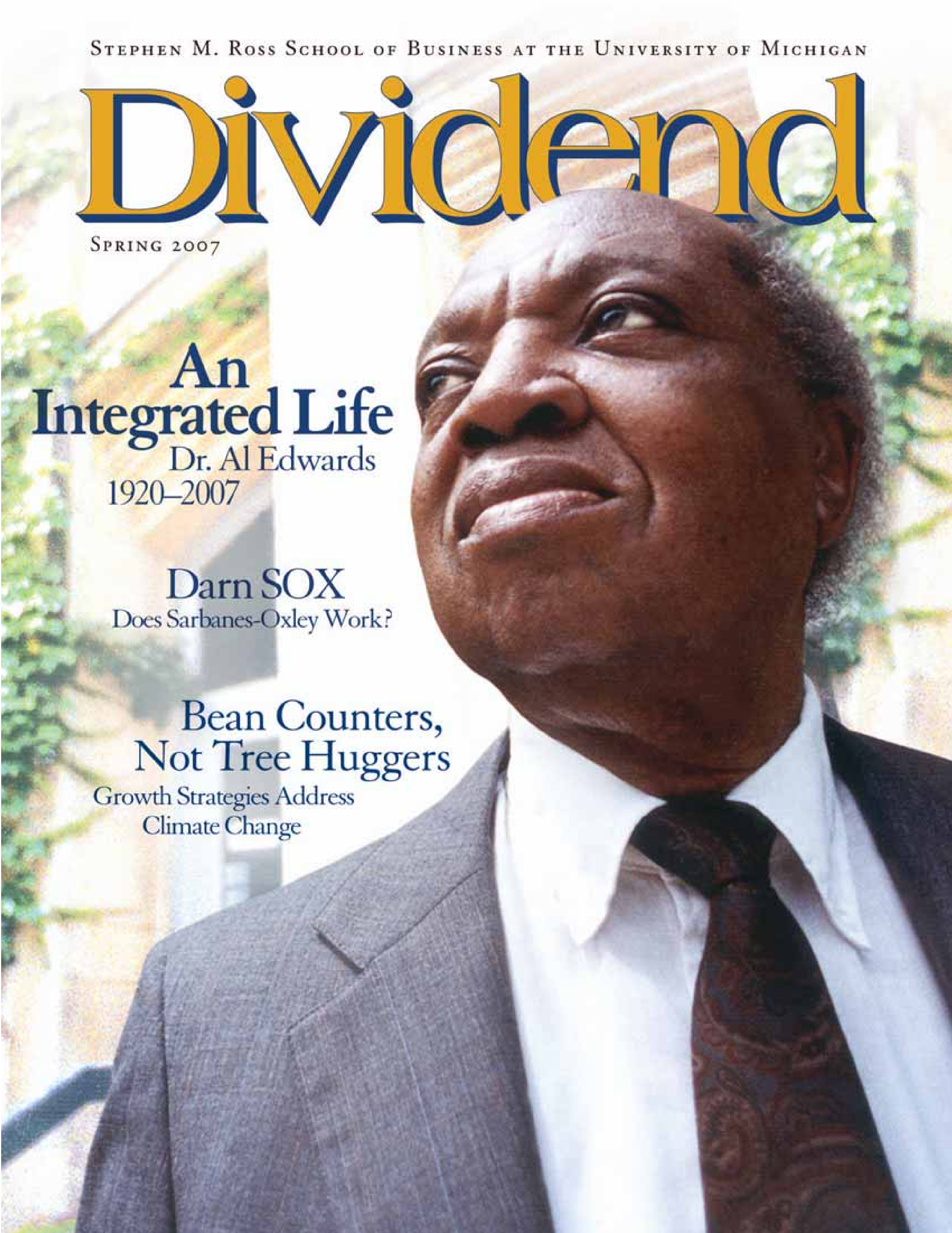
Stephen M. Ross School of Business at the University of Michigan

Dividend

Spring 2007



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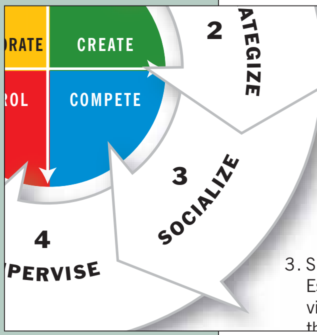

Cover photo by Steve Haines / The Detroit News

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Stephen M. Ross School of Business
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UNIVERSITY OF MICHIGAN

A GREAT HOLE

Truly a Real Estate Developer's Dream

On a bright fall football Saturday, friends and alumni of the Ross School of Business gathered near the construction site at the corner of Tappan and Monroe streets to celebrate the groundbreaking for the school's new building.

