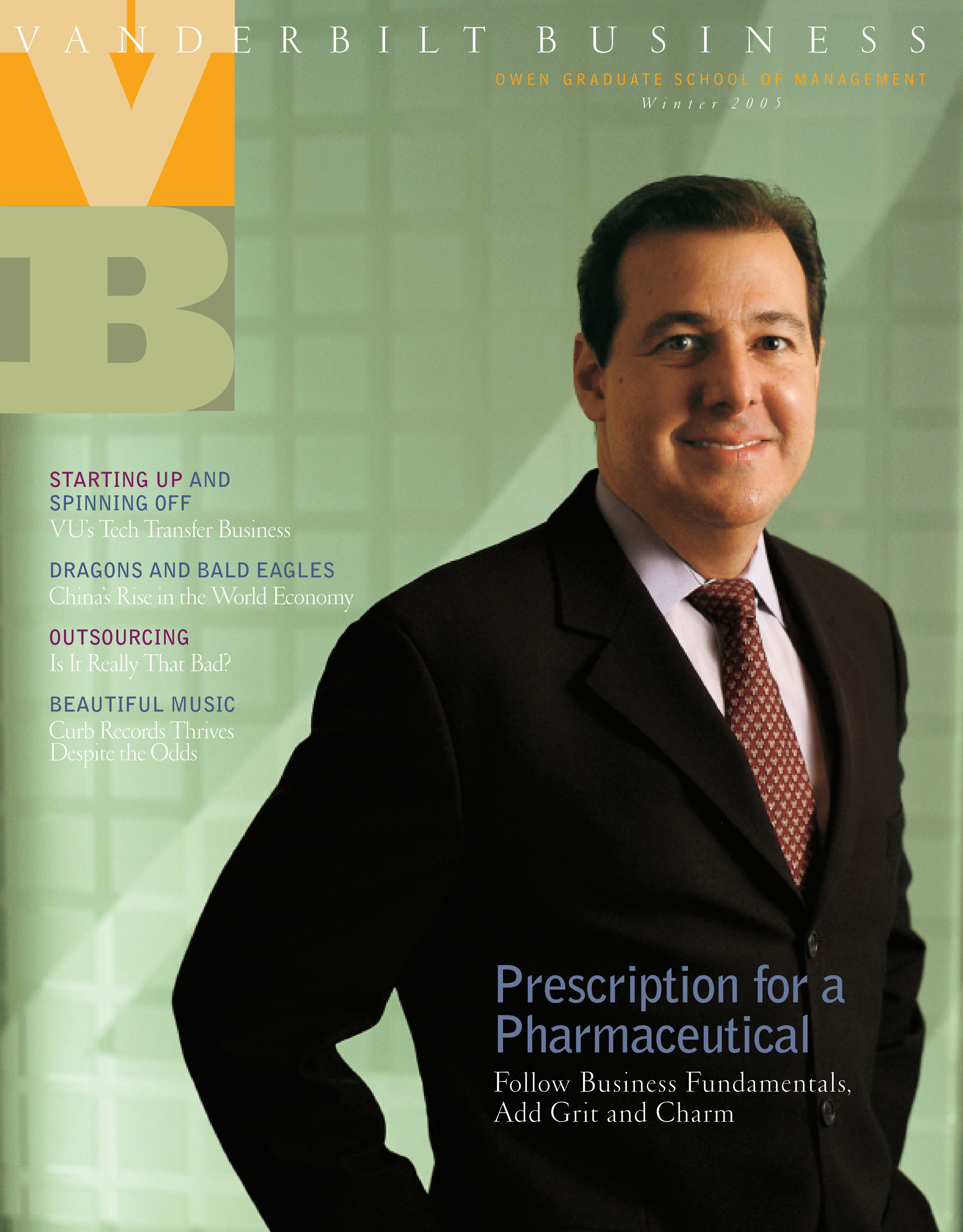
VANDERBILT BUSINESS

OWEN GRADUATE SCHOOL OF MANAGEMENT
Winter 2005



STARTING UP AND SPINNING OFF
VU's Tech Transfer Business

DRAGONS AND BALD EAGLES
China's Rise in the World Economy

OUTSOURCING
Is It Really That Bad?

BEAUTIFUL MUSIC
Curb Records Thrives Despite the Odds

Prescription for a Pharmaceutical

Follow Business Fundamentals, Add Grit and Charm

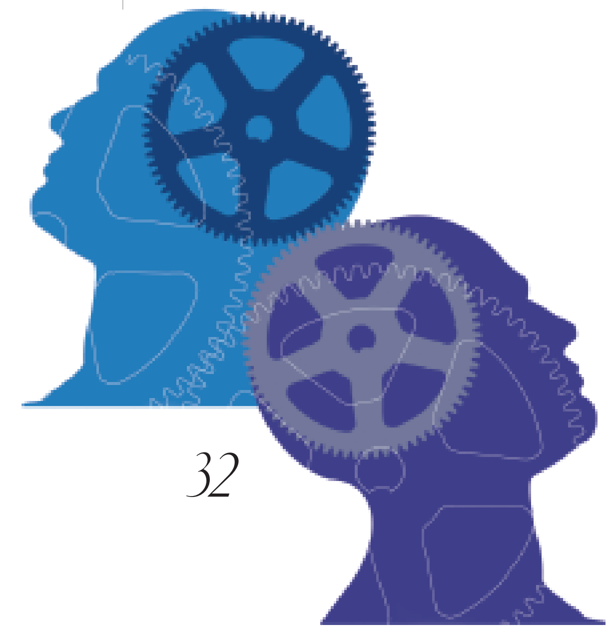
SUCCESS of the Read 180 program is also a success of Vanderbilt's tech transfer program. Read about this and other initiatives in the article "Starting Up and Spinning Off: Vanderbilt Gains Ground in the Hot Tech Transfer Business" on page 46.

DANIEL DUBOIS

Winter 2005

CONTENTS

DEPARTMENTS



32

FEATURES

25

MISCELLANEOUS

SPECIAL SECTION

52

Saks, Ties, and Luxuriate

Style is serious business and all about the value proposition.

Brad Martin, E'80, Chairman and CEO of Saks Incorporated

THE LUXURY BUSINESS BECKONS, caresses, and intrigues, but also discourages. Obstacles include market competition, barriers to entry, and luxury price points. But Brad Martin, E'80, has faced those challenges successfully. His investor group initially acquired the four-store Proffit's department store business in 1984 as a transaction, and in 1989 bought five more stores. Martin, the largest investor, decided to work there "until we find someone to run the business." In 1990, the group added McRae's, Parisian, Younkers, Herberger's, and Carson Pirie, going from revenues of about $75 million in 1989 to a $4 billion company in 1997 and one of the largest department store businesses in the country. In 1998, there was an opportunity to buy Saks Fifth Avenue. "We never dreamed we would have the interest or opportunity to buy Saks—we got involved as a courtesy to a friend in investment banking. It was a wonderful store, but a lousy business," Martin says. But buy they did, and he became chairman and CEO of Saks Incorporated. Today the luster is back: The corporation is a $6 1/2 billion business, operating in 38 states with an annual cash flow of $500-$600 million. Their secret: making Saks Fifth Avenue the most inviting luxury shopping experience, and positioning their other department store businesses to be "the best place to shop in your hometown." VB

DANIEL DUBOIS

EDITOR'S MEMO

WINTER 2005
Volume 24, Issue 2

ACTING DEAN
Jim Bradford

EDITOR
Beth Matter, MLAS'02

CONTRIBUTORS
Mark Abkowitz, Chris Baltz, Mary Tom Bass, Neil Brake, James Cheek, L'67, Charles Conte, Daniel DuBois, Lisa DuBois, Jeff Gowdy, '06, Eric Hall, '78, Susanne Hicks, Randy Horick, Laura Millard Ladd, Catherine Mann, Yvonne Martin-Kidd, Charu Raheja, Grace Renshaw, Rusty Russell, Venkat Shankar, E'05, Cole Smeltzer, Ned Solomon, Carol Wissmann

DESIGNER
Michael T. Smeltzer

ART DIRECTOR
Donna Pritchett

DESIGN CONSULTANT
J Porter

DIRECTOR OF ALUMNI COMMUNICATIONS AND PUBLICATIONS
Ken Schexnayder

EDITORIAL OFFICES: Vanderbilt University, Office of Advancement Communications, VU Station B 357703, 2301 Vanderbilt Place, Nashville, TN 37235-7703, Telephone: 615.322.0817, Fax: 615.343.8547, *owenmagazine@vanderbilt.edu*

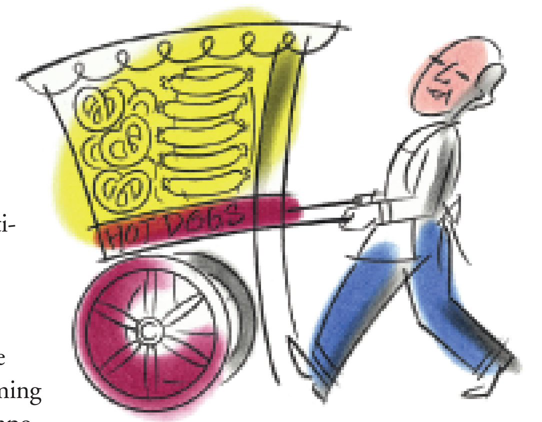
PLEASE DIRECT ALUMNI INQUIRIES TO: Alumni Affairs Office, Owen Graduate School of Management, VU Station B 357754, 2301 Vanderbilt Place, Nashville, TN 37235-7754, Telephone: 615.322.0815, alum@owen.vanderbilt.edu. Vanderbilt University is committed to principles of equal opportunity and affirmative action. Visit the Owen School on the Web: www.owen.vanderbilt.edu. Alumni Publications on the Web: http://*www.vanderbilt.edu/alumni/publications*

Vanderbilt Business Magazine is published twice a year by the Owen Graduate School of Management at Vanderbilt University, 401 21st Avenue South, Nashville, TN 37203-9932, in cooperation with the Vanderbilt Office of Advancement Communications.

Hot Dogs and Tech Transfer

Hungry for ideas? Vanderbilt guest lecturers have food for thought.

By BETH MATTER



GETTY IMAGES

I KNEW I WAS A WORLD TRAVELER FROM a young age and have had the luck to visit many of my dream destinations. But I didn't realize that I have almost the same passion for entrepreneurship until one day in 1991, when as assistant editor of the *Vanderbilt Lawyer* Magazine (becoming editor in 1993) I was covering a symposium at the school on "Trade and Foreign Investment in Eastern Europe and the Soviet Union." The Soviet Union was just then dissolving, and speakers talked about how a "war of laws" was causing a "real mess" in determining what type of law should guide the development of contracts and transactions there, and how Eastern European countries were in different stages of economic transformation.

I was taking notes, only mildly interested, until one speaker mentioned that Czechoslovakia wanted to open up its tourism trade, and that there would be many good investment opportunities, some as small as opening a hot dog stand but still very profitable.

His words hit me like a taser. Hog dog stands! In Czechoslovakia! For the next couple of hours, I could barely sit still in my chair among the rows of attorneys. What was resonating with me was not only the prospect of going to a foreign country, but of being part of a new venture. As fast as you could say "Do you want mustard and onions with that?" I was ready to turn in my Vanderbilt I.D. and catch the next plane for Prague.

Obviously, I didn't go, but instead made the hop, skip, and jump across the sidewalk in 1998 to become editor here, finding Owen's focus on globalism and enterprise a good fit. But in some ways, it was the same as going to Prague. Owen's international population offers a sense of different cultures and world views, and there is certainly an emphasis on starting new ventures.

This issue highlights some great ventures. The article "Prescription for a Pharmaceutical" features alum A. J. Kazimi and his success story of opening a niche pharmaceutical in an unlikely location—Nashville. "Starting Up and Spinning Off" outlines the growing tech transfer activities at Vanderbilt. No Gatorades here yet, but that could just be around the corner.

Fourteen years ago, everyone's eyes were trained on the Soviet Union and Eastern Europe; today the focus is on China, among other countries. The article "Dragons and Bald Eagles" discusses how China is both a threat and an opportunity to our economy, and offers tips on how to move forward in business there.

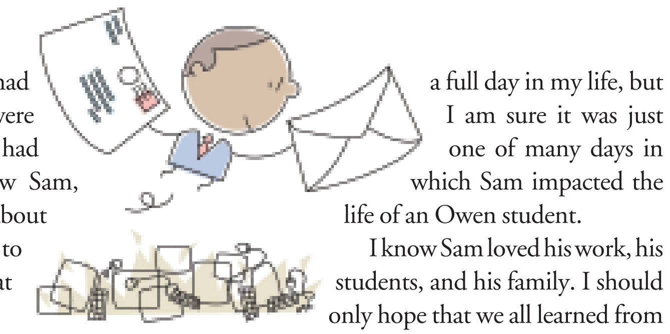
What hasn't changed in 14 years is that Vanderbilt still brings to campus many experts who talk about important and current developments. Read about some of those speakers in "Inside Owen." And try to come to one of the future lectures or panels. You never know when something as small as a hot dog could whet your appetite.

LETTERS TO THE EDITOR

Inbox

"If you knew Sam, you likely have a story that brings a smile to your face. I have one that will never fade."

DAVID STEINLICHT, KRT



Bogle on Mutual Fund Reform

In your recent article entitled "What is on the Horizon for Mutual Funds?" I was intrigued by John Bogle's ideas on how the industry might be reformed. The concept of "full disclosure" should be supported by all shareholders and directors. This will allow all investors the opportunity to make more informed investment decisions. It is not a new concept, but as John said, "that the industry hates this so much lets me know I am on the right track." Reform of the mutual fund industry is needed. I hope the industry embraces some of his ideas.

Robert Henry (E'95)

Remembering Sam

Your fitting tribute to Dean Emeritus Sam Richmond moved me ("Sam Richmond, The Man and His Mission," Summer 2004). I came to know Sam Richmond quite well during my second year at Owen. I was struck by many things: the breadth of his curiosity, his intellect, the fact that this 80-year old man had just returned from a week of skiing in Aspen with Evelyn, his lovely wife. But more than those things, I was struck by his kindness, his generosity. In Sam's passing, the academic world has lost a luminary, the Owen School the most important link to its early days, and me, a friend. Thanks for all you did for us, Sam. We'll miss you.

John (Jack) Driscoll ('00)

As anyone who ever met Sam Richmond knows, the Owen Graduate School of Management never had a better friend or owed anyone any more than our departed Dean. Sam cared. He cared about every aspect of the School. He especially cared if you were a student. In many ways he had dreams for us that were grander than the ones we had for ourselves. If you knew Sam, you likely have a story about him that brings a smile to your face. I have one that will never fade.

In April 1985, I was preparing to graduate. I had my job offer, and one night I found this sporty Mazda RX7 that had my name on it. The following morning I went to First American Bank on 21st Avenue to arrange the loan. The assistant manager said I had no local credit, no current job, and no ties to the community—therefore no car loan. I went storming into Sam's office wondering why he had sent all of us there to bank. The lady who met me at the door said Sam was not able to see me, but to give her my details, and that I should come back that afternoon. I did, and she informed me that I should go back to the bank—that my loan was waiting for me. (Most enjoyable paperwork I have ever done.)

She also informed me Sam wanted to go for a ride. When I came back, much to my surprise he really did want to see the car and go for a ride! After we took a spin around, Sam asked if I wanted to go for a ride in his car. Again I was surprised, but quickly agreed.

In the parking lot under Owen was this glinting 1969 Firebird, the quintessential "muscle car." When he turned right onto 21st, he hit the gas, and in a flash we were screaming up past the hospital. (I had never been thrown back in a seat like that and have not since.) He was smiling, and those blue eyes were on fire. He didn't slow down till we were in front of the First American Bank at the corner. (How appropriate.) That was a full day in my life, but I am sure it was just one of many days in which Sam impacted the life of an Owen student.

I know Sam loved his work, his students, and his family. I should only hope that we all learned from him that life is to be enjoyed.

Tim Skow ('85)

New Magazine Format Appealing

I have been meaning to register my support for the new *Vanderbilt Business* since earlier in the summer when I realized that it was a new version of the *Owen Manager.* The old format was adequate; however, this new presentation is very appealing.

The lead article on Froeb and Scheffman was a fascinating view of the FTC and showed the mutual confidence each gentleman has in the other. Likewise, James Bacchus' "Informed Opinion" on the WTO was of interest. Having been out of the international side of business for a number of years, it was striking how the old familiar GATT has evolved into the reach and scope of today's World Trade Organization.

Sam Richmond was not only my Dean but my neighbor, having lived in the same neighborhood for many years. I was particularly pleased to read the remembrance of this fine gentleman. All the best to Evelyn and the family.

Barnett Williams ('77)

Send letters to Beth Matter, editor, Office of Advancement Communications, VU Station B 357703, 2301 Vanderbilt Place, Nashville, TN 37235-7703, or by email, owenmagazine@vanderbilt.edu. *Letters may be edited to suit space requirements.*

INSIDE OWEN

Professional *Managing Health Care* | Speakers *Richard Breeden, Donald Trump, more* | Panels *Health Care VCs* | Students *Prison Project* | Conferences *Finance, Nanotechnology* | Community *Biz Camp* | Faculty *Holiday Wrap-up*

KATHY HAGENDOM, KRT

PROFESSIONAL

Strategies for Managing Health Care

OUR HEALTH CARE SYSTEM IS perfectly designed to bring about the results we have: a health care system that consumes every other system in the U.S. economy, at a rate of one out of every seven dollars, said health industry expert Paul Keckley, executive director of the Vanderbilt Center for Evidence-Based Medicine, at Owen's Boardroom Breakfast for Nashville-area CEOs on November 17.

For starters, doctors do what the evidence says they should do about 54 percent of the time, he pointed out. Nineteen percent of prescriptions written, for example, are for antibiotics to treat bronchitis. But bronchitis is viral, not bacterial, so antibiotics don't clear up the disease. "That adds up to a $13.5 billion waste," he says. "You might as well hand someone an M&M. When doctors are asked why they do that, their typical reply is, 'Well I didn't have a lot of time, and the antibiotic is not going to hurt anyone.'"

Additionally, 73 percent of consumers totally depend on their doctors for their health care choices, vesus 5 percent who believe they can engage effectively in making their own decisions, and only about 23 percent of the time do consumers do what they are supposed to do for their health care. Other disconnects include overuse of surgery and digital imaging procedures, he added.

What employers typically do to help contain health care costs is to shift copays, "but in doing that, you are not changing behaviors, which is critical to creating significant change," he said.

HSAs/HRAs provide a five-year ROI potential, but real change is only going to come through aligning incentives to get a different result, he suggests. "Right now, adherence to evidence-based medicine is not an incentive; a hospital is not incentivized to determine if an admission is appropriate or not, or that MRI on low back pain, which 80 percent of the time is not necessary."

Initiatives that will bring about real transformation in health care costs include improving quality of health care through evidence-based medicine, reducing demand of health care through chronic care management, standardizing processes and information through information technology, shifting provider incentives to pay for performance, and engaging consumers in financial participation of the costs.

"It's not about bad people; it's a flawed system," Keckley said. "Physicians and hospitals need to follow the evidence in care management. Employers and consumers should insist on it. We can save up to 30 percent of health costs and improve care for everyone if we change incentives to align with evidence-based care."

SPEAKERS

Breeden Outlines Hollinger Debacle

JUST AS ENRON AND WORLDCOM BEGAN to fade from headlines, another corporate scandal took center stage. The *Hollinger Report*, a 513-page book released last summer, which some compare to a Russian spy novel, details looting by CEO Conrad Black and cohorts of more than $400 million from Hollinger International during 1997-2003.

"Kleptocracy"—Richard Breeden called the antics, in his keynote speech at Vanderbilt's second Directors College, September 23-24—"is that stage of governance when rule by thieves is the order of the day."

Breeden, former SEC chairman, and now Worldcom's court-appointed corporate monitor, advised Hollinger's special board committee that conducted the internal investigation for the case.

"Hollinger separated economic interest from voting interest—never a good thing to do; the board showed little curiosity and didn't ask questions; and revenue dropped by 50 percent. The board was comprised of experienced business executives and superstars, who never analyzed the management fees.

"How do you make sure you don't wake up one day and find yourself in the same position?" Breeden asked. "The private sector is developing a standard of conduct of acceptable behavior for boards, and state and federal law plays a role in preventing problems. But regulation is not the answer—if you do a good job of running your own company and seek directors who insist on the ABCs of running public companies, hopefully we won't need new versions of SOX."

Breeden, who laughingly said he gave up his Yankees tickets to speak at Vanderbilt, added that there are no silver bullets in corporate governance, no checklist to check. "Your board must be engaged; You can't check common sense at the door.

RUSTY RUSSELL

Breeden: "Kleptocracy is when rule by thieves is the order of the day."

Term limits for board members are also good. How can you be independent forever?"

A big red flag for companies is an abusive compensation system needing to be brought under control, he said. "That is a huge warning sign of deeper problems."

The Donald's Steps to Success

THINK DONALD TRUMP'S PERSONALITY is big on TV? Try watching him on a 50-foot screen, as did executives from across the country attending the 2004 Living Leadership Conference, October 20, sponsored by Maximum Impact Marketing Solutions. The attendees heard tips on leadership from the likes of Mikhail Gorbachev, Jim Collins, Peter Drucker, Russell Simmons, Ken Blanchard, Rosabeth Moss Kanter, Larry Bossidy, and of course The Donald, via satellite downlink. Owen served as one of the college and university hosts, holding its event at the Stadium Club.

"Success sort of proceeds leadership, because it is easier to be a leader when you are successful," ventured Trump.

But for most of us, becoming a leader takes a plan, and here is the plan á la Trump:

- Love what you do.
- Never quit.
- Stay focused.
- Think big.
- Be a little paranoid, maybe a lot paranoid. (If your friends have a chance

RICK NEASE, KRT

to steal your money, your wife, your dog, your house, they may just do that.) Keep your guard up.
- Never lose your momentum.
- Be passionate about something.
- Go against the tide if you have what it takes. But if you don't, don't go against the tide.
- Be lucky. But remember, the harder you work, the luckier you are.
- Get even. If someone does a number on you, give it back to them.
- To be winner, think like a winner.
- Always have a pre-nup.

PANELS

Bleeding Edge of Health Care: Risk or Opportunity for VCs?

DAVID WARD WITH SALIX VENTURES in Nashville isn't looking to invest in the "bleeding edge" of health care. "Health care has more inertia than any other industry," he said at a panel sponsored by the Owen Entrepreneurship Center and Nashville Capital Network. "If you are too far ahead of the curve, you will lose a lot of money in a hurry waiting for the market to catch up with you. One of my partners has a rule of thumb that he wants to see $10 million in revenue before he will do a health care IT deal, because someone needs to take the risk of whether or not customers are ready to buy the service or product."

His company, founded in Nashville in 1997, with offices in San Francisco and Boston, has about $180 million under management in two funds. They focus on early stage health care service companies and health care technology companies and typically invest up to $6 million in a company.

Debora Guthrie, '79, president and CEO of Capitol Health, based in Washington, D.C., on the other hand isn't opposed to taking risk to back innovative health care service companies. "We will invest ahead of that curve, including investing in rank start-ups," Guthrie said. "We invest in companies that are first movers and innovators in their sectors…those companies can go on to become market leaders. We make sure we have the capital and staying power when investing early… allowing us to be patient investors."

Capitol Health focuses exclusively on health care services, including information technology, making primarily early stage investments in the U.S. and Western Europe. The firm manages a $60 million health care specialist fund and is raising a $250 million fund. Through its affiliate Capitol Health Global, Capitol Health provides strategic and financial advisory services to health care companies in the U.S. and Western Europe.

STUDENTS

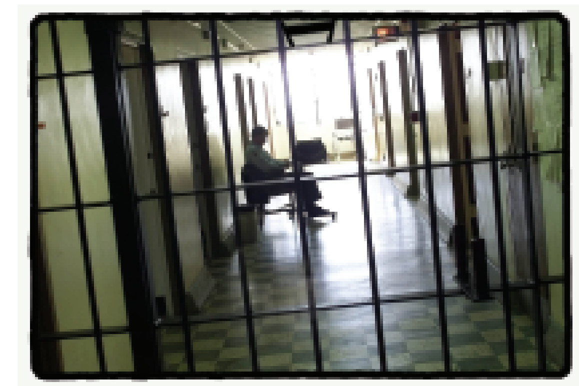
Business Behind Bars

OWEN STUDENTS LAST YEAR APPLIED their management skills in an unlikely venue: the corrections field. Three students partnered with the nation's largest private corrections provider during a benchmark management assumption project to formalize company best practices into standard operating procedures.

Rising prison populations and state budget crises nationwide mean that services of such private sector companies as Nashville-based Corrections Corporation of America are in demand. CCA last year undertook the largest management assumption in its history: the simultaneous transition of six correctional facilities for the Texas Department of Criminal Justice. But even CCA, which builds and manages correctional facilities for government agencies around the country, and is no stranger to management assumptions, found itself in uncharted territory, as it prepared to assume management of all six facilities in just 48 working days.

A team of Owen students—Jim Leonard, '04, and Nicole Ballard and Tyler Collins, both '05—helped to identify company best practices, analyze strengths and weaknesses, and develop a set of standard operating procedures to be used for future transition projects.

GERRY BROOME, KRT



The project was one of more than 50 that Owen hosted recently with companies large and small, from all over the country, says Bruce Lynskey, clinical professor of management and project advisor. "Typical projects are well-defined business problems, offering students the opportunity to apply what they learn in the classroom and transfer this formal knowledge into real-world, practical situations."

The students learned that CCA's challenges included navigating a hostile environment, assimilating business practices of different corrections management companies, site inspections and physical plant improvements, as well as hiring and training staff. "Assuming management of an existing facility is more difficult than opening a new correctional facility," says Jimmy Turner, VP/operations. "Our challenge was to introduce prospective staff, vendors, and community members to CCA; and install our business practices and culture at the new facilities while providing seamless service to our customer."

CCA historically had relied on tenured operations staff at its headquarters and long-time employees on loan from other facilities to ramp up operations at new locations and mentor new employees. Ben Elrod, '02, director of compensation and staffing, who participated in the transition project, recalls, "We were surprised that no field manual existed for bringing facilities online. We broached the subject with Jimmy Turner, who was supportive of the idea."

CCA's Executive Operations Group—a multidisciplinary team spearheading the transition effort—met weekly throughout the project. "We studied EOG meeting minutes and company organizational charts to figure out the players and their respective roles; determined major themes; and decided what people seemed to be struggling with," says Leonard, team leader. Students also surveyed staff at all levels of the company—wardens, assistant wardens, business managers, and training managers—about the process from beginning to end. Leonard and his team also participated in the company's after-action meeting to discuss challenges and lessons learned. "The most salient theme was that, due to lack of a set transition team onsite, wardens at these new facilities got into low-level tasks, from copying files to filling out paperwork," says Leonard. "The company had the necessary expertise, but wasn't organized for a smooth and efficient transition. Our team's recommendations sound like low-hanging fruit, but when you're in the process of completing six simultaneous management transitions, no one had time to plan for it."

The team created a facility start-up checklist, FAQs, and a best practices analysis. Recommendations also included formation of a set transition team, composed of the facility warden, assistant warden, human resources manager, a team coordinator, and an onsite transition office.

"When CCA is awarded a new facility management contract, they can hand the transition team our report and apply the lessons learned for their own process," adds Leonard.

The student project was a win-win situation for both Owen and CCA. "Companies utilizing such teams get top-notch work performed by highly motivated students," says Lynskey. "The companies also get firsthand on-the-job exposure to potential full-time hires."

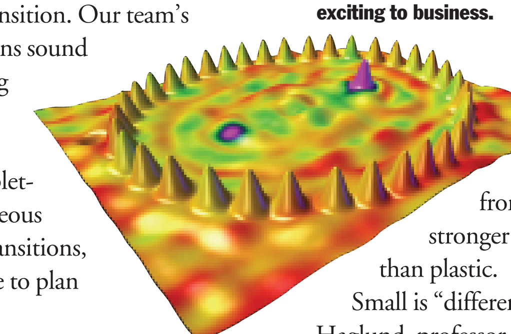
CONFERENCES

Nano, Nano, Nano

SMALL IS THE NEXT BIG THING. Nanotechnology—the design and manufacture of extremely small electronic circuits and mechanical devices built at the molecular level—is expected to constitute a $1-trillion-a-year megamarket by 2015, according to the National Science Foundation. The technology has already led to innovations that sound like science fiction: floor tiles that clean themselves, military uniforms that automatically contract to prevent a wound from bleeding, beams stronger than steel but lighter than plastic.

The properties of very tiny objects are what make nanotechnology exciting to business.

IBM RESEARCH, KRT



Small is "different," explained Richard Haglund, professor of physics at the Tennessee Valley Conference on the Science and Business of Nanotechnology, sponsored last fall by Vanderbilt and the Nashville Technology Council. "The properties of very tiny objects, when you get to the nanometer scale can be very different from the way they are in bulk: for example, a 2 nanometer cluster of gold is not a metal, but an insulator. And, when you change the dimensionality of objects—for example make a quantum wire of just a few atoms thick, but many atoms long, it doesn't behave like a regular wire, but has different properties and ductility and conductivity, and so on."

These are just some of the reasons that nanotechnology is attractive to business. The conference was held to bring together people from the science world, the engineering world, and the business world to explain the technology, to identify promising applications of the technology, and to assess the financial viability of investments in nanotechnology.

Vanderbilt is active in the nanotechnology field through its Vanderbilt Institute of Nanoscale Science and Engineering, and involvement in a Nanoscale Interdisciplinary Research Team (NIRT), a National Science Foundation-sponsored research collaboration with Michigan State University and Purdue University. The team received a $1.5 million grant to study energy conversion using the technology.

Although nanotechnology is becoming "big," it not necessarily new, said Jim Davidson, professor of engineering. "There is no such thing as a stand-alone nanotechnology business-science industry. It intersects with chemistry, physics, and the engineering world. A lot of the technology was going on decades ago by another name."

"There is a lot of hype now surrounding nanotechnology," added Germain Böer, professor of management and director of the Owen Entrepreneurship Center, "but unlike the dot-com craze, there is substance behind this development." He points to the facts that the U.S. government will spend about $1 billion per year for the next four years on nanoscience and nanotechnology, and that the American National Standards Institute has established a nanostandards technology panel to ensure that standards are used for nanotechnology development as some of the proof positive that nanotechnology is here to stay.

National Market System: A Good Foundation

DOUG DRISWOLD, KRT

SOME SUGGEST THAT THE markets and the market structure need fundamental change.

But Richard Ketchum, chief regulatory officer for the NYSE, and speaker at the 2004 Financial Markets Research Center conference, disagrees. "The national market system and its five foundations—economically efficient markets, fair competition, information transparency, opportunity to execute without brokers/dealers, and best execution—articulated by Congress in 1975, are not bad, even though it is true that Congress could not have foreseen the technological advances that have occurred since then."

Within that legislative framework, the SEC division of market regulation has a great deal of flexibility in how to interpret those directions from Congress, he said. "So it is probably not necessary to actually rewrite law. What we would like is the way the SEC has tried to work the markets for the last several decades—to regulate using a scalpel, sometimes the butcher knife, but rarely do we need an ax to make major changes."

There is no need to make major changes, he emphasized, because markets are in a constant state of evolution. "No matter what you decide a market should look like today, you are not going to be able to predict where the market will be next year or five years from now, what the technology will do, or how people will want to interact. You want markets to compete. It's better not to regulate markets, but let them evolve on their own. That doesn't mean you don't have to have a little regulation though."

DRESS FOR SUCCESS

A FEW YEARS AGO, TOMMY HILFIGER HAD BECOME OVER-DISTRIBUTED. We had too much product in the pipeline, and the supply and demand equation was out of balance, which caused too much of the sales volume to be at a discount. With a designer brand, the last thing you want to do is over-distribute and lose price credibility. While the U.S. wholesale business is about half of what it was six years ago, in terms of brand positioning this is not necessarily bad. We were able to offset much of these decreases through very strong international business growth. Additionally, we forgot about basics, injected too much leading edge fashion, and our sub-brands, which were targeted at different age groups, became muddled together. Our goal is to be a multi-brand, multi-channel company, and our strategies have been to fix the core business, accelerate our European momentum, and diversify through acquisitions.

—David Dyer, E'71, CEO, Tommy Hilfiger, Distinguished Speaker, November 8

RIC THORNTON, KRT

COMMUNITY

Summer Camp with a Biz Twist

NASHVILLE'S ENTREPRENEURIAL legacy is sure to continue with expressed business interest among the young set. During the last six summers, hundreds of students from Nashville, ages 10 to 18, many underprivileged, have come to Vanderbilt to learn about business through the Summer Business Camp of Youth About Business (YAB), a nonprofit dedicated to helping young people acquire business knowledge and experience.

The students divide into teams of seven and study such real world problems as mergers, acquisitions, and takeovers. Just like MBA students, they conduct in-depth analyses and structure proposals from an accounting, financial, and legal perspective. Students are judged not only on the quality of their analyses, but on presentation and communication skills and the ability to work together as a team.

Vanderbilt provides free meeting space for the camp and also sponsors a team. Professor David Owens teaches one session, and Owen students and staff are involved on a daily basis. The camp has also spawned interest among the business community, with more than 300 executives serving as consultants during the life of the program.

"It's a wonderful opportunity for these high school students to really dig in, understand a business situation, and prepare an in-depth analysis," Owens says. "And they're seeing firsthand how free enterprise works."

"The business world is such a huge part of American society, and yet for many young people, the free enterprise system and how it works remains a complete mystery," says Sam Kirk, YAB founder. "My goal is to try to make the world of business more accessible to young people."

BONITA CLARK, KRT

FACULTY

Post Holiday Wrap-Up

❄ ONLINE SHOPPING DURING THE holidays reached a record $21 billion, estimates Professor Donna Hoffman, co-director of the Sloan Center for Internet Retailing. Much of this success is due to multi-channel retailers who promote all of their different selling avenues, leading people to view Internet shopping as a convenient extension of in-store shopping, and the best way to shop during the workday.

❄ What did your gifts say about you as a giver? More than you may know, says Jennifer Escalas, associate professor and an expert on advertising and brands. People often select gifts that reflect their own image or feelings about the recipient. Wrapped up some Legos for your child? You may be nostalgic for a less complicated time. Gave your wife a Volvo? Chances are you think she is a good mother, who is concerned with the family's safety.

❄ During the holidays, did your children seem more aware of new toy and game offerings than at other times of the year? Probably so, notes Jacqueline Conard, the Madison S. Wigginton Assistant Professor of Management. Advertisers deploy their best tactics during the holidays to rise above the noise of other ads and to drive sales that can make or break their entire year, she says. Children, tweens, and teens are particularly susceptible to advertising messages intended to sell the "must have" toys of the season.

❄ Behind every retailer this holiday season was a manufacturer bracing for the inevitable return of merchandise, which is particularly problematic for time-sensitive products like electronics and personal computers, which depreciate as much as one to three percent per week, depending on where the product is in its lifecycle, says Joseph Blackburn, the James A. Speyer Professor of Production Management. Rather than using a traditional, centralized return process that may have a product sitting in a central warehouse for weeks or months until its future is decided, Blackburn suggests using a preponement method—planning ahead for returns before shipment—and identifying a product's best use—resale, refurbish, salvage, or write-off—much earlier in the return process, even at the retailer level. This shortens the amount of time the product is out of circulation, thereby maximizing its retained value, he says. VB

INSIDE OWEN

How Does a Record Company Stay in the Game?

Curb Records Continues To Thrive in the Era of Internet Downloading and Mass Merchandisers.

Q

MIKE CURB, FOUNDER OF CURB RECORDS, met with students, staff, and faculty recently to talk about how a record company can continue to thrive in the era of Internet downloading and mass merchandisers. Curb Records, the only Tennessee-owned record company, and one of few record companies that has never been sold, has had more than 150 #1 records on Billboard charts, and has received a Billboard award for the longest running record in the history of a pop chart, *How Do I Live,* by LeAnn Rimes. The label has also produced the only album in history, *You Light Up My Life*, to reach #1 simultaneously on Billboard's pop, contemporary, Christian, and country charts.
www.curb.com

Participants in the roundtable included David Owens, professor of management and innovation; Steven Tepper, assistant professor of sociology and associate director of the Curb Center at Vanderbilt; Timothy Vogus, Owen research associate; Buddy Kalb, songwriter; Jake Miller and Jason Reusch, second-year students; and Sonya Waitman, first-year student.

Mike Curb, founder of Curb Records, has been involved with the music industry since he was a teenager and is now interested in helping others learn about the business.

DANIEL DUBOIS

Curb: If you get the right song, the right record, the other parts of the record industry become easier. There aren't many Patsy Clines or Eminems out there, but once in a while, there is an artist who is really special. But what we are running into in the industry now is stagnation. There is the whole new Internet world, but people are still trying to market records the old way: get a hit record, get it on the radio, create a demand, and get it displayed in a store, although there aren't as many stores today. People who can think outside the box—that is what the industry needs.

If Wal-Mart and other mass merchandisers do not stock your record, you will lose two-thirds of your sales. There are still lots of mom and pop rap stores in urban areas, but even most of them are strapped. The Christian businesses, particularly the independent record stores, are feeling pressured.

A

Curb Records is the only record company that has lasted 40 years without changing ownership. If we don't solve the problem of free file sharing, there won't be a record industry as we know it today. I am thankful that Vanderbilt is utilizing a subscription service through Napster. I know the RIAA would prefer not to sue people and would prefer to have a compromise. I'm very supportive of the actions that the RIAA is taking to protect the industry, particularly here in Nashville, where so many jobs rely on the music industry.

Kalb: Now, if Wal-Mart doesn't want you, where do you go with your product?

Curb: Looking at the bottled water on this table, I realize we are sort of in the same business. The people who market and design bottled water had to figure out how to get people to buy something that they could get for free. We are in the same position—how to get people to buy a box set of Ray Stevens at Wal-Mart, when they could get the songs free on the Internet.

Also, I think that if you don't know where music comes from, how are you going to know where to take it in the future? People debate whether or not an artist is country, whether or not an artist is pop? Nevertheless, in my mind, if country radio plays it, then as far as I am concerned it qualifies as country music. And these questions can affect marketing.

Tepper: How does the music industry think about innovation in relation to formats? It is good for business for formats to collide.

Owens: Part of that could be copying—like a secret sauce; let's copy it and overproduce it.

Curb: Anytime formats collide, you have an explosive hit and an artist who can be played in multiple formats. It is amazing how genres have evolved. There used to be one R&B chart, but when you say R&B now, most people consider that covers hip hop, soul, and some jazz. If there are multiple genres, there are more opportunities for new artists to expose their music.

Miller: I turn on satellite radio and click on the country tab, and there are 20 versions of country, divided by decade with no commercials. I get my music exactly the way I want it. How do you know what people are listening to if they are going through these other channels?

Curb: Billboard and other charts have clear criteria for what makes up a rap station, an R&B station, or an urban station, for example. They track stations with the Broadcast Data Systems. Streaming radio is definitely not on the chart. There is a digital chart, which is based on reports from 10 companies, such as itunes, musicmatch, yahoo, etc.

Miller: From a consumer's perspective, once you have gone through the download phase, you feel like, 'why can't I just download this? Why can't it be like bottled water?'

Curb: You can't get bottled water for free, but you can get tap water free. If the consumer can get records for free, there will not be a way to pay artists, songwriters, publishers, record companies, recording studios, and all of the other people involved in record industry positions.

Reusch: From a consumer's standpoint, we look at it like why can't they sell the songs for a quarter? It costs them almost nothing to do it. Is that model from your perspective viable?

Curb: If Apple sells a song for 99 cents, they are buying it from us for about 60+ cents. That means we have about 30 cents left to figure out how to market the song. In the past, we had margins of $3. Obviously, there will be great challenges in the future with regard to marketing music more efficiently.

People still flock to buy huge albums, such as this one by Tim McGraw.

Kalb: Actually, the record industry started as a singles business. When Bing Crosby recorded *White Christmas*, they put a throwaway song on the back, because you had to have something on the back. The industry became so successful, it turned into an album business. You made people buy that one song they liked, and pick up nine other songs that they might or might not like. We are back around to the singles business; people are downloading just that one song. A problem is that the record business is constructed around contracts based on producing albums.

Tepper: That seems like that could have an effect on innovation in the sense that if you were selling singles, you could have other kinds of music on the back.

Curb: We just had a major record *Live Like You Are Dying* by Tim McGraw. People bought the album for that song. That made me think of bottled water. The bottled water companies have packaged it

There is a whole new **INTERNET WORLD**, *but people are still trying to* **MARKET RECORDS** *the old way...but there aren't as many record stores today.*

with blue labels and bottles, suggesting water, rather than with red labels. Now if you want someone to buy an album, you have to have value added. What does that mean? It means you have to have an exciting album cover, interesting information inside the album, a special box set—something they can't download. You can give them DVDs—those are a lot harder to download. That is why I say we are in the bottled water business now. There are two ways a record company doesn't get hit by the Internet—one is to have a huge album, by a Tim McGraw or an Eminem. The other way is your inexpensive catalog—something that you can sell at Wal-Mart for $5.99, and that price is so low that people won't bother to download it. So then the question becomes how do you make really cheap catalog?

To give a little context, record companies are often misunderstood. The artists need you at the beginning of their careers badly, because they need a contract and a chance to get started. We are also important when an artist is having a problem or at the end of their careers when they have crashed and burned. When they get to the peak of their careers, there are so many people around them—accountants, agents, managers, lawyers—oftentimes they don't think they need their record company like they did at the beginning. Meanwhile if there are profits coming from successful artists, the record company is recycling those profits to develop new artists. If there are no record companies, it will be more difficult for new artists. It will be more difficult for artists to succeed if they don't have record companies to make the initial marketing, promotion, and recording investments.

Kalb: Another problem: A man whom I have been working with is tremendous, and there are probably 5-6 million people who would love this guy's music, but there is a wall where radio doesn't play it. How do you get through that wall of radio?

Curb: We haven't signed many new artists in the country genre in the last two years. We have been signing artists like Nashville's Kimberley Locke (*American Idol*) and looking at other artists in the R&B and pop genres.

Reusch: Back to file sharing, people have strong feelings about file sharing—they think of it as either a God-given right or as evil.

Curb: The debate about file sharing is no different than the debate about copyright law. Intellectual copyright law is what allows people to create and their rights to be protected.

Reusch: One argument is that you want to affect the culture by putting the album out, but on the other hand you have to feed the beast. However people are going to obtain music—through CDs or the Internet—you have to deal with that.

Curb: When people copy a TV show or music using double cassettes, that isn't good, but that is one-on-one. Cassette slippage might be a fraction of a fraction of a percent. But the difference now is that we are a victim of our technology, and millions of people can download an album within two or three days of its release.

DANIEL DUBOIS

The panelists compared the record industry to the bottled water industry. Both deal with figuring how to get people to buy something they could get for free.

Owens: XM and Sirius are other ways to get sound quality.

Waitman: How do you get people who listen to XM and Sirius? Most of the CDs I have are ones that people have told me about. They are mostly alternative music, and you don't hear that on the radio. People find out about a new artist, and sometimes you can go on the Web and hear one song. And that is enough to inspire you to buy the album.

Kalb: So how do you multiply that effect?

Tepper: Music is a social experience—we like to hear it and talk to other people about it. I don't think the industry is taking those kind of interactions seriously and taking advantage of those effects.

Owens: There is too much music to choose from. We need people to help select for us.

Miller: That is similar to the situation of pharmaceutical companies. They discovered they didn't need to market directly to prescribers, but that they could do better marketing to advertisers, or social networks, who have Websites where people get their information. It is risky, but the pharmaceuticals have found it to be a big payoff. Maybe the record industry could use DJs in the same manner.

Reusch: Part of what makes file sharing so successful is that you are not just file sharing, but are also giving tips and recommendations about music, and there are chat rooms, where you talk about certain artists.

Curb: We are all searching for a legal way to file share, but it is very, very difficult to achieve this because there is so much illegal file sharing at the present time.

Reusch: If I am sharing my files with others, they can see what else I am listening to.

Owens: That is like radio. You listen to hear one song you like and then you hear more that you like. I see problems with itunes and Napster, though, because it makes general 99 cents per song regardless of quality.

Curb: I believe the price balance will come. I love what Napster is trying to do. From an industry standpoint, I don't mind the 99 cents because that is what I paid for a single when I grew up.

Owens: I wonder if there are other places where I can get generic music for 99 cents, but if I could go to your Website and get the good stuff for $2, that goes back to the notion that there is selectivity, and we can create variance between the most valuable and the least valuable.

Curb: We have had singles forever. I think people who buy a single are more apt to buy an album. I don't honestly think that the 99 cent single is a risk. I think we are at risk of raising a generation of people who think that copyright is free, and then we have a dramatic change in the for-profit arts. You can buy our music through our Website. Sony is the first record company to set up their own direct downloading, and they have an enormous catalog. We'll see it if works. We built our industry on selling to third parties, so if we sell directly to consumers, we could offend our good retail customers like Wal-Mart.

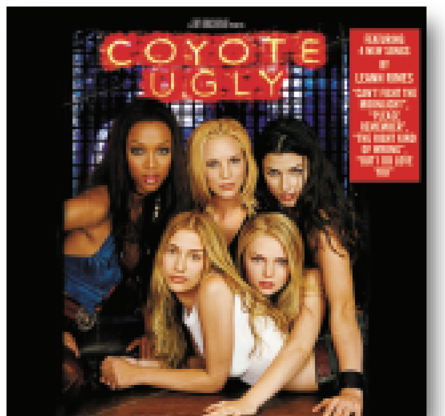
Curb: "If you get the right song, the right record, the other parts of the record industry become easier."

Kalb: If you had 4 or 5 million customer email addresses, you could signal when new albums are out and send a sample of the music. When you collect this information on people, you know who they are and what they like. If you begin to do business directly, you would see it as a blessing instead of a curse.

Curb: When you download to those customers, you know who they are, whereas when they buy an album in a store, you don't know who the customer is, unless you include a coupon, and very few people return coupons.

Miller: Earlier, I vaguely knew what Curb was, but I didn't really know what you

Big record companies **MERGE**, *and if you aren't going to sell millions, they don't want bothered with you. The nice thing about* **NICHE MARKETING** *is you are not dependent on one or two artists.*



were about. If I go to Wal-Mart to buy music, I may be going there anyway, but if I go to Curb Records, I am going because you are a brand, and that upside is huge.

Waitman: If you download a Tim McGraw song, you could send them a free sample of a new artist: "If you like Tim McGraw, you are probably going to like this artist."

Miller: Or, what if your songs were also packaged with an MP3 player?

Owens: It's not that big of deal to download something now. Maybe the industry could collaborate to create its own kind of paypal.

Curb: It is difficult to direct people to the Curb site, because many people don't know that Tim McGraw's album is on Curb Records.

Kalb: Why don't you market it that when anyone puts in "Tim McGraw" it comes up and links to the Curb site?

Curb: I readjusted some of my contracts to allow the artists to set up their own sites, and in exchange for that, if someone wants to buy, it links to Curb Records.

Owens: So why buy music in a store? Maybe to get a picture of Tim McGraw and to get other information about him.

Kalb: With an actual CD, you can give them something they can't get anywhere else. You can give them an idea of how a song is layered.

Waitman: Maybe you can give them funny outtakes of recording the songs.

Curb: Additionally, big companies merge, and they don't want to bother with the Kimberley Lockes. They didn't even want to bother with Amy Grant or Wynonna Judd, and they have been big selling artists for us. If you aren't going to sell millions, they don't want to talk with you. What do you do when the two biggest record companies merge? Bertlesman and Sony just merged. So much so that Warner Bros. sold to a private investor, because they didn't think they could compete with these merged entities. Most of the record companies are deriving most of their business from a handful of artists, and that is not good. When Garth Brooks stopped recording, the Nashville office of Capitol Records had to downsize. It's very important for a record company to have a broader base of recording artists, so they aren't completely dependent on one or two artists.

Owens: That is another parallel to the pharmaceutical industry. If pharmas can't sell 500 million, the drug sits on the shelf.

Kalb: I believe in niche marketing and trying to create something that sparks passion—so much passion that people get up and go somewhere to buy music, whether it is at a computer or in a store.

Owens: There is something about music that demands authenticity—that it is the real thing. That is what Curb has—the sense that it will never go away. Maybe part of the solution would not be competing at 99 cents for generic offerings, but saying that for a few bucks you can come to our site, and we have something that is real, not something overpolished, but it will cost you a little more. That might be a way to play both ends. You could also pull back from thinking about Wal-Mart, who has 40 percent of your business, because they end up with too much power. If you sell to individuals, you keep your transaction costs down.

Waitman: We at Owen are also interested in niche marketing and creating classes that attract the best students. What can we do to bring students here and then move them into the record industry?

Curb: We would be open to trying to work with Owen on this. Maybe there is some way the students could get experience working on marketing plans and other aspects of the music business. Maybe it would incentivize students to learn how to start their own record companies or other businesses. I have lived and breathed the music business for more than 40 years, but now am putting much of our profits back into the Curb Center and the Curb College and other educational initiatives to encourage people to learn about the music business. VB

Business Plan

EMBA Student and Vanderbilt Physician Brings Health Care to Indian Tribal Villages.

By VENKAT SHANKAR

Venkat Shankar one day hopes to build a state-of-the-art children's hospital in India that would provide quality care irrespective of ability to pay.

"Code Blue! We need you stat in the ER!!"—I can hear the portable radio crackle above the din of the beeps of ICU monitors and noise of respirators. I glance at my watch as I reflexively rush down the stairwell to the ER. It is well past 1:00 a.m., and having finished my night rounds in the pediatric ICU, I am hoping to get some rest.

Moments later, I am directing a team of eight doctors and nurses resuscitating a 2-year-old child who had cardiorespiratory arrest in the ambulance on the way to the hospital. Unable to revive her heart after two hours, we place her on a heart lung machine in the ICU. I explain to her distraught parents that despite our best efforts, we may not be able to save Betsy's life. It is emotionally and physically draining.

I walk out of the room at 4:30 a.m., and a nurse excitably informs me that a "donor" is found for Joe. Joe is a 6-month-old infant awaiting a heart transplant. He has been battling for survival the last 4 weeks on a respirator after a viral infection weakened his heart muscles beyond repair.

I wake up Joe's parents who are sleeping down the hall to break the news they have been waiting to hear: "We found a heart for Joe!!" With tears rolling down their cheeks, they give me a tight hug. Hours later, Joe will be back from surgery and off the respirator. It is 6:30 a.m. now, the sun is rising, and another busy day begins in the PICU at Vanderbilt Children's Hospital (VCH). I am ready to hand over the 24 critically ill children to my colleague—and to get some much-needed sleep.

As a faculty member at VCH, one of the nation's state-of-the-art children's hospitals, I have a gratifying and meaningful job and love every minute of it. My journey here has been long and challenging, but gratifying, and one that started many years ago in a tiny town in India. Across

VENKAT SHANKAR *is an assistant professor of pediatrics and anaesthesiology at Vanderbilt Children's Hospital and a current EMBA student. For his work with the Indian tribal villages, Shankar received a Governor's Community Service Award from the Chest Foundation of the American College of Chest Physicians.*

I came to realize that to **INFLUENCE** *and* **HELP** *on a* **LARGER SCALE** *than an individual patient level, you have to have a thorough* **UNDERSTANDING** *of your macro environment.*

the planet, I have met and lived with many different people in different cultures—and am humbled by the similarities in all humans despite cultural, religious, political, and ethnic divisions.

For the past four years, I have also been involved in the planning and execution of a community health project for the neglected and medically underserved poor tribal population in Chattisgarh, India. It is run by Jana Swasthya Sahyog and is an NGO formed by eight brilliant doctors driven by the desire to serve the needy. All held promising academic careers in prestigious institutions prior to forming this organization.

The project provides high quality curative services through a community health center to the indigent and underserved population from 560 tribal villages (with a combined population of nearly half a million). The program has trained 47 tribal women health workers in 21 villages and promotes advocacy on tribal health related issues. It also develops low cost and appropriate technology for use at the community level in the prevention, diagnosis, and management of such common diseases as malaria, tuberculosis, malnutrition, leprosy, and acute respiratory and diarrheal illness.

More than half of the villages served have no electricity and almost none has piped water. Poverty is rampant—the annual income per individual in the family is less than US$60. Sixty-four percent of children less than 5 years old are severely malnourished. Over 80 percent of adult women weigh less than 88 pounds.

The project in Chattisgarh serves the indigent and underserved population from 560 tribal villages.

STUDENT EXPERIENCE

I spend two to four weeks every year on site—examining and treating sick children, administering anaesthesia for children, training nurses and health care workers, and evaluating and fine tuning processes and the overall mission of the project. Everyday we see more than 400 patients in the outpatient clinic and operate on at least four or five. I also bring with me a large amount of donated medical supplies, used medical equipment and instruments, and medical books and journals. The transition between a high tech ICU and a bare bones community hospital with severe resource constraints isn't easy, but is well worth the time and effort. These few weeks are gratifying and meaningful and recharge my batteries.

It doesn't take long to realize that one can make a difference where it matters. I wish I could spend more time and that we had the resources and capacity to help more people in need.

I came to realize that to influence and help on a larger scale than an individual patient level, you have to have a thorough understanding of your macro environment. This drew me to join the Executive MBA program at Owen in 2003, and I have enjoyed every moment of it. In the program, you interact with 50 other bright overachieving individuals from various walks of life. Every class is vibrant, enriching, and illuminating. The teachers are extraordinary and use effective teaching methods to illustrate core concepts. In the process, I am gaining a new perspective of both the hospital in India and my ICU at Vanderbilt. The Leadership and Change Management course was particularly helpful as we were going through many changes at my hospital at that time, and I could see the concepts play out in real life. Organizational Behavior has been valuable in anticipating, understanding, and modifying group behavior. Virtually everyday, I find some operational process or step that seems wasteful and non-value added. The last 12 months have changed the prism through which I look at events and processes. Health care is a major sector of the national economy, and the rising health care costs are reaching a crisis situation. It would be helpful if more people in medicine pursued MBA degrees. The people "in the trenches" are able to impart insightful perspective in understanding current issues and proposing potential solutions.

The program has developed low cost and appropriate technology for use in the prevention, diagnosis, and management of such diseases as malaria, tuberculosis, and leprosy.

In India, the country with the most infants, the choice for a sick child is between the state-run public hospitals that are in complete disrepair, or private for profit hospitals that are beyond the reach of most.I dream of building a large state-of-the-art children's' hospital in India—a hospital built on a "not-for-profit" basis, using philanthropy from many individuals and corporations. The hospital would offer quality care for children irrespective of the ability to pay. The physicians would have live exchange of information and knowledge with other centers across the world, using telemedicine technologies.

This venture will need appropriate cash flows from revenues generated or philanthropic contributions for long-term viability, sustenance, and growth. I think the classes in Creating New Business and Launching New Ventures, Strategy, and Finance will be of immense practical value in planning and implementing this project. Moreover, the lessons imparted from the various guest speakers are inspiring and illuminating. Using these skills and knowledge, with continued determination and some luck, I hope to achieve that dream in the near future. VB

INSIDE BUSINESS

Governance *Report on SOX, Custom Board Size* | **Discrimination** *Bad Credit* | **Entrepreneurship** *Early Days at Yahoo!* | **Corporate Image** *The Corporate Villain?* | **Success Story** *Women and Popular Music*

GOVERNANCE

A Two-Year Report Card on SOX

By James Cheek

The Sarbanes-Oxley Act of 2002 ("SOX") has had its second anniversary, and while all of its implications are not fully understood, most observers note that SOX and the related SEC, NYSE, and Nasdaq rules have had a mix of bad and good effects on public company life. Having advised a number of public companies on these legislative and regulatory changes, I agree, and this article reflects my view of the best and the worst impacts of SOX.

The Best—higher degree of accountability and responsibility. SOX clearly demands greater accountability from all of the major participants in public company life—senior management, independent directors, external auditors, and corporate lawyers. Senior management must certify financial statements and evaluate disclosure and internal financial controls and are subject to potential criminal prosecution. Audit committees are directly responsible for the appointment, compensation, and oversight of the external auditors and must provide effective whistle-blowing procedures. Codes of ethics and business conduct applicable to executive officers and directors must be adopted. External auditors are accountable to the audit committee which must preapprove all services. Corporate lawyers must report material violations of law or fiduciary duty up the ladder to the board of directors until an adequate remedy is adopted. These changes have resulted in senior executives becoming more involved in the public reporting process and in maintaining an organizational culture of financial and business integrity. There is more intense scrutiny of the independence of directors and of the external auditors and of conflict of interest situations. Boards are graded on their corporate governance practices by outside organizations. Cumulatively these changes have in fact resulted in a better system of checks and balances within public companies to assure business integrity and the accuracy of corporate and financial reporting.

The Worst—costs of disruption and money. The positive benefits described above are not cheap. The degree of process required to comply with SOX and the amount of senior management time devoted to that process are enormous, adversely impacting the time and energy devoted to more substantive strategic matters. Another impact is the changing and more tense nature of relationships among the principal participants in public company life as each group seeks to meet its responsibility as a check and balance on the other groups. In addition, compliance with SOX provisions, particularly those relating to Section 404 internal control matters, is costing millions of dollars, far more than the costs originally projected. These costs have a potential disproportionate impact on smaller companies, and in some cases have resulted in companies not going public or going private if they were already public.

After two years of experiencing public companies living under SOX, I believe on balance that the best outweighs the worst. The system of checks and balances now imbedded in public companies should in the long term improve oversight, corporate cultures, and internal controls and financial reporting, thereby enhancing investor confidence and reducing the potential negative impacts of future massive financial frauds.

James Cheek, a 1967 graduate of Vanderbilt Law School, is a senior partner at Bass Berry & Sims in Nashville, and is chairman of the task force on corporate responsibility for the American Bar Association.

GOVERNANCE

Board Size: Custom Fit Works Best

By Charu Raheja

In the post Enron-WorldCom era, optimal corporate board structure has been much debated. It is generally

Daniel Dubois

Professor Mark Cohen found that African Americans were more likely to be charged subjective markups in auto purchases, and the rates had nothing to do with their credit-worthiness.

DISCRIMINATION

Bad Credit

Think only people who are uncreditworthy get charged exorbitant interest rates on auto loans? Mark Cohen, senior associate dean and Justin Potter Chair in American Competitive Business, found otherwise. Studying more than 1.5 million General Motors Acceptance Corporation loans between 1999 and 2003, he found African Americans were nearly two-and-a-half times as likely as white customers to be charged "subjective markups"—rates over and above the interest rates set by auto lenders that can be based on creditworthiness, loan amount and term, and vehicle type. The borrowers Cohen studied paid $421.6 million in subjective markup, but blacks, comprising only 8.5 percent of the group, paid nearly 20 percent of the amount. Some were charged as much as $5,000 or even $10,000 in subjective markup that had nothing to do with their creditworthiness. As a result of the study, GMAC settled a lawsuit alleging the company discriminated against minority consumers by charging higher interest rates for loans. Lawsuits are also pending against other major auto company captive insurers and banks and financial institutions that provide auto loans. Because of the settlement, "approximately 90,000 GMAC customers should benefit each year by receiving lower rate auto loans," he says. For his work, Cohen was featured in the January 2005 issue of *Money Magazine* as one of 12 "Unsung Heroes who did right by you last year."

INSIDE BUSINESS

thought that a higher proportion of independent directors allows for more effective monitoring and thus improved firm performance. Likewise, small boards often are considered best, as large boards present coordination problems that make monitoring of firms difficult.

Indeed, Sarbanes-Oxley as well as the stock exchanges' new listing requirements require more independent directors. Companies traded in the NYSE now must have its audit, governance, and compensation committee staffed wholly by independent directors who meet criteria for independence set by the exchange. Board size also has been affected by the call for change, with the average size for U.S. firms down from 11.5 members to 9.5.

Although recent regulations and pressure for change may help improve board effectiveness in some firms, there is some potential danger with uniform requirements for all firms. Below, I examine proposed calls for ideal board size and composition and their potential implications to board effectiveness.

Although it may be clear that boards need to be independent to have an incentive to monitor management, it is less clear at what point too much independence prevents boards from monitoring effectively. Companies are moving toward fewer insiders on the board, and in many cases, the only insider is the firm's CEO. To monitor managers effectively, directors need information about the company—not only the company's conditions, its competition, and its products—but also the subtle or soft information about the business and the workings of management. Information may be easy to evaluate in mature firms with well understood technology, such as a grocery store chain, but other industries are more complex and difficult to evaluate, such as firms engaged in research for products in yet unproven technologies.

By allowing insiders other than the CEO, or outsiders who are less independent of management, boards are able to obtain such information. As William T. Allen, former head of Delaware's Chancery Court, wrote in a recent article in the *Corporate Board Member* magazine, in most cases, directors get plenty of information. Their difficulty is in knowing what information to concentrate on, how to interpret the information, and what issues to pursue. Insiders and affiliated outsiders can help independents decipher the information and focus on important issues.

Additional insiders also prevent the CEO from being the only party deeply informed about the issues and capturing the board. While insiders can always be called to board meetings, making them board members gives them the psychological responsibility of board membership, allowing them to meet with independent directors formally and informally and being responsible for discussing their own opinions, not just those of the CEO.

Small boards may save on coordination costs, but larger boards have more people to oversee management performance and to give advice. These benefits can outweigh the higher coordination costs in some industries. For example, a larger board may be more efficient for such complex firms as those in multiple product lines or geographical territories. Several studies documented that pre-Sarbanes-Oxley-Shareholder-Activism Era, firms with more complex organizational forms—firms with a larger market cap, conglomerates, or more mature firms—tended to have larger boards. If one believes that firms not ideally designed would be weeded out by competition, then it is surprising to learn that successful firms such as General Electric have in the past elected for board size much larger than the numbers recommended by the current corporate governance standards. (General Electric currently has 16 board members, with 10 independent directors.)

Giving companies flexibility in choice of corporate board structure may help improve corporate governance.

While recent calls for better corporate governance and better management oversight have helped bring awareness to shareholders and more responsibility to boards of directors, there are potential costs to the one-size-fits-all recommendations for boards of publicly traded companies. It is tempting to set rules making it easier for shareholders to evaluate a firm's corporate governance, but such rules may presume that practices proven effective for some firms will work for others as well. Giving companies flexibility in choice of corporate board structure may in fact help improve corporate governance.

CHARU RAHEJA *is an assistant professor of management.*

ENTREPRENEURSHIP

Start-Up 101: The Early Days at Yahoo!

By ERIC HALL

I WAS FORTUNATE TO HAVE BEEN AT Yahoo! in the first seven months of its existence and the early days of the Internet. No one back in April 1995 could have forecast Yahoo!'s rise to stratospheric heights.

But what made Yahoo! different from other tech start-ups in the mid-90s? There are several factors. First, we had founders who realized they didn't have the skills to run a company. One of my favorite Clint Eastwood *Dirty Harry* lines is, "A man's got to know his limitations." Jerry Yang and David Filo realized theirs from the beginning.

Mike Moritz, the highly successful VC from Sequoia Capital, brought in an interim management team to figure out what Yahoo!'s business was. My partner, Philip Monego, was CEO, I was COO/CFO, and Randy Haykin was VP Marketing. Interim management allowed Yahoo! to build a strong foundation of sound management practices in finance, operations, and marketing from the start. We knew how to set up and run a company and didn't waste valuable time or make mistakes setting up the infrastructure. We also gave the company time to find CEO Tim Koogle and COO Jeff Mallet, who led Yahoo! to success. As Randy once said, "Yahoo!'s DNA was set in its first six months of its life."

The second factor was we were frugal to a fault. I emphasize the word frugal. Frugal is not cheap. It means getting the most value for your money. Cheap means lower quality. When Mike handed me the checks for Yahoo!'s first $1 million in VC funding, he said, "This is all you get from us…make it last a year." He wasn't kidding. Our first office was a dump but fit our budget. Our first management task was organizing a painting party. I bought the paint and supplies, and Philip provided the pizza, beer, and sodas. We painted the office in one evening. Our total cost was under $300 versus the $5,000 quote we got from a painter. More importantly, our first eight employees who had never worked together gelled into a team that night, and we instilled a work ethic that still exists today. We sublet part of our office to our ISP and cut our rent and Internet connection costs by almost half. We bought second-hand desks and chairs for less than $125 per employee. Vendors complained initially when we made them take half their fee in Yahoo! shares, but their complaining stopped when Yahoo! went public.

The third factor was that work ethic. Philip's pet saying was, "Whatever it takes." This was the key factor in Yahoo! and other early Internet start-ups like Netscape and eBay. We all had a passion for what we did and what we were trying to accomplish—making the Internet fast, fun, and free. We didn't do it for the money like so many employees and companies did before the bubble burst. If something had to be done, someone stepped up to do it. My most difficult challenge as COO/CFO was making sure employees didn't burn out. I spent a lot of time making employees go home after spending 14-15 hours at work. Po Bronson in his great book *The Nudist on the Late Shift* describes Dave Filo sleeping under his desk after working late into the night and being awakened in the morning when the first employee arrived. I can say this was true since I usually woke David up. Hard work also garnered reward at Yahoo! We couldn't pay a lot, but we did provide generous stock option awards to our employees, a practice I still support today. Many of the part-time students we hired to surf the Internet more than paid for their college tuition when Yahoo! went public.

A lot of what we did was pioneering, and we invented it as we went. But what we learned can be applied to entrepreneurs and companies today:

Check your ego at the door. You may have a great idea, but you need great people to make it happen. Find those people, hire them, and let them achieve great things. Nurture that organizational passion.

Be frugal to a fault. Learn to get the most out of your funding. Make 12 months of working capital last 18.

Do whatever it takes. Working at a start-up is hard. You don't measure the day or week in hours. You measure it by what you accomplish. Time is an entrepreneur's worst enemy and missing deadlines will kill a company.

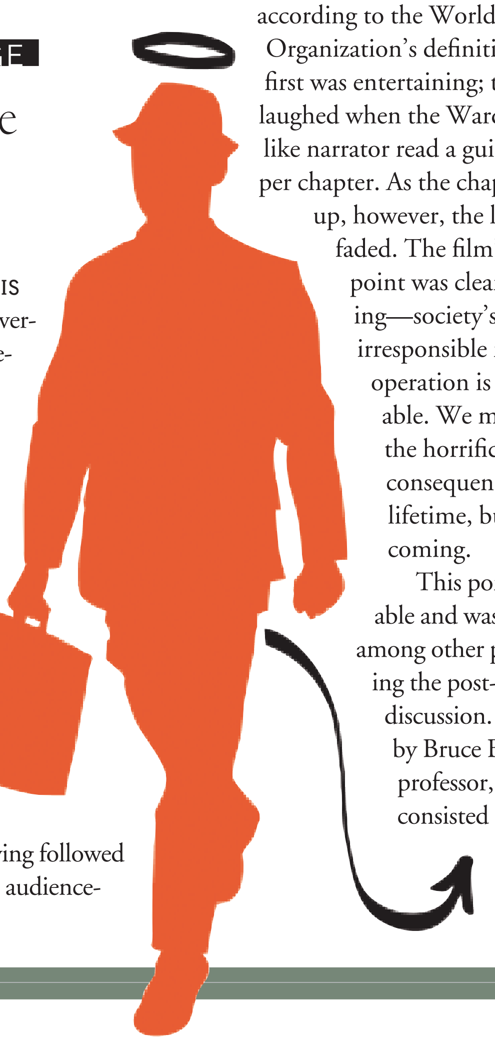
Today, Yahoo! is one of the Internet's most successful companies and, in my opinion, still has a lot more upside to come. I own some of its stock, do you?

ERIC HALL, '78, is a principal with Financial Leadership Group, LLC in San Francisco.

CORPORATE IMAGE

The Corporate Villain?

By JEFF GOWDY



AS SCHOOL STARTED UP THIS YEAR, SO did a new, controversial film at the Belcourt Theatre. No, it was not Fahrenheit-911. It was *The Corporation*, a Canadian documentary, which has caused quite a stir worldwide. The film has won several film festival awards, including the Sundance Film Festival's Audience Award.

The Belcourt Theatre showed the film for several weeks, on one night hosting a viewing followed by a panel presentation and audience-driven discussion.

The film begins by focusing on how the corporation was recognized as a "legal person" in the mid-19th century. The corporation since then has been granted many rights held by individuals but is held to a lesser level of legal accountability.

The film decrees that corporations receive little punishment for externalities, or negative byproducts. To illustrate an externality, the film shows an old movie clip of one person throwing a pie at another. The pie misses and hits an innocent bystander in the face. This sets the stage for the rest of the film—a chapter-by-chapter account of externalities that the corporate entity has wreaked on society.

As the film progresses, it purports that the corporate entity is a psychopath, according to the World Health Organization's definition. This at first was entertaining; the audience laughed when the Ward Cleaver-like narrator read a guilty verdict per chapter. As the chapters piled up, however, the laughter faded. The film's main point was clear and chilling—society's insatiable, irresponsible mode of operation is not sustainable. We may not see the horrific consequences in our lifetime, but they are coming.

This point is debatable and was discussed among other points during the post-screening discussion. Moderated by Bruce Barry, Owen professor, the panel consisted of Dan Cornfield, sociology professor, Margaret Blair, law professor, and David Ewing, a senior VP of the Nashville Area Chamber of Commerce.

Barry and each of the panel members opened with prepared statements reflecting their take on the film from their own academic perspective. Then, things got heated. As the first question was fielded, an irate audience member stood and demanded that the scope of the discussion be limited to large firms. This would not be the last such outburst.

Barry and the panel did an admirable job of keeping the discussion focused on the broader points and the tone as light as possible. However, the disconnect between the audience (focused on details) and the panel (focused on themes) derailed much of the conversation.

Nonetheless, the discussion clearly showed that sustainability, corporate responsibility, politics, law, and economics are intertwined in a complicated weave that concerns many.

The most obvious omission from the discussion was the question: "*What can we as individuals do?*" Can consumer demand patterns change the way corporations operate and produce? Outside the realm of regulations, will it ever become beneficial or strategic for corporations to operate sustainably?

Many other questions come to mind—and one statement. Joe Strummer once sang, "It has been suggested in some quarters that this (situation) is not enough…well, get up and scream!"

It would be interesting to see how many would, after viewing this film.

JEFF GOWDY, a first-year student, is studying environmental management with the intent of working in the arena of green business. He graduated from the University of Virginia in 1997, has six years of management consulting experience… and occasionally listens to The Clash.

SUCCESS STORY

Girls Just Want to Have Fun

AND DOROTHY MARCIC, OWEN ADJUNCT FACULTY MEMBER, has definitely been having fun with her latest project, her book turned musical play—*Respect: A Musical Journey of Women*—which has drawn a crowd around the country, including 12 weeks in West Palm Beach and is now playing indefinitely in Ft. Lauderdale. The play chronicles social and economic change in women in the U.S. from 1900 to 2000, through songs of the day mirroring women's experiences. Archetypes went from codependent ("Bill Bailey, Won't You Please Come Home") and innocent/victim ("I Wanna Be Loved By You"), evolving through the decades to rebel of the 1960s ("You Don't Own Me"); to responsible adult in the 1990s ("Hero"), when women became increasingly prominent and started their own companies in record numbers. Codependent songs still exist, she says, but any hit chart shows songs of women's strength outnumbering the passive ones. What started as a one-woman show has turned into a cast of four. Marcic used to sing all of the songs in the play but now leaves that to professional singers. "But in terms of business professors," she laughs, "I may be one of the best singers around." The play also opens March 23 at the Chicago Center for the Performing Arts.

Headlines from Around the World

Read all about it: technical glitches at Amazon.com, solutions to crime, Nashville is a great place to start a business, and more.

RECENT TECHNICAL GLITCHES HAVE stopped some holiday shoppers from completing purchases at Amazon.com Inc., but the Web retailer's sales are unlikely to be hurt unless the problem persists. Amazon is considered "the gold standard in the industry. The concern is that if they're having problems, then what does that mean for the rest of the industry?" said Donna Hoffman, a management professor at Vanderbilt University and co-director of its Sloan Center for Internet Retailing. Hoffman said, however, that even if Amazon shoppers have encountered technical problems, most of them would be likely to come back to the site and complete their shopping after the glitches are resolved.

—*Reuters,* December 14

CHANGES TO SENTENCING GUIDELINES, more prisoners, double-bunking, prison expansion! When are we going to see the real and much-less-expensive solution to our crime problem? According to Vanderbilt University economist Mark Cohen, the calculated cost to American taxpayers when a single young person quits school and embraces a life of crime and drug use (a common scenario) is almost $2 million in criminal justice costs, victim costs, drug-abuse-related costs, and lost wages. Youth intervention programs cost a fraction of incarceration, and studies show 90 percent of youth referred to early intervention services do not have further involvement with the law.

—*St. Paul Pioneer Press,* December 10

A DECADE AGO, FULL SPONSORSHIP OF AN EMPLOYEE'S master of business administration was standard practice at many big companies. These days, however, more executives are discovering that if they want an executive MBA, they have to pay for most or all of it themselves. Kerry Fehrenbach, a 39-year-old marketing executive at software company Intergraph Corp. in Huntsville, Alabama, is footing most of the bill for her executive MBA at Vanderbilt University's Owen Graduate School of Management.

—*Wall Street Journal,* December 7

NOW THAT BROADBAND IS AVAILABLE everywhere, Silicon Valley is not the only place to start business. Nashville is introduced as one of the five great (and cheap) places to start a company, and Vanderbilt MBA is featured as the main reason to choose Nashville.

—*Business 2.0,* December

ASSOC. PROFESSOR JENNIFER ESCALAS is featured as a poster woman for professors, having gained tremendous resources for research from Owen, including a research budget, administrative assistants, and equipment. Escalas notes that those resources provided by the school make her more productive and allow her to interact more with peers through attending numerous conferences.

—*Chronicle of Higher Education,* November 19

A RECENT STUDY HAS FOUND THAT MBA degrees do not help executives much in their jobs and do not increase their rates of pay, but many top-level executives from publicly traded U.S. companies do not buy those arguments. R. Brad Martin (EMBA 1980), Chairman and CEO of Saks, discusses his MBA experience.

—*AmericanWay Magazine,* September

A MONTH AFTER GOV. MCGREEVEY announced that he would resign over a gay extramarital affair, New Jersey's chief executive continues to be fodder for late-night funnymen. Owen Communications Professor Fred Talbott commented, "Laugh about it. Laugh at yourself. I hope that he can eventually laugh through it too."

—*Philadelphia Inquirer,* September 12

RECIPE FOR SUCCESS? WHEN AN MP who champions ancient Greek is appointed to the board of an innovative broker, investors may fairly question the wisdom of mixing politics and business. Research last year by Mara Faccio, an economist at Vanderbilt University's Owen Graduate School, placed the UK third in a league of countries with strong links between political and business power.

—*London Times,* August 25

New Global Sourcing and White Collar Jobs

Economic Gains and Policy Challenges

By CATHERINE L. MANN

GLOBALIZATION HAS ALWAYS HAD TWO sides. We know well the positive side—lower prices for consumer goods and business inputs, more variety, more efficiency, and technology transfer, all of which support higher product value and wages. These gains from trade result when firms change what they produce and the way they produce it in response to competition and opportunities abroad. But these gains from trade also mean that some firms go out of business and some workers lose their jobs.

What is new today is the wave of international competition enabled by technology. The Internet and information technology more completely integrate the United States with the rest of the world, and extend the competition for the marketplace and for jobs from the manufacturing economy to services. With more extensive integration with the global economy, the gains from trade are larger, but adjustment costs are more widespread. Moreover, our deeper integration is taking place at a time when new and large players previously on the sidelines—China, India, countries of the former Soviet Union—are breaking onto the international scene. Putting the two sides of globalization together to make a positive equation for U.S. workers and firms is the critical challenge facing policy makers today.

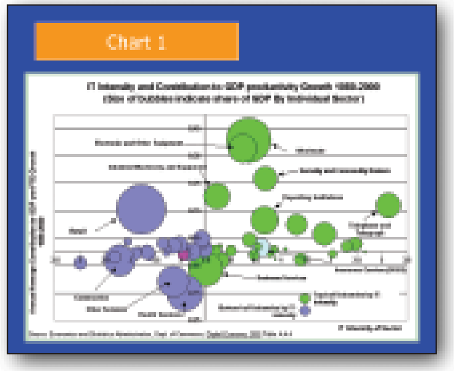
PHOTO ILLUSTRATION MIKE SMELTZER

IT is globalization in a "petri dish." The benefits and costs of globalization can be more quickly observed in this sector than in others.

As a backdrop, what do we know about global integration, particularly in the manufacturing arena, from a historical empirical perspective? Research using detailed plant-level data, summarized in a short book by Howard Lewis and J. David Richardson, shows that global engagement through trade and investment links is very advantageous for U.S. workers and firms. First, workers and companies that export have 0.6-1.3 percent faster sales growth and 2-4 percent faster employment growth, and offer dramatically better pay and benefits. Exporting is the slam dunk of global engagement. But, even if the firm only imports, it is more likely to receive foreign direct investment, which pays for advanced manufacturing technologies, which yield higher wages for the workers. For each 10 percent of imported input, worker salaries are higher by $1,000.

This research also finds that global affiliated companies are much more robust than those that stand alone. Plants that are part of a U.S. multinational family compared to those that are not have 11 percent higher labor productivity, which supports a 7-15 percent wage premium. It is also the case that U.S. plants that are owned by a foreign parent are more likely to grow faster, employ more people, and use advanced manufacturing technology. The wage premium in these globally affiliated firms

Putting the two sides of **GLOBALIZATION** *together to make a positive equation for U.S. workers and firms is the* **CRITICAL CHALLENGE** *facing policy makers today.*



Leading and lagging sectors

is 19 percent for blue- and 13 percent for white-collar workers.

We are just on the cutting edge of globalization of services, and we know much less about services in global engagement. However, examining globalization of information technology—hardware, software, and services—may give some insights. IT is a particularly interesting sector; it is globalization on "steroids"—a very rapid pace of technological change combined with rapid global integration of countries that have targeted this sector through investment and skill development. IT is also globalization in a "petri dish." Good things, bad things grow faster in a petri dish, and the benefits and costs of globalization may be more quickly observed in this sector than in others.

First, consider IT hardware, because this is where the globalization process is well underway and data exist for analysis. My research on globalized production of IT hardware suggests that IT hardware prices are some 10-30 percent lower than they would have been if all production of IT hardware had stayed in the U.S.

Lower prices of information technology are a particularly potent way to generate productivity growth and macroeconomic gain in an economy. Estimates by Bayoumi and Haacker and by Flamm indicate that for every 10 percent decline in prices, investment demand rises by well more than one-to-one. Research by Stiroh, Jorgenson, van Ark, Lynch and Black, and others show that more IT investment in an economy in conjunction with business transformation and changing workplace practices accounts for about half of the accelerated productivity growth of the 1990s. What difference does just the globalization part make? The 10-30 percent lower IT prices yielded on the order of $250 billion additional GDP over the last five years of the 1990s and about 0.3 percentage points on GDP growth.

The economy-wide story masks wide variation in the diffusion of IT across sectors in the US economy, which points to where future gains from globalization of IT services and software may come. In the chart upper left, the sectors in the upper right quadrant are the "leading" sectors, the advance guard in terms of integrating information technology into their businesses (horizontal axis) and generating higher productivity growth (vertical axis): electronics and industrial goods, wholesale trade, and financial-type institutions. Not only do these sectors invest in IT capital, but they also are leaders in hiring IT professionals, and, for the services sectors such as finance, enjoy international trade surpluses. So, hand-in-hand with IT intensity are gains to productivity growth, IT jobs, and trade.

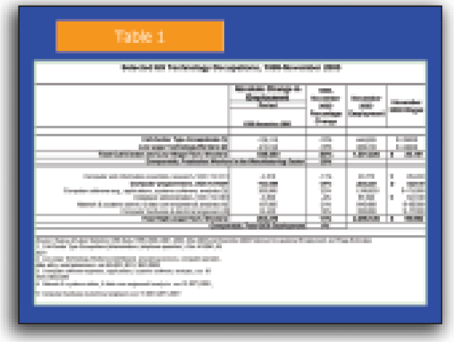
What do we know about the "lagging" sectors, those in the lower left quadrant? Health services, construction, and retail trade have many small to medium sized enterprises (which often require non-scaleable applications and on-site assistance with IT), have complex needs on account of layered relationships (consider the doctor office, hospital, pharmacy, and other players in health services delivery), and finally often have a regulatory and cultural climate which could make cost-effective IT products more difficult to create (state-level licensing, for example). For these various reasons, it has been an expensive challenge to design, implement, and use IT effectively, particularly in the area of software and services.

Moving some segment of the programming or services abroad reduces the price of the IT services and software applications, which increase the demand for the IT package of hardware, software, and services in the lagging sectors. Because the demand for services and software is estimated to be even more price elastic than is IT hardware (see research by Bayoumi and Haacker), the cheaper applications should expand the demand for the products and the people who design, integrate, and assist in their implementation on-site in the firms of the lagging sectors.

Is there any evidence of this change in type of IT skills demanded? The chart and table on the next page tell two stories: First, the chart shows that the tech boom and bust was not just about stock market valuation, but is reflected in growth (and contraction) in IT investment and IT jobs. The complementarity between IT investment and IT workers already observed in the sector-level data discussed above shows through, with both IT investment and IT jobs showing a modest rebound after the crash in 2000.

Second, the table data reflect structural factors—technology and international trade—that affect demand for workers with IT and related skills. Consider first workers with non-specific IT skills and low wages, for example, data entry, computer operators, and telemarketers. These jobs have been replaced by technology, directly or indirectly by international trade, and almost 1/3 of those employed in these sectors lost their jobs between 1999 and November 2003 (latest data at this level of detail).

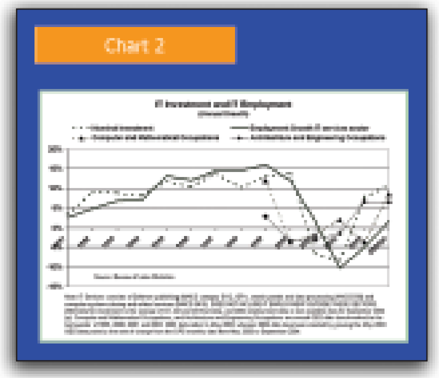
What about workers with specific IT-skills and high wages? Computer programmers have earned good money and the job has required specific skills. But, these workers are on the cusp of the new technology and international job divide. Their specific skills have been replaced by new types of programming code, and information technology enables their activities to be internationally traded. Over the period where data are available, programming contracted 125,000 jobs—about a third of the number of people employed in this job segment since 1999. But, what of the next steps up the job ladder—application and system software engineers; database, system, and network administrators; system and network analysts—which are the IT jobs that pay as much or more and require the specific knowledge to design and integrate IT into the U.S. workplace? Over the same time period, jobs for workers with these skills increased by more than 425,000, a more than 20 percent increase on the base of employed persons. Thus, trade and technological change work together to eliminate some jobs completely, and change the skills demanded in others. While this process is not new, the pace of change has been quite rapid, and the skill level now exposed to international trade is moving higher.



Structural factors affecting demand for IT workers

If this is the face of 21st century globalization, what is the 21st century policy response? First, technology and trade put an even higher premium on more education, whether above high school or in the industrial trades. Second, enabling dislocated workers to gain on-the-job training helps move them to a new career and up the wage ladder. Wage insurance (see Lori Kletzer and Robert Litan) replaces part of the earnings lost between a previous job and the new one, and kicks in only after the person leaves unemployment to take a new job. Third, for some skills, particularly in science and technology, market imperfections argue for an investment tax credit to promote skill upgrading within an organization. Such a "human-capital" investment tax credit recognizes that technology skills take a long time to develop, yet depreciate quickly, and, moreover, that the first jobs in the career ladder may no longer exist in the U.S. once technology enables international trade.

What market imperfections support the "human-capital" investment tax credit?



Tech boom and bust

"Free-ridering" firms on training cost and benefits tend to limit how much all firms spend on training their own workers. "Spillover" benefits for the economy as a whole are generated from innovative science and technology workers, and workers able to adjust to new ways of working with technology. "Incomplete information" about what skills might be demanded in the future hinders workers from retooling before their skills depreciate. All told, these rather familiar market imperfections are the rationale for the R&D tax credit and the investment tax credit for IT capital. In 21st century competition, a "human-capital" investment tax credit offered to individuals through firms, and implemented by educational institutions, has even greater salience, given the importance of innovation and human skills in today's international environment.

Deeper global integration demands far superior policy responses, which heretofore have been woefully lacking. Policy makers run the risk of foregoing the gains from trade if they cannot aid in the adjustment of those on the front lines of globalization.

CATHERINE MANN *is a senior fellow at the Institute for International Economics and previously taught in Owen's Executive MBA program.*

Tireless Wireless

As Asurion's business gains record speed, Owen alums and students call up the right solutions.

By BETH MATTER

IMAGINE DRIVING A RACE CAR AND changing the tires at the same time. Sounds impossible, but it is a good analogy to working at Asurion, North America's largest provider of enhanced services for the wireless industry, company executives say.

Asurion has to keep its speed with its businesses in cell phone insurance and warranties, roadside assistance, equipment lifestyle management, customized solutions, and mobile equipment solutions, while navigating and enlarging its course through aggressively acquiring companies and expanding into Asia.

"Our greatest challenge by far is handling growth," says Byron Smith, EVP and chief marketing officer. "We are growing revenue and top line in customers at 40 percent a year or more, and have pitched 16 new pieces of business in the last year, winning 13 of the 16." Asurion is the leading provider of value-added solutions to many of the world's largest wireless carriers, systems integrators, and OEMs, including ALLTELL, Verizon Wireless, Cingular Wireless, Palm, Nokia, Blackberry, and recently T-Mobile, among others. At the time of this interview, the company had more than 500 openings at its Nashville offices.

One of the perks of moving its headquarters to Nashville was the presence of good talent to draw from, Smith says. The company primarily recruits at Owen, finding its alums have the know-how and stamina to help it win the race. The group including Stephen Beckham, '93, Nancy Freeman, E'85, and Kevin Hyman, '01, "are the infrastructure builders, jumping on a lot of projects and new business development, and keeping the current businesses running," says Courtney Harrison, SVP, organizational and people development. "The group including Brian Johnson, '04, Kathryn Bratton, '03, Heather LaGrone, '03, Manish Mudgal, '03, and Mike McCooey, '02, look at and improve what we do, and make sure we continue growing at this rate."

Success stories include one alum who cracked the code of keeping customers from churning, or dropping their carrier, "a program that will roll out nationwide soon," Smith says, "and another who is involved in business development, doing everything from product analysis to preparing presentations and visiting clients throughout the country." Several others have been involved with reshaping how the company thinks of process insurance claims and what that market will be like going forward for their company.

Additionally, a team of Owen students—Consuela Sawyers, Mark Wisner, Marc Gaaserud, Rusty Miller, and Trotter Hunt—made an impact last year in Asurion's newest area, Managed Wireless Solutions, dealing with enterprise-wide mobile equipment. The business provides companies such data devices as Palms, Blackberries, and mobile wireless applications ranging from loading software and running their intranets to leasing and insurance, fixing the back end and upgrades, and helping them think through migration. Customers include the Department of Homeland Security, the Transportation Security Administration, McDonalds, and Pepsico.

"As a new business at Asurion, we wanted to understand our marketplace and talk to potential customers in a non-sales environment," says Eric Rosa, VP and general manager of the group. "The students asked companies how they used wireless services, what was important to them, and what worried them. They did a gap analysis and made a presentation to senior management. We had asked them to identify companies that might be interested in our services, and as a bonus, we closed a deal as a result of the project. The deal was perfectly qualified: We had never closed a deal as easily as that one—soup to nuts signing in about two weeks, when it usually takes three months."

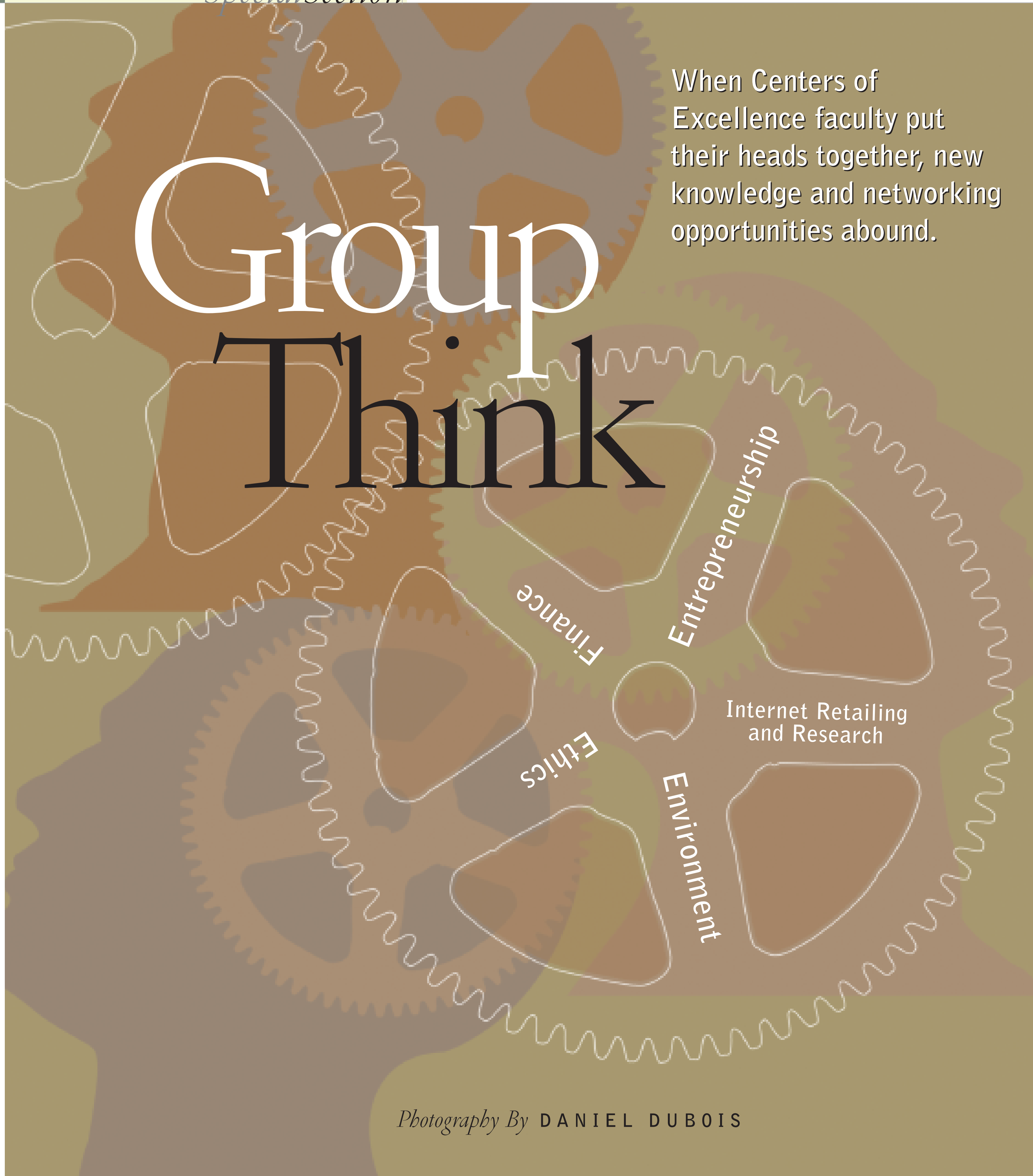
So what makes Owen students and grads a good fit for Asurion? Aptitude and a good work ethic, Rosa says. And why is Asurion attractive to Owen folks? In addition to the pace and challenging work, Harrison suggests the community service the company does, such as offering jobs to foster children, who age out of the system at 18, the lack of hierarchy in the company, the ability to impact and make a difference right out of school, and access to the CEO, Bret Comolli, who has lectured in Vanderbilt classes, as have other Asurion executives. And of course, the fun and informal atmosphere doesn't hurt.

DANIEL DUBOIS

Some of the Asurion Owen team: from left, back row: Brian Johnson, Jose Amden, Nancy Freeman, Kevin Hyman, Steve Beckham, Manish Mudgael, Katye Bratton Hughes.

Group Think

When Centers of Excellence faculty put their heads together, new knowledge and networking opportunities abound.



Photography By DANIEL DUBOIS

Vanderbilt Center for Environmental Management Studies (VCEMS)

COMPANIES ARE NOW MORE ENVIRONMENTALLY AWARE, and VCEMS studies that effect on the bottom line. A joint initiative of Owen and Vanderbilt Engineering and Law Schools, VCEMS promotes and develops alliances among industry, government, and academia to study how environmental policy affects business management and operations. Students, through the Center, can also obtain an MBA with an environmental emphasis, a master's degree in engineering management, or a Ph.D., and apply to be one of the Bridgestone Americas Fellows in Environmental Management. A major activity has been the conferences on such topics as corporate and environmental reporting, and risk communications for firms. Companies currently are regulated so much that most pollution now comes from individuals, says Mark Cohen, Owen professor, and Mark Abkowitz, engineering professor, co-directors of the center. The group is sponsoring a conference in April that will look at how to effect change in individual behavior, and how manufacturers and retailers can encourage their customers to use and dispose of products correctly.

DIRECTORS: *Professors* MARK ABKOWITZ AND MARK COHEN

Mark Abkowitz

Cal Turner Program for Moral Leadership

WHAT ARE THE ETHICS? That is the question for The Cal Turner Program for Moral Leadership in the Professions. The University-wide program is dedicated to discussion and promotion of moral values relevant to Vanderbilt's professional schools: business, law, medical, nursing, and divinity, and also serves as a resource to professionals in the community. Initiatives include "Professions in Global Perspective," a two-year examination of such moral and ethical issues as the HIV/AIDs pandemic, outsourcing of jobs, and religious diversity; and "Professions and Privacy," a look at privacy concerns arising out of technological and other developments. "We bring professional students together to talk about issues of common concern," says Bart Victor, Cal Turner Professor of Moral Leadership, "and bring faculty together to share ideas and to teach each other's students. The students get to see how they view other professionals, and how other professionals view them. And underlying it all we ask the question—what are the ethics? It is a question important to us all."

EXECUTIVE DIRECTOR: *Professor* JOANNE SANDBERG

Financial Markets Research Center (FMRC)

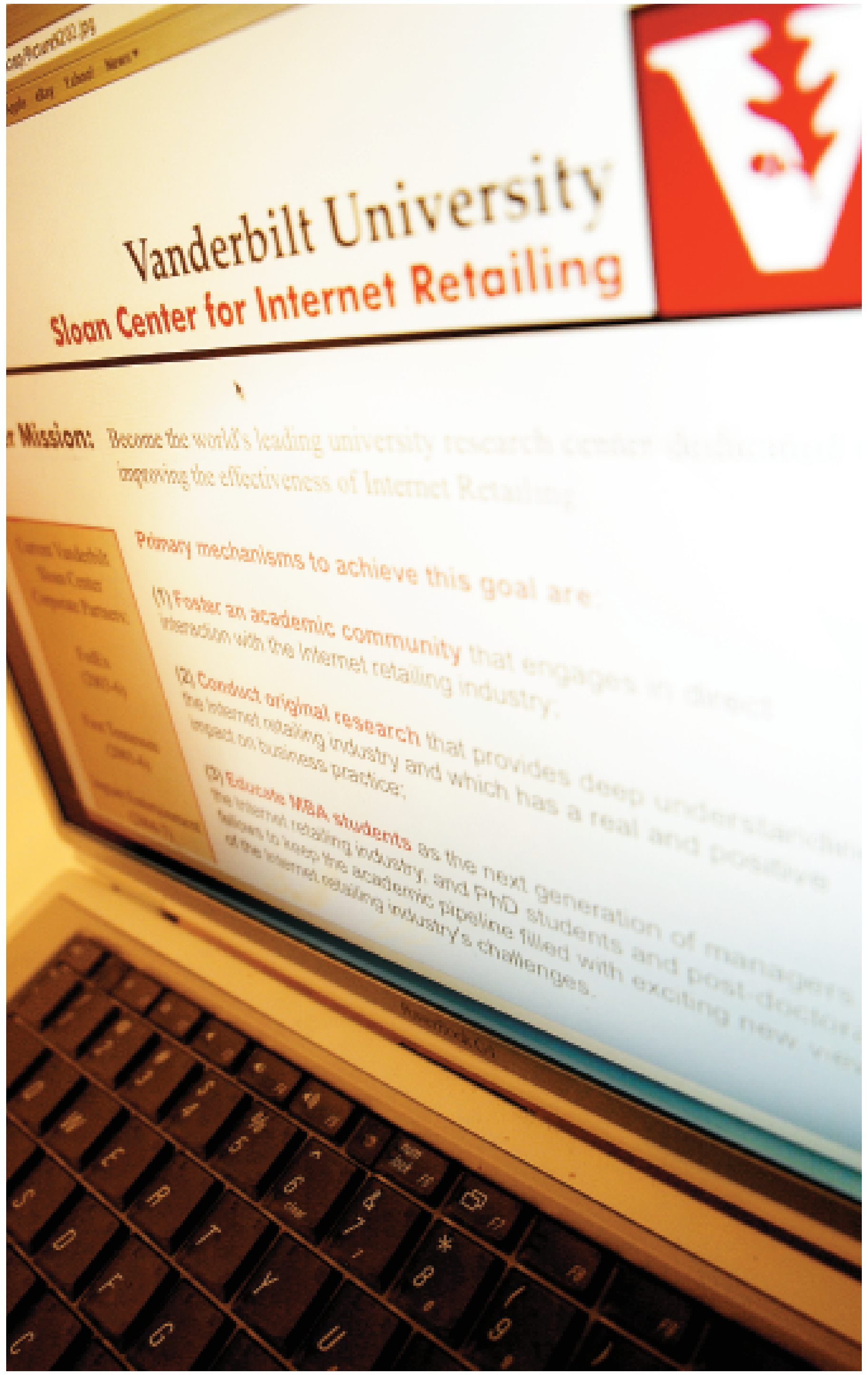
FOUNDED IN 1987, THE FMRC IS THE GRANDDADDY OF OWEN'S CENTERS. The Center brings brokers and others in the financial community together with researchers from Owen and beyond to foster research on financial markets, instruments, and institutions. The annual conference examines such timely subjects as corporate behavior and financial markets, exchange governance, and securities market structure. Not just an academic exercise, the FMRC indirectly and directly influences public policy. Notable research includes finding in the 1980s that derivatives effects on the stock market can be managed successfully; and in the mid-1990s that Nasdaq market makers maintained artificially high trading profits at the expense of investors, resulting in a sweeping reform of the Nasdaq market and the introduction of the SEC order handling rules.

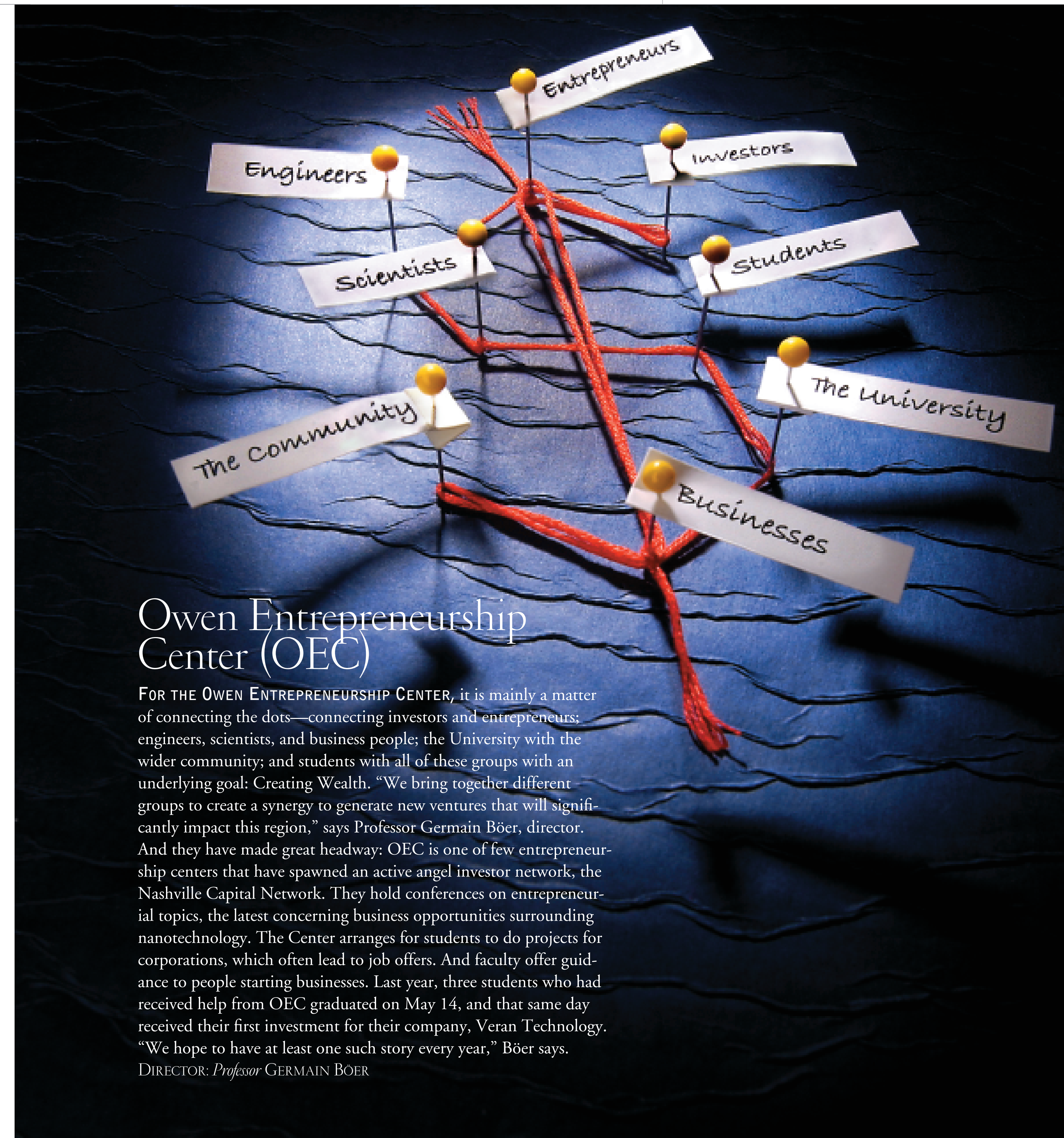
DIRECTOR: HANS STOLL,
ANNE MARIE *and* THOMAS B. WALKER *Professor of Finance*

Sloan Center for Internet Retailing/eLab

OWEN HAS LONG BEEN A PIONEER IN THE ONLINE WORLD, and the Sloan Center/eLab ensures its position at the forefront. Sloan started in 2003 to study how businesses can use the Internet to their advantage to connect with customers and sell products and services; eLab started in 1994 as the nation's first academic research center dedicated to the study of the Internet, and now offers its database and capabilities to Vanderbilt faculty for research. Professor Ray Friedman, for example, just completed a study on "Negotiating Through Brokers" and used eLab to reach thousands of research subjects. "The volunteers completed the project online, and the computer simulated the other party in the negotiation," Friedman says. "If we hadn't used eLab's database, we would have needed more than 100 people to do the exercise in person and extra administrative assistants to handle the paperwork. With the database, we were able to reach a wide population—geographic and age-wise. This is a unique resource. It makes research easier and better."

DIRECTORS: *Professors* DONNA HOFFMAN *and* TOM NOVAK





Owen Entrepreneurship Center (OEC)

FOR THE OWEN ENTREPRENEURSHIP CENTER, it is mainly a matter of connecting the dots—connecting investors and entrepreneurs; engineers, scientists, and business people; the University with the wider community; and students with all of these groups with an underlying goal: Creating Wealth. "We bring together different groups to create a synergy to generate new ventures that will significantly impact this region," says Professor Germain Böer, director. And they have made great headway: OEC is one of few entrepreneurship centers that have spawned an active angel investor network, the Nashville Capital Network. They hold conferences on entrepreneurial topics, the latest concerning business opportunities surrounding nanotechnology. The Center arranges for students to do projects for corporations, which often lead to job offers. And faculty offer guidance to people starting businesses. Last year, three students who had received help from OEC graduated on May 14, and that same day received their first investment for their company, Veran Technology. "We hope to have at least one such story every year," Böer says.

DIRECTOR: *Professor* GERMAIN BÖER

Increasing the Options

IBG Advocated Market Reform Through Electronic Brokerage Services

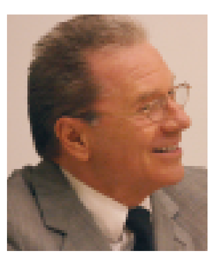
By LISA A. DUBOIS

When Thomas Peterffy bought a seat on the American Stock Exchange in 1977, he was certain that in those early days of option trading he would have to fight to be accepted among the seasoned crowd of traders. Much to his surprise the other floor traders accepted him with open arms.

"Only later did I realize that newcomers were looked upon as fresh money—and rightly so," Peterffy says. "Most would lose their trading capital within a few months and never return."

Not only did Peterffy stick it out through some pretty tough times in the risky, cutthroat environment of options trading, but he became an innovator and an advocate for market reform—and also, in the process, built one of the world's most successful global electronic brokerage services.

Having immigrated as a young man to the United States from Hungary, Peterffy taught himself computer programming, and was especially interested in the mathematics of option pricing. However, once he began a career as an options specialist, he figured out that successful trading depended more on one's "luck," or ability to out-joust aggressive floor brokers, than on one's ability to price options. Peterffy was determined to even the playing field.



Thomas Peterffy

"It became clear to me that the trading process for listed stock options could never be conducted in a fair and yet efficient manner unless it was put on a computerized platform," he says.

In 1982, Peterffy formed Timber Hill, Inc., an equity market maker. The following year, Timber Hill became the first trading system whose brokers used handheld computers on the trading floor. "Early on," he says, "it was our vision that putting the process of quote generation, trade processing, and risk management on an integrated computerized platform would enable the firm to compete on price and speed, thereby reducing transaction costs to our broker dealer customers and attracting trade volume."

Needless to say, such a sea change in the entrenched practices of the AMEX met with staunch opposition. "Peterffy fought the establishment," says Hans Stoll, Walker Professor of Finance and director of the Financial Markets Research Center. "He was interested in market microstructure, how markets work in small minute-to-minute changes, and what it costs to trade under those conditions. He realized a computer could carry out many tasks better than a person could."

In the beginning, Timber Hill's computers could only quote options and accept trade and price outputs. The traders would have to stop periodically to download the information into a mother station. Despite the clunky, seemingly innocuous technology, the CBOE specifically prohibited the use of

these computers, and the SEC refused to hear an appeal.

Peterffy persevered but continued to hit roadblocks. He rigged up hard-wired trading screens on the exchange floors to display quotes. But in response to newly imposed regulations, the screens had to be faced away from the traders. Timber Hill then hired clerks to translate the numbers, coded in colors, via hand signals to the traders.

In 1991, Timber Hill expanded into Germany, which had opened the world's first fully automated options exchange. Switzerland soon followed, and Timber Hill began trading there as well. In 1993, the United States finally allowed commercially available handheld computers on the exchange floors, enabling traders to create electronic trade tickets. Within a year, Peterffy formed Interactive Brokers, Inc. (now known as IB LLC) to electronically deliver and execute customer orders wherever the existing technology permitted them to do so.

Over the next 10 years, given the introduction of Electronic Communications Networks (ECNs) and the inevitable push towards more sophisticated technology, the AMEX could not hold back the tides.

Peterffy says, "Our time arrived with the launching of the ISE, the first fully automated U.S. options exchange in 2001. The ISE would have better markets, faster and error free executions, and is now the number one exchange for stock options in the U.S."

In January 2004, the Boston Stock Exchange, in partnership with Interactive Brokers Group and the Montreal Exchange, rolled out the Boston Options Exchange (BOX), the only SEC-approved, technology-driven open access options market in the U.S. Having eliminated seats and specialists, trading can be completely anonymous, faster, fairer, and with reduced transaction costs. In a press release, Peterffy estimates that early investor savings could reach "half a billion dollars annually."

Stoll says, "Thomas Peterffy is a manager, a visionary, a thinker, and a doer. He can step back and see the broader panorama of the markets and know which directions to go. Thomas provides high speed broker services to customers."

Today, Interactive Brokers Group is a $1.5 billion dollar firm, and one of the world's leading brokerage services with access to more than 40 market centers in 16 countries. Stoll believes that Peterffy distinguishes himself from the pack in his grasp of foreign markets and his ability to trade easily and inexpensively on them.

"We have expanded into global markets because of our view that the efficient allocation of risk capital must be a global process. Being at the forefront of this process, we'll be able to be of maximal benefit to the global economy," Peterffy explains.

That drive to be at the forefront of international market reform also led Peterffy to be involved in the Financial Markets Research Center from its beginnings and to continue to be a supporter and a participant in the center's activities over the years. He believes the FRMC has the potential, through unbiased research, to influence the evolution of fair and efficient markets.

"This is simplistic," he acknowledges. "But I see fair and efficient global markets, and uniform and well-enforced property laws as the solution to many of our problems of poverty, violence, and religious and national hatred." VB

Prescription for a Pharmaceutical

In five short years, Cumberland Pharmaceuticals has launched five new drugs and started a joint-venture company that supports pharmaceutical research. And it's still in the start-up mode.

Photography By DANIEL DUBOIS

By GRACE RENSHAW

Cumberland Pharmaceuticals' corporate headquarters illustrates one of the keys to the company's success. They're hiding in plain sight.

A modest suite of offices tucked away on the ninth floor of the 2525 West End Building, in the shadow of Vanderbilt's football stadium, they look as if they might house a newly minted law firm or consulting practice. In fact, they're home to Nashville's first and only full-fledged pharmaceutical company, founded in 1999 by A.J. Kazimi, '84.

Today, thanks to Kazimi's considerable business and marketing savvy, Cumberland is succeeding in an extremely tough, high-stakes business.

The hurdles faced by major players in the pharmaceutical industry would daunt an Olympian. They include the Food and Drug Administration's notoriously difficult approval process and regulatory requirements, along with stiff competition from well-funded giants such as Pfizer, Glaxo and Lilly, whose armies of perfectly coifed and highly compensated sales representatives reach every physician practice and hospital in the country and whose ads for acid reflux, migraine, allergy, and other drugs now dominate commercial television. And that's to say nothing of the usual obstacles faced by start-up businesses with products aimed at an international market, such as recruiting talented people with enough fire in their bellies to take on the grindingly difficult task of building a major company from the ground up.

Kazimi has succeeded through a combination of grit and charm—and a brilliantly conceived network of strategic alliances that gained him access to talent and other support from Vanderbilt University Medical School, the Tennessee Biotechnology Association, and the Nashville Healthcare Council. Cumberland's successful start-up is, very simply, a story of business fundamentals, carefully applied and precisely executed.

Find Your Niche.

Throughout the 1990s, Kazimi served as COO of Therapeutic Antibodies, Inc., a biopharmaceutical company founded in the U.K. in the early 1980s. When Kazimi joined the company, it was headquartered in Nashville to gain a foothold in the U.S., but its research and manufacturing facilities remained in the U.K., Australia, and New Zealand. Over the next 10 years, Kazimi closed more than $30 million in product agreements with pharmaceutical firms, enabling the company to garner financing for more than $100 million of debt and equity. Ultimately, those successes positioned the company for a successful IPO. Among the treatments developed by Therapeutic Antibodies was an antitoxin for rattlesnake venom, aimed at the emergency medicine market.

But when Therapeutic Antibodies merged with another firm and moved its headquarters back to the U.K., Kazimi decided the time was right to start a niche pharmaceutical company here. "There was a lot of consolidation among the major pharmaceutical firms, such as Pfizer and Warner-Lambert and Glaxo/Wellcome/SmithKline," he recalls. "As these companies grew bigger, they needed to focus their resources on the blockbuster drugs."

That left a sizable market niche for products with less than $100 million in annual sales, and emergency medicine was one of the niches Kazimi singled out as offering high potential. "There were more than a thousand FDA-approved products in America with sales of under $50 million," Kazimi says. "We saw plenty of opportunity."

Cumberland's acquisition business model places it in stark contrast to most of its competitors.

In addition to quick-response treatments for emergencies, Kazimi and his management team identified two other areas—gastrointestinal disorders and critical care—where physicians would be receptive to new and better products. "We wanted to specialize and not be a generalist company," he says. Cumberland also chose to focus on areas where a costly battle for market share was less likely, hoping to avoid fierce competition of the sort currently playing out in ubiquitous television advertisements for erectile dysfunction drugs from three major manufacturers.

Choose a Business Model that Supports Your Goals.

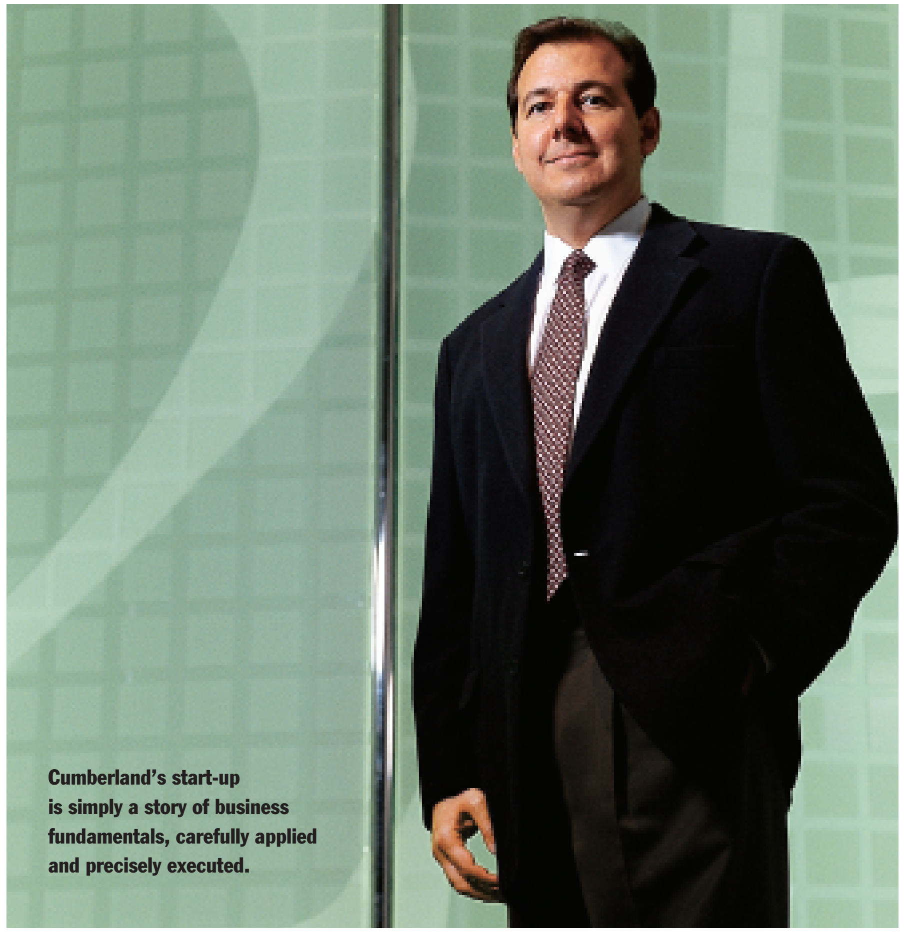
In the late 1990s, most of the major pharmaceutical companies reflected the traditional R&D model, with which Kazimi was familiar after 10 years with Therapeutic Antibodies. However, he did not think that model would work for a start-up — particularly one with Cumberland's ambitious goal of launching five drugs in five years.

"The process of developing one viable drug can take more than 10 years and cost over $100 million," Kazimi says. "To be a successful drug company, we certainly need a pipeline. But that doesn't mean we have to develop every drug we market. There are a lot of good, FDA-approved drugs out there with potential sales of $50 to $100 million, but they need marketing and distribution support to reach their potential."

Kazimi and his team ultimately settled on a two-stage model that combined acquisitions with research and development. "Our goal as a company was to crawl before we walk and walk before we run," he says. "So our goal was to start with an acquisitions model and build our marketing and sales capabilities first. Then, we could expand our focus to include research and development."

Those Who Fail to Study History Are Doomed to Repeat It.

By adopting an acquisitions business model, Kazimi placed Cumberland in stark contrast to most of its competitors. "When we formed Cumberland, we looked at all of the health care companies on the stock market and tried to find those that were built on a similar strategy," he recalls. "What we learned was that most of the new life science/pharmaceutical companies were built on the traditional R&D model."



Cumberland's start-up is simply a story of business fundamentals, carefully applied and precisely executed.

DANIEL DUBOIS

But Kazimi and his team did find a handful of successful companies built on the acquisitions model, and they studied those to gain the advantages of hindsight while avoiding the same problems. "We wanted to determine what they had done well and where they had made mistakes," Kazimi says. "We found that, to be successful, we needed to have an exciting portfolio of products, and we decided a reasonable pace would be one quality acquisition per year. And we've done it."

Don't Reinvent the Wheel.

Cumberland has succeeded by taking advantage of what Kazimi recognized as a huge untapped resource: good drugs that were FDA-approved, owned by companies that lacked the skills or resources to support their marketing and distribution. The company acquired its first product, Amelior®, from Vanderbilt in May 1999, early in its start-up. Designed to lower fever in post-surgical patients, Amelior®— currently in late-stage development — offers a treatment that can be injected or administered intravenously. "Many patients come out of surgery with tubes down their throats," Kazimi explains. "They have very high fevers and can't take medicine orally. This product meets a specific medical need."

To reduce the time required to launch Cumberland and its start-up costs, Kazimi also formed alliances with companies that could provide the manufacturing capacity, sales force, and other capabilities his fledgling company needed. Through these alliances, Cumberland gained access to manufacturing and distribution facilities in Canada, Australia, and Southeast Asia, as well as physician education and marketing support. Rather than assembling a sales force from scratch, Cumberland markets its products through Cardinal Healthcare, a pharmaceutical sales and distribution giant headquartered in Ohio.

This strategy worked because it proved mutually beneficial to the four companies with which Cumberland is now allied. "We bring them opportunities for added growth and profitability," Kazimi says, "and they make their mature operations available to us."

Get Good Advisors.

After Kazimi recruited a board of directors with the health care and financial expertise he needed to launch Cumberland, he assembled an advisory board of experienced pharmaceutical executives. "These individuals had all been through building pharmaceutical companies," Kazimi said. "We had a small management team with a lot of experience, and our board and advisory panels really extended our capabilities." Members of the advisory panel provided guidance on all aspects of the business, including corporate strategy, operations, marketing and sales, manufacturing, regulatory issues, finance, and human resources. Kazimi also formed a panel of three outside business advisors—Lane Carrick, president of Sovereign Wealth Management; medical practice management consultant Chris McDonald, and Art Doty of Unity Communications—to work with his team to evaluate potential product acquisitions. Finally, he recruited an international contingent to represent Cumberland overseas.

"We built an outstanding team," he says. "And we made sure we had access to expertise in every area critical to Cumberland's success from the start."

Brighten the Corner Where You Are.

Kazimi, who has lived in Nashville for 24 years, jokes about "taking the adventurous route" by choosing his adopted hometown for Cumberland's headquarters.

In fact, like his other moves, choosing Nashville as Cumberland's headquarters was a calculated business decision. "We have a really strong base of health care services here, and pharmaceutical and life sciences are a good outgrowth of that," he says. "I thought, 'Wouldn't it be exciting and rewarding to not only stay and help build a company, but to help build the life sciences/pharmaceutical industry in this part of the country?'"

Some of the rewards were financial. Most of Cumberland's initial 150 shareholders were from the Southeast, and Cumberland's first institutional investor, S.C.O.U.T. Healthcare, is based in Birmingham, Alabama. By 2003, when the company brought in S.C.O.U.T., Kazimi says, "We had made enough progress and had enough critical mass and value that they could come in on reasonable terms."

In addition, the state of Tennessee had identified the pharmaceutical and life sciences industries as important to the state's future and committed state resources to encourage start-ups. Having Vanderbilt University Medical School, with its active research programs and intellectual resources, right in the company's back yard also proved advantageous. Kazimi recruited Cumberland's medical director, respected pulmonologist and critical care specialist Gordon Bernard, from Vanderbilt's faculty. Bernard also serves as Vanderbilt's assistant vice chancellor of research.

Cumberland Emerging Technologies helps to bring biomedical technologies and products conceived at Vanderbilt and other regional research facilities to market.

During his tenure with Therapeutic Antibodies, Kazimi had joined the Nashville Healthcare Council, an association of executives representing the cornucopia of health care companies and for-profit hospital networks headquartered in Nashville. Through the council, he had an extensive network of contacts in the business of providing health care services. "They saw biotech and pharmaceuticals as a natural complement to their health care services," he says.

Offer Products that Meet a Genuine Need.

Four of Cumberland's five products are on the market, a blazing achievement for any pharmaceutical start-up. Kazimi is particularly proud of Acetadote®, a drug that can prevent liver damage after an overdose of acetaminophen, the active ingredient in Tylenol®. Administered intravenously as an emergency treatment after an acetaminophen overdose, the drug can reduce or prevent the permanent liver damage that patients may otherwise sustain.

In addition to Amelior®, the product Kazimi acquired from Vanderbilt in 1999, Cumberland also offers three GI products—CeraLyte®, a non-prescription oral solution that rehydrates the body while controlling diarrhea, a leading cause of dehydration; and Kristalose®, a prescription laxative produced by Bertek Pharmaceuticals. The company's product, ProctoKit™, offers a practical application system for prescription-strength hydrocortisone cream. Cumberland is marketing ProctoKit™ through an agreement with its manufacturer, Ranbaxy Pharmaceuticals.

Cumberland Pharmaceuticals has found high potential in niche pharmaceuticals, those with less than $100 million in annual sales.

Develop a Productive Pipeline.

Tucked away in the basement of the historic Gateway to Nashville building behind the Union Station Hotel is the newest and most innovative link in Kazimi's pipeline.

Cumberland Emerging Technologies (CET) was actually formed in 2000, when Cumberland Pharmaceuticals teamed up with Vanderbilt and the Tennessee Technology Development Corporation, an initiative of the State of Tennessee, to create a vehicle for bringing biomedical technologies and products conceived at Vanderbilt and other regional research facilities to market. Now, through the life sciences laboratory CET recently opened at the Gateway building, entrepreneurs have access to lab space and the other resources they need to investigate the commercial potential of their ideas. Kazimi also scored points with Nashville Mayor Bill Purcell and the Nashville Chamber of Commerce by choosing Cummins Station for his research facility, since the lab's location supports their efforts to expand downtown development.

According to Kazimi, CET's new lab is a badly needed incubator for projects in their infancy as well as those with uncertain potential. The lab is also the realization of his dream of a concrete pipeline for new products produced through traditional research and development—a pipeline Cumberland does not have to fund on its own. "Right now, we have about a dozen new products either at Vanderbilt or at other regional facilities that Cumberland Emerging Technologies is involved with," he says. "But commercial lab space was necessary to support new projects, and we couldn't find any in this area. So we decided to create it."

The carpeting in the lab's reception area is brand new, as are the natty director's chairs in the reception area. As Kazimi walks down the hall of the CET lab, he points to several doors and mentions the type of research the doctor whose office lies behind them is pursuing. They include nanotechnology and gene-trapping-projects that sound like the basis for a science fiction movie.

None of these projects is on the cusp of yielding a viable product. But if and when they do, CET's parent, Cumberland Pharmaceuticals, stands ready to manage their development and marketing, and guide their creators through the maze of regulatory requirements and intellectual property law.

By that time, Cumberland may no longer be privately held. Kazimi does not rule out the possibility of a public offering at some point. "There are four publicly traded companies operating in the U.S. that were successfully built through product acquisitions," he points out.

For the time being, however, Kazimi says he is happy knowing that his company has quietly crept onto industry insiders' lists of promising pharmaceutical start-ups in five short years. It's not yet exactly a household name, but Cumberland is no longer hiding in plain sight. VB

STALLING FROM RETENTION DEFICIT DISORDER?

CUMBERLAND PHARMACEUTICALS HAS NOT YET JOINED THE RANKS of the huge drug manufacturers filling the airwaves with "purple pill" ads or cartoon characters representing toe fungus. Nevertheless, the company passed a milestone on the road to greater visibility last year when it invested in an advertising campaign on behalf of CeraLyte®, its first non-prescription drug.

Cumberland passed a milestone when it started advertising its product CeraLyte.

Cumberland hired Adair-Greene, an Atlanta-based ad agency specializing in marketing pharmaceuticals to health care professionals to help promote the product. CeraLyte® offers a single, drinkable solution to the age-old problem of dehydration resulting from severe diarrhea. Made with a rice-based formula, it both rehydrates patients and controls their diarrhea, and it can be used by children and adults.

Cumberland is marketing CeraLyte® in the U.S. through an agreement with the manufacturer, Cera Products, a pharmaceutical company based in Baltimore. "CeraLyte® is a good example of our strategy of sharing in the pharmaceutical industry's greatest strengths—stable revenues and growing demand—while avoiding the risks and costs of drug development," Kazimi says. "We're seeking to expand the marketing potential of a proven product."

Adair-Greene's campaign, aimed primarily at gastroenterologists and specialists in emergency medicine, labels the problem, "Retention Deficit Disorder," and uses artwork showing the feet of two occupants in adjacent public toilet stalls to emphasize the drug's dual action in "stalling" fluid loss.

Kazimi, who spent four years at the Brown-Forman Corporation—the venerable owner of Jack Daniel's, Southern Comfort, Fetzer Wines, and numerous other national brands—early in his career, has no qualms about creating a memorable marketing campaign. "We wanted to catch their attention," he says. "Our research indicated that this concept would help doctors remember both of CeraLyte's benefits."

STARTING UP and SPINNING OFF

Vanderbilt Gains Ground in the Hot Tech Transfer Business

By CHARLES CONTE

It was not exactly a Eureka moment.

For one, the idea had been brewing for quite some time; Jennifer Ledbetter, E'04, and her brother, John Hyde, had been planning to go into business together for years. Both have undergraduates degrees from Purdue: she in civil engineering, he in computer science. He's the inventor. Ledbetter entered Owen to complement her brother's technical skills with an advanced business degree.

They named their company, Realtime Applications, Inc. Their first product is a software platform that provides a point-and click-environment for developing and managing complex Web-based applications.

In her third semester, Ledbetter started working on a business plan for the new company in Germain Böer's Creating New Ventures course that carried over into Bruce Lynskey's Launching the Venture course. Böer, professor and director of the Owen Entrepreneurship Center (OEC), has done as much as anyone at the School to bring the entrepreneurial spirit to the program, including: instituting twice yearly sessions with venture capitalists; creating the Adventures in Entrepreneurship class where Owen students are able to work directly with entrepreneurs; and working with the Vanderbilt University Office of Technology Transfer and Enterprise Development (OTTED). With more than 15 years in the high technology field and experience ranging from emerging and early-stage start-ups to Fortune 500 enterprises, Clinical Professor Bruce Lynskey, is a "serial entrepreneur," for the past four years enjoying an alternative career in academia.

Fortuitously also for Ledbetter, Lynskey introduced her to the director of OTTED, Christopher McKinney, who was speaking to the class. OTTED manages the University's IP (intellectual property), among other functions. Things moved rather quickly at this point for Ledbetter, with McKinney recommending several major international IP law firms to assist with a prior art search and trademarking.

Taking Vanderbilt's Ideas Public

Moving discoveries, inventions, and ideas from the University into the marketplace is OTTED's job. OTTED identifies and protects Vanderbilt-grown IP through patents and copyrights. And it also promotes them through marketing and licensing activities to the financial benefit of the inventor, the University, and the community through agreements with companies all over the world.

Spin-offs and start-ups, business incubation, pre-seed, and seed funding: OTTED behaves a bit like a traditional venture capitalist in supporting the commercialization of Vanderbilt's ideas. OTTED's other key functions are materials transfer agreements (mostly for biological materials from corporate owners coming into Vanderbilt labs for research purposes); helping develop clinical trial agreements; and providing sponsored R&D agreement support services.

Vanderbilt established its Office of Technology Transfer in 1991. By 1997, the University also decided to consider opportunities to start new companies based on intellectual property produced by faculty members; they established the Chancellor's Fund in 1999 with a $10 million endowment, eventually investing in 15 start-up companies, and opened the Office of Enterprise Development (OED) to identify likely investment candidates and to assist with their formation and incubation.

In December 2000, the OED was transformed into the Vanderbilt University Technology Company (VUTC). But in May of last year, VUTC and the Office of Technology Transfer were merged to form the OTTED, under Vice

PHOTO ILLUSTRATION DANIEL DUBOIS

Chancellor for Investments and Treasurer, William T. Spitz, who appointed Christopher McKinney as director.

OTTED is now essentially a one-stop shop for managing the entire University's intellectual property portfolio. "In addition to working with our large portfolio of technologies, we added about 130 new technology disclosures to our technology base last year," says associate director of OTTED, Tom Noland. "Those range from things that may never generate a single dollar of revenue, to opportunities that might be the next Gatorade." Typically, he says, 5 percent of the disclosures that come across his desk may rise to the level of a company start-up.

All technology disclosures are vetted internally via technology commercialization associates in OTTED who, says Noland, have an "infinite number of resources" they can draw upon to help evaluate any particular technology for commercial potential. (Among those resources is the Owen student body.)

Last fiscal year, OTTED secured 29 new corporate licenses. OTTED now manages nearly 700 technologies on behalf of Vanderbilt, has 212 active commercial licenses in place, and generated approximately $3.8 million in base revenue in fiscal year 2004.

The (Informal) Ties That Bind

OTTED operates very flexibly across campus. Relationships with faculty and administration are collegial, friendly, even casual, and always constructive and supportive. It helps that OTTED staff gets around too… Director Chris McKinney himself is also a lecturer in the Department of Electrical Engineering and Computer Science, and a frequent lecturer/presenter at the Owen School in the Owen Entrepreneurship Center. He teaches in Vanderbilt's customized master's degree program for clinical doctors and research professionals working at pharmaceutical giant Bristol-Myers Squibb, and he serves on the University Conflicts Committee (along with Bruce Lynskey). "Our office has developed symbiotic relationships that give us a large, informal presence across campus," says McKinney.

The ties that (loosely and unofficially) bind OTTED and Owen include students recruited to work on projects related to the commercialization of Vanderbilt IP. (Owen students also work on individual projects with particular researchers to help them better define the markets for their technology.)

> The huge amount of IP flowing from U.S. universities every year creates an equally huge challenge: how to harvest that bounty.

"We operate very opportunistically," says Noland, "and quite informally… When we have a potential start-up, I may ask Germain or Bruce if they have a student who would be a good fit for the project. The company formation process is very labor intensive, so the student needs to be self-motivated and very engaged. The fit between the student and the project is absolutely key."

One utterly ideal fit is Business Development Associate Christopher Rand, '04, who interned at OTTED and eventually stayed on. Before coming to Owen, Rand spent three years at Price-Waterhouse. While interning with OTTED, he helped create relationships between that organization and local and non-local capital sources. Rand now conducts due diligence on companies founded on Vanderbilt-based IP. The MBA program really "catalyzed" Rand, says McKinney.

"The close relationship with Owen is only natural," says Noland. "We are about encouraging entrepreneurs. It's part of the culture."

Whatever It Takes

Informal relationships, networking, or just lending a helping hand. In the instance of Veran Medical Technologies, probably all were in operation. With regard to student-created IP, Veran Medical Technologies was a trailblazer. Though the situation certainly may have arisen before, there was no formalized precedent at Vanderbilt for handling student-created IP. "Veran made us address this issue directly," says Lynskey.

Formed in November 2002 by Jerome Edwards and fellow Owen students Evan Austill and Benjamin Heavrin (all '04 grads), Veran Medical Technologies was created around patent-pending, Dynamic Track technology, an image-guided intervention system using a computer program and a mobile workstation that allows surgeons to operate on organs that move with the patient's heartbeat and respiration, such as the heart, lungs, kidneys and liver.

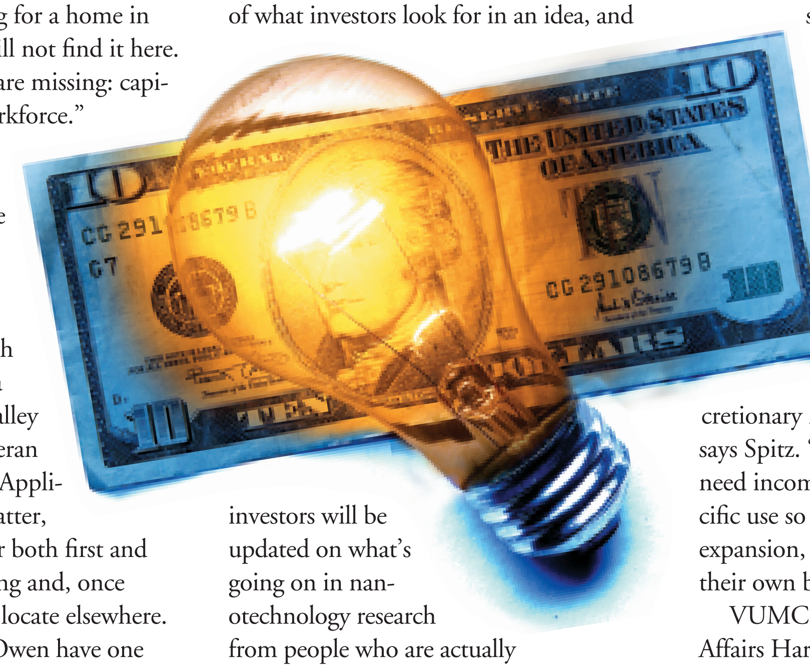
Since the Veran group's IP was not created with any "extraordinary resource advantage" from Vanderbilt (such as a research fellowship or other direct funding), there was no question as to ownership of the idea. That aside, OTTED (and in fact, Chris McKinney) freely offered its resources to the Veran founders, securing entrée to several international IP law firms—just as McKinney did for Ledbetter and her software platform idea. In both instances, OTTED functioned strictly on an advisory basis.

Germain Böer notes that more and more students are entering Owen who have PhD's in the life sciences or medical degrees (like Veran's Heavrin), or engineering degrees (like Veran's Edwards) with the specific goal of acquiring the business and start-up acumen to launch their own ideas into the marketplace. With Veran, Vanderbilt Medical Center was not the source of a marketable idea; instead it became a resource for the start-up's quest for investors, and itself has committed funds to the initial round of financing.

Veran is not a by-the-books technology-transfer-at-work success story. But the start-up does illustrate one way that OTTED, Owen, and VUMC (in this instance) can work together to help bring technology to the marketplace. "Whatever it takes," might be the best description of the process.

An Atmosphere That Gives Off Sparks

Vanderbilt is very good at generating IP in technology, biotechnology, and medical informatics, says Lynskey. But in this, the University is ahead of the local economy. "Ideas looking for a home in these areas," he says, "will not find it here. Two prime ingredients are missing: capital and a technology workforce." Both are too costly to import for young, early-stage ventures. There are a half dozen venture companies in Nashville, but all their resources together could not match the capital resources of a single leading Silicon Valley VC. A company like Veran or Ledbetter's Realtime Applications, Inc., for that matter, has to look elsewhere for both first and succeeding round funding and, once established, will have to locate elsewhere.



But Vanderbilt and Owen have one advantage that the major university IP producers do not. "This is a small community," says Lynskey. "It's a compact campus, physically speaking, not a loosely linked group of silos." At Vanderbilt, it's very easy for someone in the business school to speak with someone from the Med Center or the School of Engineering, or the Technology Transfer Office, for that matter. "Closeness," says Lynskey, "encourages interaction."

Böer not only echoes this assessment of Vanderbilt-Owen's advantage of scale, he actively exploits its premise in every way he can. For example: the Owen Entrepreneurship Center co-sponsored a conference in late September—with the School of Engineering, the Vanderbilt Institute for Nanoscale Science and Engineering (VINSE), and the Nashville Technology Council—that brought together researchers on nanotechnology and business people interested in investing in these technologies and in applying them to their products. (Nanotechnology is a new technology for creating MEMS—micro-electro-mechanical-systems—at molecular and even atomic dimensions.)

Through this event, Böer hopes that, "scientists will have a better understanding of what investors look for in an idea, and investors will be updated on what's going on in nanotechnology research from people who are actually doing it." The point is to start a dialogue between Vanderbilt research experts and the business community so that mutually beneficial relationships can flourish. "You really never know exactly how such relationships get started," says Böer, "but if you create an atmosphere where meetings take place almost at random, where scientists and investors bump up against one another, eventually the interaction will create some sparks."

Tech Transfer and the Business of the University

"Most technology that comes out of the university setting doesn't lend itself to immediate development," says Vice Chancellor for Investments and Treasurer, William T. Spitz.

"It's usually very early stage stuff."

Spitz has taught a course, Investment Management, every year for the past 13 years at Owen. He and his office are responsible for managing the University's endowment fund. Organizationally, OTTED reports to Spitz's office.

"The technology licensing and development effort is a resource for the faculty," he says. "Yes, we are definitely interested in commercializing IP. But our short-term goal is to serve our faculty. OTTED is a critical part of recruiting and retaining faculty. In that sense, even if it didn't make a cent, it would still be a worthwhile effort."

Of course, long-term, the goal is that the management of technology transfer *will* make money and, "increase discretionary revenue for the University," says Spitz. "Academic institutions *always* need income that is not marked for specific use so they can pursue research, expansion, and faculty hires according to their own best interests."

VUMC Vice Chancellor for Health Affairs Harry Jacobson brings a slightly different perspective to technology transfer that is both aggressive and more risk-tolerant. Jacobson's business bio and track record as an entrepreneur include co-founder of Renal Care Group, Inc., a nephrology practice/dialysis company, and founding director of EBM Solutions (acquired by HealthGate Data Corp.), a provider of evidence-based guidelines and care management applications used to improve quality of care. Jacobson sits on the board of directors of both Renal Care (NYSE: RCI) and HealthGate Data (OTC BB: HGAT.OB), as well as Kinetic Concepts, Inc. (NYSE: KCI), a global medical technology company that designs and manufactures advanced wound care and therapeutic surfaces. He also teaches a course on health care entrepreneurship at Owen.

"If you focus on one single university, the success rate for technology transfer ventures may not seem very encouraging," Jacobson says. "But an absolutely first-class technology transfer program, however, can better a university's chances of success," he says, even given the constraints within the university environment that mitigate against a technology transfer program accomplishing all that it otherwise might. But, Jacobson suggests, a university can increase its chances of success by expanding its field of vision: "If you are going to risk capital on an idea," he says, "why limit yourself to only those ideas coming out of your own university? Why not seek out ideas from other universities and find the expertise within your own institution to help capitalize those ideas into something of value?"

In his role at VUMC, Jacobson has been able to put into play a more proactive, broader interpretation of what represents an opportunity for investment, capitalizing on ideas that, strictly speaking, come from the outside—but to which Vanderbilt adds value. To push the message of entrepreneurship, Jacobson welcomes university-wide "outreach" efforts, and supports broader based efforts such as Vanderbilt's participation in the Nashville Health Care Council and the Nashville Capital Network.

Given the "time and proper resources," he suggests, an effort, such as one initiated and explored by Vanderbilt a few years ago, could push the current boundaries of technology transfer. That effort sought to develop a consortium of like-minded universities to establish a shared fund for entrepreneurial investment that could be leveraged with the traditional sources of venture capital to build a substantial fund with first-class, expert management. "Not only would you have the resources then to make early stage investments, which is the hardest money to come up with," he argues, "but you could do some serious B, C, and D round investing as well. Additionally, you would greatly increase your success rate by being able to draw on a wider pool of ideas, and not only within consortium participants."

> Vanderbilt's Office of Technology Transfer and Enterprise Development is all about encouraging entrepreneurs.

Jacobson, obviously, is looking beyond the current horizon to a further evolutionary stage in the development of technology transfer.

Though only in its infancy, the Discovery Life Sciences Fund seems to be the sort of structure that Jacobson envisions—as well it might, as he was instrumental in its inception. Emphasizing drug discovery and development, medical devices, diagnostic imaging, etc., the Discovery Life Sciences Fund is a partnership among Vanderbilt, and two venture capital firms. "It's a strategy for addressing the lack of capital directed at early-stage technologies," says Noland, "and particularly in this area of the country."

The objective of the Discovery Life Sciences Fund was not "just to form a pool of capital," says Noland, "but a pool of *smart* capital." To that end, OTTED recruited MDS Capital (www.mdscapital.com), the venture arm of Toronto-based, MDS Inc., with more than $1 billion under management and a leading North American venture capital company focused exclusively on emerging life science companies. MDS liked the idea of working with a local VC company. So OTTED invited Clayton Associates (www.claytonassociates.com) in Franklin, Tennessee, to join the partnership.

In the grand scheme of university investment, at this point in time, OTTED is still very much the tail of the dog. And it's not even clear that the tail belongs with *this* dog; the organizational fit with the Office of Investment may not be the ideal one. "Some universities have made a ton of money from their technology transfer efforts," says Spitz. "But it's *not* because they had the ideal organizational structure in place. Look at the successful technology transfer programs, and they are all differently organized. *No one* has figured out the right model here. We're all still groping."

Jennifer Ledbetter and John Hyde are sole owners of Realtime Applications, Inc., investing their own savings, without outside financial resources. Meeting venture capitalists in Böer's and Lynskey's classes helped her decide that they did not want to give up ownership of their idea by accepting outside funding. Today they are operating under a second business plan. Instead of introducing their product through a few beta test site companies, Realtime Applications, Inc. is pursuing five to ten technologically sophisticated clients, clients who eventually would become case studies.

Like technology transfer in the university organizational structure, there's no ideal model for the entrepreneurial effort either. Both are still works in progress.

TECHNOLOGY TRANSFER: A BRIEF HISTORY

THE FORMAL TRANSFER OF DISCOVERIES and innovations from the university setting to the commercial sector has a fairly brief history. Before 1980, fewer than 250 patents were issued to U.S. universities each year. In the year 2000, with more than 300 universities engaged in technology transfer, over 3,700 patents were issued to U.S. academic institutions. For the competitive and statistically minded, the University of California finished first in 2003 with 439 patents granted, well ahead of the pack, which included Caltech (139), MIT (127), followed by Stanford and the University of Texas.

The rise in university technology transfer activity is the direct result of the 1980 Bayh-Dole Act that enabled universities to own and patent inventions developed under federally funded research programs.

Though a huge amount of IP flows from U.S. universities every year, says Owen's Bruce Lynskey, the challenge it creates is equally huge: how to harvest that bounty. "Inventors, the IP owners, want to talk about how the technology works," says Lynskey. "But the first thing investors want to talk about is, how will this make money?

"The wall between the university and the business worlds is still very thick," he says. "It's no trivial task to meld the two."

Gatorade ("Is it in you?"), the carbohydrate-electrolyte sports drink, is arguably the highest profile product ever to make the transition from campus to the marketplace. Formulated in 1965 by Dana Shires and Robert Cade of the University of Florida to help keep the school's football players hydrated, and out of the hospital for heat-related illnesses, the brand did not take off until the early '80s. Today it has 73 percent of the sports drink market—and since it first appeared, it's brought more than $80 million to the University of Florida.

Though Vanderbilt University has produced no Gatorades or Googles (Stanford University's stake was about 1.8 million shares in this venture), it has had a few "home-runs," according to associate director of OTTED,Tom Noland.

WIZORDER

The first really big hit for Vanderbilt: an electronic order entry system created and developed at Vanderbilt University Medical Center that marshals an array of critical information at the moment a clinician uses the program to order tests, treatments, and drugs. In July 2001, Vanderbilt University licensed rights for commercial development and marketing of WizOrder to Atlanta-based McKesson HBOC, Inc. Under an exclusive licensing agreement, Vanderbilt received an initial lump payment from McKesson HBOC as well as a share of revenue from future sales.

READ 180

READ 180 is a comprehensive reading intervention program designed to meet the needs of students in elementary to high school whose reading achievement is below the proficient level. Vanderbilt holds the copyright on the Read 180 product. http://teacher.scholastic.com/read180/

REACT 350 HIGHWAY CRASH CUSHIONS

These resilient polyethylene cylinders that cushion the impact of highway crashes were invented by John Carney, formerly of the Vanderbilt School of Engineering, now provost at Worchester Polytechnic Institute. REACT 350 is a Vanderbilt-patented product. www.energyabsorption.com/products/permanent/React350.htm

JIM HSIEH

DRAGONS and Bald Eagles

China's Rise in the Global Economy

By LISA A. DUBOIS

During spring break, Ray Friedman, Brownlee O. Currey professor of management, will escort 24 students from the familiar halls of Vanderbilt to various locations in China. The Americans will divide into teams and spend a week conducting research for select U.S. companies interested in some aspect of the Chinese market. Upon their return, the students will give company executives a consulting report about their findings.

What may at first blush appear to be an academic boondoggle has actually become a critical component of business education in America. "Our students, whether they like it or not, are going to be selling into China, sourcing from China, and competing with Chinese companies that are starting to sell in the U.S.," says Friedman, who teaches a course titled, "Doing Business in China." "Most projections say that within 50 years China will be the biggest economy in the world. This is a region that—if you are in business—you simply can't ignore."

The numbers bear him out. According to Nicholas Lardy of the Brookings Institution (*Integrating China into the Global Economy*, 2002), with that country's loosening of historically impermeable trade barriers, China's foreign trade has "exploded," from US$20 billion in the late 1970s to US$475 billion in 2000. By 1999, China was the U.S.'s fourth largest trading partner and exports from the Sleeping Giant to the States accounted for over a third of China's total exports. In addition, after 13 years of negotiation, Chinese officials added fuel to the growth spurt by joining the World Trade Organization (WTO) in 2001. The WTO, at the very least, has a framework for providing some semblance of structure during such monumental expansion. In fact, structure remains a critical yet unknown factor, as China looms ever larger on the radar screens of American corporations.

"China is the hottest market on the planet," says Paul Winnowski, '99, president of GE Security for Greater China. After leaving the Owen School, Winnowski waded through a series of acquisitions and mergers as an executive in the security technology industry, before an acquisition deal with GE Security closed in 2002. At that time Jeffery Immelt, the newly anointed CEO of General Electric, launched a campaign challenging all of the businesses that comprise GE to react to China's emergence in the global marketplace. A year later, Winnowski was heading up GE's security technology arm in Shanghai.

On the operations side, the company manufactures residential security, fire alarm, and smoke detector systems that are exported globally. Next year GE will move more of its video security system production to China. In addition, Winnowski is beginning to sell various product lines, such as bomb detection systems for airports, and fire and car alarm systems into the Chinese domestic market.

The opportunities in this market are mind-boggling. The country is slated to build 43 airports in the next five years. All of them need security systems. Add that to the boom in China's highway and office building construction, and Winnowski knows the field is bursting with potential. Plus, the rapid expansion of well-paying jobs among the workforce has given rise to a burgeoning middle class, so the home security market is equally on the upswing.

"The security industry in China is a

$2.6 billion market with an 18 percent growth rate. For us, that 18 percent growth rate is the highest in the world," Winnowski says. "If you look at China's 1.3 billion population, 450 million of them live in major metropolitan areas. 150 million of those consider themselves middle class. And those people are target accounts for security systems."

Even if these kinds of targets have American executives salivating, the legal, cultural, and organizational obstacles to success in China are reasons to step cautiously into the economic whirlpool. The Chinese do not conduct business in a Western style—and they like it that way.

"The Chinese want to be paradoxical," explains David Parsley, associate professor of management and an international consultant on foreign exchange rates. "China doesn't want to do everything by someone else's book. It wants to invent its own book."

Given the history from which it is emerging, into the marketplace that it is inventing, China's recalcitrance makes sense. Until 1978, bureaucrats in the Chinese government held a tight grip over the economy, keeping the nation isolated from the world at large, restricting tourism and trade, and eschewing the kinds of goods and services so dominant in Western society. But by the late 1970s, aware of the need to provide jobs to feed an enormous population, leader Deng Xiaoping began loosening controls and giving a certain autonomy to local officials. In the process of decentralization, Chinese officials began opening up "special enterprise zones"—now numbering about 400—in various pockets of the country, where international companies are allowed to have a presence. According to Xianquan Xu (*China, the United States and the Global Economy,* 2001), the U.S. has direct investments in such industries as automobiles, pharmaceuticals, petrochemicals, chemicals, textiles, machinery, electronics, telecommunications, light industry, food, agriculture, and in such service sectors as tourism, real estate, and financial services.

Parsley says, "The Chinese leaders want to see if these special enterprise zone experiments run successfully and if they do, they can apply those models to other parts of China." He likens what is taking place in China today to the Industrial Revolution of the 1850s that essentially hurled much of working class Europe and North America out of the Dark Ages.

The problem locally, and the enticement internationally, he says, is that growth has snowballed to the point where facilities can't keep up. "Certain communities develop so rapidly that they outstrip their infrastructure—the sewers, the telephone lines, the education system," he says. "But, on the other hand, people's incomes in China have quadrupled in 10

"The rise of China's economic power will demand a decision from the U.S.: whether this is a chance for collaboration or just an epic threat to America's interests."

years. Are things moving too fast? For them it's not fast enough. What this means is that along with the economic transformation is the transformation of the rules of the game. This is one place where Westerners are having lots of trouble in China."

One of the biggest challenges, says Leon Tang, E'01, is finding trustworthy business partners, including customers, suppliers, and government officials. Tang is the general manager of a plant based 120 miles outside of Shanghai that makes copper tubing for air-conditioning heat exchangers. "A written contract does not mean too much in China," he says. "Everything is so dynamic that you have to be prepared for change at any time. This is partially due to a fast-moving economy and partially due to the formation of a new business and social system that is caused by reform from a socialistic system to a market economy."

To illustrate the dilemma for his students, Parsley cites the problem faced by McDonald's in Beijing. The hamburger maker moved into the country early, set up a huge fast food restaurant on prime real estate near the Forbidden City, and did blockbuster business for years. A while back, a tycoon from Hong Kong convinced the Chinese officials that they would be better served if he developed the property on which McDonald's was sitting. The local party told McDonald's to vacate the premises. McDonald's protested, brandished its written contract giving it the right to that location, and even took the city officials to court. The American company lost the case and ultimately had to move, but later moved back into the new complex built on the site.

"An 'arrangement' had been made, and in China they don't have the kind of legal tradition that McDonald's is used to," Parsley explains. "A lot of times the legal system is being defined rapidly and in real time as things move along."

Fang Fang, '93, is managing director of Investment Banking for JP Morgan Chase in Hong Kong, serving as the bank's primary investment negotiator between its multinational corporate clients and Chinese enterprises. (See sidebar next page.) He helps domestic companies buy and sell companies, or raise capital outside of China, and helps multinational companies invest in existing or start-up businesses within China. And, considering that China is the world's largest recipient of direct foreign investment, he runs up against cultural roadblocks all the time.

He says, "It's not that the Chinese don't respect contracts. These are instances of growing pains that force local officials to alter contracts. The legal infrastructure is not perfect. The banking system is not perfect. There is a lot more ambiguity from what you'd normally see in a developed, mature economy like the U.S. has."

One example of a company held back by government restrictions on international capital is Wal-Mart, which was allowed into China, and has done quite well there, but is only allowed to build a handful of new stores a year. Fang says, "The government realized that if Wal-Mart was allowed to sweep the market, no Chinese retail chain could catch up. So the government said, 'no matter how well you're doing we have to control

MIDNIGHT TREK TO SUCCESS

In 1991, Fang Fang, '93, was working in mainland China earning $10 a month—indigent-level wages by any standard. Determined to "go out and see the world," he began applying to American MBA programs, big name business schools, and state universities. Although he received a recruitment flyer from the Owen School congratulating him on his GMAT score, he had never heard of Vanderbilt University in Nashville, Tennessee, so he set the letter aside and applied only to what he calls "the usual suspects."

The Fang family: Michelle, Margaret, Victoria, Fang, and Amanda

Unfortunately, Fang was broke. With every application he enclosed a letter asking the school to please waive the application fee, which he couldn't afford, and mentioning that he would need full financial aid in order to attend. For the next several months, he received rafts of reply letters, some accepting him but declining to fund his tuition, and many others advising him not to reapply unless he got his financial resources in order. By early April of that year, Fang began to feel panicked.

Then he remembered the letter from the Owen School. He fished it out of the dustbin and read the fine print at the bottom, which stated that qualified international students could possibly receive financial aid. Fang wasn't certain if the business school at Vanderbilt was even a legitimate program, but he had run out of options. Because of the 12-hour time difference, he made a midnight trek to a local post office. And because China had very limited international phone lines, and the cost of such a call was exorbitantly expensive, he took a chance and phoned collect.

"I couldn't believe it, but Joel Covington, admissions director then, took my call," Fang says. The admissions office express-mailed an application with a fee waiver, which Fang completed and returned. Afterwards, he made another collect call—to remind the people at Vanderbilt that he needed a full-tuition scholarship.

On the other end of the line, Covington laughed and replied, "We'll try our best."

A few days later, Fang received his acceptance letter with the promise that his tuition would be paid in full while he was a student at Owen. Taking one more midnight hike to the post office, he called collect for a third time. "Thank you for the scholarship," he said, "but I can't afford the airfare to get there, and I will need a way to support myself in Nashville." The admissions office arranged to put him on a work-study program.

Two years later, Fang spoke about his Owen experience at an Owen Associates dinner, and after graduation took a job on Wall Street with Merrill Lynch International Investment Banking. He subsequently was recruited by the Beijing government to become a senior executive at a large investment holding company listed in Hong Kong, later transferring to its Hong Kong offices. Today, still based in Hong Kong, Fang is the managing director of Investment Banking for JP Morgan Chase, one of the largest banks in the world.

Knowing his days of hardship were not so long ago, he repeatedly expresses a debt of gratitude to the people of Vanderbilt and Nashville. In fact, he helped organize Chancellor Gordon Gee's recent visit to Beijing. "The MBA program at the Owen School changed my life," he says, "and I will never forget that. Vanderbilt's connection with China goes back more than a century with Charlie Soong, (see sidebar next page) and it will continue far into the future."

— Lisa A. Dubois

your pace, because we have to nurture our domestic competitors and give them breathing space to grow.'"

In another example, a multinational company entered China under contract to build a "ring road" around a city. To recoup its huge investment in building materials and labor, the company was allowed to charge a toll to drivers using the road. However, the city's population rapidly outpaced its borders, expanding beyond the ring road. It soon became inexpedient for drivers to have to pay a toll as they traveled in to work. Local officials took away the tollbooths and instead offered the company a fixed payment every month—which it ultimately had to accept even though the payment could be lower than the long-term earnings it would have collected from the fares.

Such are the risks for foreign investors entering a country unused to the concept of property rights. On the other hand, if property rights cause a rift between U.S. and Chinese companies, intellectual property issues often create a total impasse. "Intellectual property is a weird issue anyway," says Friedman. "Even in the U.S., for a company to protect itself it has to hire a phalanx of lawyers."

Intellectual property is an alien concept to the Chinese. First, counterfeit goods and imitations of brand-name items are considered acceptable. Adding to that, even when a Chinese court agrees that copyright laws have been broken, cases are often resolved so slowly that knock-off products have already saturated the marketplace. Friedman says, "North Face jackets are all over the place, and they're not really North Face."

Vanderbilt's new official Chinese name is 范德堡, meaning "Bastion of Academic Excellence" and "Academic Center of Virtue."

Winnowski battles intellectual property violations every day, and exerts tremendous energy trying to convince people that, unlike a copied DVD or a CD, a knock-off version of a security system could lead to real danger or tragedy. Still, he admits, it's an uphill climb.

CHARLIE SOONG—EARLY CHINESE ENTREPRENEUR

CHARLIE SOONG, AN 1885 GRADUATE OF VANDERBILT'S SCHOOL OF RELIGION, by a twist of fate, became one of China's most powerful men during the 20th century. Soong arrived in Nashville in a roundabout fashion, after working for a Boston sea captain, and first enrolling at Trinity College in North Carolina. Wanting to be a missionary, Soong returned to China but found that western Christian missionaries were unwilling to accept him as an equal, and therefore he turned to business. He first printed Bibles, then turned to flour milling, noodle manufacturing, and selling foreign machinery, becoming quite wealthy. He became the financial backer for revolutionary leader Sun Yat-sen, whom his middle daughter Ching-ling later married. The eldest of his three sons, T.V., became prime minister of China; the youngest, T.A., was a financier who ran China's salt monopoly; and his middle son, T.L. (Tse-Liang), who graduated in 1921 from Vanderbilt's College of Arts and Science, became director of the World Bank. In 1994, a bequest from the estate of T.L.'s widow endowed the Tse-Liang Soong Scholarship in International Finance at Owen.

Only when Chinese businesses begin originating merchandise for multinational distribution, and only when those products are counterfeited by outside groups and the profits stolen, will China start focusing on intellectual property rights, Friedman says.

Outsourcing has become another sensitive issue on both sides of the ocean. Almost daily, American companies are closing down local factories and rushing abroad to take advantage of the massive cheap labor force in Asia. As a result, says Friedman, many companies are simply paying low wages and exporting their goods, but they're not really tapping into the Chinese consumer base. Currently, international corporations are complaining that the cheap labor is getting progressively more expensive.

For example, Crown Cork & Bottling executives grumbled to Parsley about the problem with retaining workers. People would be hired, trained for three months, given a 30 percent pay raise every three months, and still would leave for other manufacturing jobs. "They had a little bit of training, they knew a little bit about working in a Western company, and BOOM! Suddenly they're highly marketable."

Parsley does add, however, that China, which had formerly experienced such high underemployment that it had never faced an overheated economy, is now showing some signs of overheating, including some domestic inflation. "The domestic inflation will basically make China less competitive," he says.

Friedman argues that even if the Chinese manufacturing market becomes less competitive, U.S. companies are closing so many factories here and such a large portion of the workforce is retraining for jobs in the non-manufacturing sector, that the U.S. might find itself in an unexpected bind. "To rebuild the current labor capacity might take 10 to 15 years," he says. "We've lost much of the machinery and the capability."

Just as important, he says, are the implications to the international markets. The world is now so dependent on the Chinese labor force that it would be catastrophic if that economy collapsed. A 1 percent shift in the Chinese unemployment rate would result in 13 million people out on the streets, which could ultimately lead to chaos or revolt, which, in turn, would have a resounding effect throughout the world. "Political stability in China is very important to the U.S. and other Western nations," Friedman says.

Another tricky issue related to outsourcing is that for years America has been a beneficiary of the practice. Think Nissan or BMW, or any number of foreign textile and pharmaceutical manufacturers. Multinational firms have long exported jobs to this country—attracted by its legitimate court system, free press, transparency of contracts, and protective Constitution. "If we were to unilaterally impose some kind of ban on outsourcing, the United States would come up huge losers," Parsley says.

In the meantime, while U.S. business and government officials squabble and debate, and while the war in Iraq and Islamic extremism divert the national attention, U.S. economist David Hale (*The Australian*, June 30, 2004) says that Americans are ignoring the "epic consequences that flow from the rise and rise of China." Urbanization, he argues, has created tremendous demand for raw materials, and Chinese bureaucrats will barter for those materials from any available source—the Middle East, Central Africa, and Latin America—even if Westerners disapprove of the abusive regimes holding power there.

To satisfy a big, hungry populace Beijing is trading for oil, grain, produce, coal, and steel. When Western nations recently chastised Chinese officials for partnering with Sudanese officials linked to human rights atrocities, China's deputy foreign minister, Zhou Wenzhong, responded, "Business is business.... We try to separate politics from business. Secondly, I think the internal situation in the Sudan is an internal affair, and we are not in a position to impose upon them." (*New York Times*, Aug. 8, 2004).

Hale believes that increased trade also will lead to China influencing the politics of developing nations. "At its heart, the rise of China's economic power will demand a decision from the U.S. on whether this is a chance for a new collaboration or just an epic threat to America's interests," he says.

Given the complexity of the Sino-American relationship, a delicate balance must be maintained. The proverbial genie has been set free, and there's no way the United States or any other outside nation can lure it back into the bottle. So, as Friedman acknowledges, whether Americans like it or not, they're going to have to deal.

In his experience, Parsley has found that some of the most successful entries into the Chinese marketplace have involved "arm's length" business negotiations. In other words, he advises that newcomers begin by setting up arrangements in which Chinese partners agree to a limited partnership in return for a limited commission for each transaction. If they successfully deliver on their promises within a given period of time, and if they take responsibility for maneuvering through all the distribution networks, legal hurdles, etc., then at the end of the contract period the American company will make an equity investment, for example, and the partner will become significantly enriched.

"That has been a successful model, because at that point the American company has transferred the risk," Parsley says.

When asked what Westerners should know about conducting business in and with China, Owen School graduates, Fang, Winnowski and Tang, agree on a variety of points:

1 **Americans must first find a reliable, trustworthy, competent Chinese partner who is familiar with the marketplace.** This is more easily said than done. Many people claim that they can develop, market, and move products, and it is difficult to winnow out those who are capable of resisting corrupting influences and willing to meet their obligations.

2 **Executives must physically reside in China to make it work.** The economy is so dynamic and unlike American markets that company leaders who try to dictate ideas from afar are likely to fail. Winnowski says, "You have to understand the localization of language, features, functionality, and cost for your products. If you only meet two or three of those criteria, you might not be in the game.

3 **American corporations must take a long-term view.** The market is evolving and requires patience and flexibility. Fang says, "If you stick around and tough it out you will be the winner. Motorola, Intel, and Volkswagen proved that patience and persistence count. Others gave up too quickly and now they want to come back in and it's too late."

4 **Those who enjoy high risk, excitement, and challenge will love working in this environment.** "I'm never bored," Fang admits. Winnowski adds, "It's hard for me to see going back and only looking to grow in the low double digits. Growing only 10 to 15 percent a year like we were doing in the States now doesn't appeal to me. We've being doubling our business every year. That's what makes this fun." VB

"CLASS ACTS"

Erica Whittlinger '72 *Getting Refired* | Warren Butler '90 *Change for the Better* | Anuj Sawhney '97 *Bollywood Hills*

GETTING REFIRED

Erica Whittlinger, '72, wasn't planning a career change when she began experiencing back pain three-and-a-half years ago, but three stent procedures and open-heart surgery convinced her otherwise. "I had a choice between dying at my desk or changing my life," says Whittlinger. "I chose to change my life."

That change included selling her successful 18-year-old money management firm, Whittlinger Capital Management, and relinquishing her role as an investment guru on public radio's popular *Sound Money* program. The biggest change, though, occurred on the inside. "The best analogy is to go from driving in the left-hand lane of the freeway to the right-hand lane," Whittlinger says. "I slowed down my internal speed a lot. But, being a hard-core entrepreneur, I went right out and co-founded a new firm, The ReFirement Group."

The company counsels and advises organizations on how to deal with demographic shifts in the 40+ generation, its influences in the marketplace, and how that affects businesses. "There's a seismic shift going on in the labor force," Whittlinger says. "The only growth in the labor force is among those under 34 and over 45, and the majority of the net growth is Asian and Hispanic. Some organizations have as many as half their employees eligible to retire in the next few years. By 2010, there will be a 10-million worker shortage in the U.S."

As experts in intergenerational issues, The ReFirement® Group works with companies to enhance internal communications among employees of various ages, keep experienced workers engaged and productive, and facilitate knowledge transfer to younger workers.

"After I changed career directions, I de-stressed and suddenly found myself happy," Whittlinger says. "How many people have the thought that they're happy just spontaneously pop into their heads? My mission now in life is to inspire others to bring more joy into their lives."

"You Can Refire Your Life"

Whittlinger co-authored *The ReFirement® Workbook*, a guide to refiring your life, available at www.refirement.com. She recommends that individuals ask themselves these basic, but meaningful questions:

Erica Whittlinger

1. What are your core values? What is really important to you?
2. Are you spending your time and energy on "nutritious people" or "drainers"?
3. How much time do you spend on activities that make your heart sing vs. those which enervate you?
4. Where in life are you "stuck"—finances, health, spirit, career, relationships? You always have options. What are they?
5. Are you exploiting your personal and professional assets and managing around your liabilities?
6. Are you having fun yet?

—Ned Andrew Solomon

Please Note: Class Notes appear only in the printed version of this publication.

"CLASS ACTS"

'90

CHANGE FOR THE BETTER

THE CONSTANT OF CHANGE—nowhere is that more obvious than in the continuous mergers and acquisitions of banks.

But customers at Bank of America, where Warren Butler, '90, is SVP/Corporate Quality and Productivity Group, are likely to be happy about their change: Bank of America is now focusing on giving customers a world-class experience at every interaction. "We want to do more than satisfy our customers—we want to delight them," Butler says.

Butler lives in Dallas with his wife and two children, but currently works in Boston in the Transition Program Office for the Bank of America/Fleet acquisition. "For each line of our business, my team improves existing processes, or develops new ones, to mitigate impact on customers during this transition," he says.

For a bank that historically has grown through acquisitions, increasing revenues and savings through expanded customer satisfaction is brand new territory. By listening to customers, the team identifies drivers that delight. With more than 150 transactions per second, it is an ambitious, albeit exciting undertaking.

Butler, with his experience, is up to the challenge. The bank was his client while at Price Waterhouse, his first job after Owen, and there he consulted on processes involved with transitions. Later at BAC, he served as process executive, developing and testing new prototypes.

"Consumer banking is a commoditized world, but a big driver for us," Butler says. "We're finding new ways to differentiate ourselves from our competitors, increase revenues, and especially to delight the customers."

— CAROL WISSMANN

Warren Butler

'97

BOLLYWOOD HILLS

AFTER GRADUATING FROM OWEN IN 1997, Anuj Sawhney returned to his native country India to manage AAA, a new family business—standing for Ashok, Aman & Anuj (his father, his elder brother, and himself)—that makes wristwatch parts for clients in India and overseas.

As managing director, Sawhney supervised operations, marketing, sales, purchases, and foreign collaborations. His father is chairman, and his brother, a 1992 Owen grad, is CEO. "We experienced infancy problems," Sawhney says, "and began moderately, manufacturing 50,000 dials annually. Today, we make six million world class dials, and demand far exceeds supply."

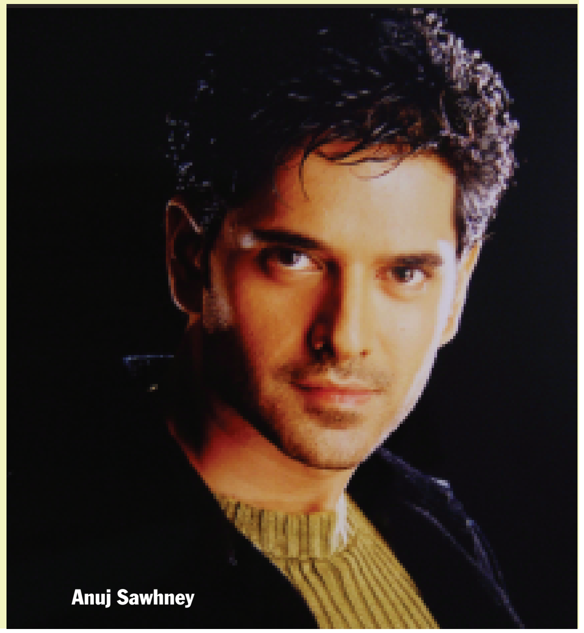
The company took off, but his dreams went in a different direction. "I've always had an urge to be famous," he says. "Though my career at AAA met with success, my heart craved more."

That "more" turned out to be pursuing a career as an actor on television and the silver screen. He landed his first commercial from his first audition, and proceeded to do all-India campaigns for such companies as Nescafé, Yamaha motorcycles, and Nokia phones, and music videos for world-renowned Indian singers such as Punkaj Udhas and Roop Kumar Rathod.

He became immersed in the world of Bollywood, the burgeoning Mumbai-based Hindi-language film industry in India. His first two films *Nayee Padosan* and *Funtoosh* have been hits is his homeland, and the next two—*Brides Wanted* and *Naina*—are ready for release. Another film, *Postman and the Prostitute,* with former Miss Universe and current superstar Sushmita Sen, and a big director, started production in January.

The day-to-day operations of AAA are now in Aman's capable hands. "My MBA gave me the security I needed to step into the uncertain and unpredictable world of films," Sawhney says. "My education gave me the courage to believe in myself. I may or may not be a superstar in Bollywood tomorrow. What is important is that I was given a chance to do what I always wanted to do."

—NED ANDREW SOLOMON


Anuj Sawhney

DISCOVER THIS PLACE.

continued from page 64

them into words and images.

But, more importantly, during the process I personally discovered the extra "something" possessed by Owen MBAs—the drive, determination, a roll-up-the-sleeves-and-get-it-done mentality that we hear recruiters talk about. I learned firsthand that this special quality really does exist in our current students and in our alumni.

Case in point: the team of Vanderbilt MBAs (all '04) who played a major role in the branding assignment—Jim Leonard, Shannon McDonald, Mark Dickens, Stephen Rice, and Jon Weindruch. These students took the initiative to get involved in this branding process—not just for the class credit or because they were marketers-in-the-making—but because they truly wanted to make a difference in the future of this school.

DANIEL DUBOIS

The branding team, left to right: Tim Kovick, Corporate Design Inc.; Stephen Rice, '04; Yvonne Martin-Kidd; Mark Dickens, '04; Fran Scott, Scott Gardner Inc.; Jim Leonard, '04; Jon Weindruch, '04; Shannon McDonald, '04

This team viewed this assignment as a personal and professional challenge. They compared and contrasted the Websites and viewbooks of the top 30 B-schools in order to identify "best practices" and competitive positioning. They organized focused discussions with impossible-to-schedule constituent groups. They worked late into the evening on the iterative process of tagline formulation, even though the pizza was gone. Each of them made a significant contribution, and our end result is far better thanks to them.

We still have work to do. We need to increase awareness and continually strengthen efforts to attract the highest caliber students, faculty, and corporate recruiters. The School needs to introduce new programs that will help diversify our "product" portfolio and bring in new revenue streams. But, what a joy to be facing these challenges as part of the team here at Owen. I'm truly glad that I've *discovered this place.* And, true to its promise, it's helping me *shape my world* in a meaningful way. VB

Discover This Place. Shape Your World.

Branding Campaign Captures Owen's Unique Identity

By YVONNE MARTIN-KIDD

IT WAS A LITTLE MORE THAN A YEAR AGO that I first walked into Owen to interview for the position of director of marketing. Just as interviewers have their favorite questions, so do those being interviewed. Mine happens to be, "So, what's the single greatest challenge facing the organization at this time?"

From the dean to other members of the administrative team, to the students and alumni I interviewed with, the answers had a consistent theme. "We need an identity. We need to be able to tell people who we are, what we're about, and what makes us different and better than other schools. We need a rallying cry. "

It will come as no surprise then, that the highest priority when I joined Owen was to help the School uncover its true identity and articulate it in a way that held a relevant and compelling message for our constituent groups—students, faculty and staff, alumni, and the business community.

- By now I hope you've seen the new tagline—*Discover this place. Shape your world.* ™
- Maybe you've visited our new Website (www.owen.vanderbilt.edu) and seen a new graphic look that we call the "portal"—featuring graceful, swooshing lines that suggest a world in motion and an emphasis on the talented individuals who comprise the Owen Community.

NEIL BRAKE

- Hopefully, you've gotten a copy of *Our Promise*, a simple four-part statement that makes a commitment to each of our key constituent groups.

When all of these things come together, they stand out in the world of B-school communications and paint a picture of a very special place. A school that is—first and foremost—about people, about their dreams and goals, about potential, and about a promise to do everything in our power to help them succeed. Like other B-schools we produce leaders. Like other schools, we make an impact. Like other schools we innovate, we excel, we exceed.

However, unlike other schools, Owen builds leaders one-by-one. We build them in an intimate, supportive environment where even students vying for the same job will help each other during the interview process. We build leaders with a fair measure of flexibility and counsel that ensures that the path a student travels is the path that student actively *chooses* to travel. We build leaders by getting to know them—by learning their names, understanding their potential, and helping them to achieve that potential.

As a veteran of more new product introductions and branding efforts than I care to count, I found the "branding of Owen" to be the most rewarding I've worked on.

The most obvious reason is that the brand identity was already there. We didn't have to manufacture anything; we didn't even have to search hard for it. The special qualities of this place came through in each and every focused discussion during the development process. All the creative team had to do was corral the sentiments being expressed and put

Continued on page 63

YVONNE MARTIN-KIDD *is executive director of Marketing and Communications at the Owen School.*

VANDERBILT UNIVERSITY
Owen Graduate School of Management
VU Station B 357703
2301 Vanderbilt Place
Nashville, TN 37235-7703

Non-profit Org.
U.S. Postage
PAID
Nashville, TN
Permit No. 1460

A Publication of VANDERBILT UNIVERSITY
OWEN GRADUATE SCHOOL OF MANAGEMENT

Cliff Richmond, '83, and the Cliffnotes—the music of Reunion, November 5-6, 2004.