Noting that it was not a typical ground-breaking ceremony because construction on the 270,000-square-foot building began earlier last fall, Dean Robert J. Dolan described the October 7 event as "a celebration of great things that have gotten us to this point and of the great things we know are to come in the fall of 2008 when we open our great new building."

Dolan thanked friends from the University, alumni, donors, the architects, the project and construction managers and **Stephen M. Ross**, BBA '62, for his inspiration and financial support.

Acknowledging Ross' pivotal role in the building project, President Mary Sue Coleman said, "We are here because of Steve Ross, his love of the University of Michigan and his purposeful vision of a great business school made even greater. I want to thank Steve again for his historic contribution and the fact that he really pushed us to do this monumental project. We're a better business school because of your leadership and your inspiration."

"There's nothing like being in Ann Arbor for a Michigan football weekend. Can it get any better than this?" asked Ross, a New York-based real estate developer and founder, chairman and CEO of The Related Companies. "An undefeated football team going for six in a row, a business school ranked No. 1 by *The Wall Street Journal*, a great hole in the ground — truly a real estate developer's dream!

"Two years ago, I made the best investment of my life. The best thing about the experience I had as a student was it helped me develop the confidence and values that are so critical in my career. It's a thrill for me to think that I can make a difference, a Michigan Difference, helping to support the programs I know will instill the values of this great institution for generations to come."

TOP Left to right, Dean Robert J. Dolan, Stephen M. Ross, President Mary Sue Coleman and Bill Pedersen from the architecture firm Kohn Pedersen Fox celebrate the beginning of work on the school's new building.

MIDDLE Photographer Philip Dattilo captures the color and drama of the Ross School construction site on a November night.

BOTTOM The girders go up in December.

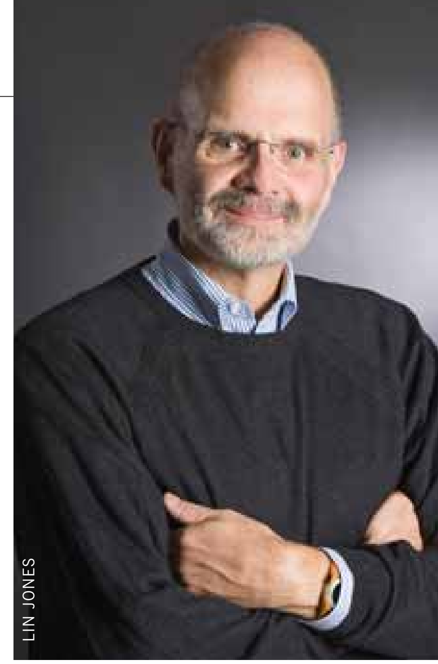
PHOTOS BY PHILIP DATTILO

ELECTED

Walsh to Lead Academy of Management

James P. (Jim) Walsh, the Gerald and Esther Carey Professor of Business Administration at the Ross School, has been elected the 65th president of the Academy of Management (AOM), the oldest and largest scholarly management association in the world.

The AOM, with 17,000 members in 97 countries, is the world's leading association for scholars who create and disseminate knowledge about management and organizations. Walsh, a member of the AOM's executive committee, begins his term as president in 2009. He is the third U-M faculty member to lead the AOM since its founding in 1936. The others were Charles Jamison, an AOM founder and its first president, who led from 1936 to 1940, and Franklin Moore, who served in 1956.



LIN JONES

Jim Walsh to head AOM, the leading association for scholars in the field of management and organizations.

Walsh, professor of management and organizations and professor of strategy, has been active in the organization for more than 25 years, chairing two AOM divisions and either editing or serving on the boards of the *Academy of Management Journal*, the *Academy of Management Review* and the *Annals of the Academy of Management*. He was elected a Fellow of the AOM in 2000.

Walsh joined the Ross School in 1991 and teaches in the school's BBA, MBA, Executive Education and PhD programs. He also advises Multidisciplinary Action Projects and teaches in the school's MBA leadership development program.

A RISING STAR

Student Ranks Among Japan's Top Stock Analysts

As a retail stock analyst for Nomura Securities in Tokyo, Global MBA student **Takahiro Kazahaya**, MBA '07, worked 12 or more hours a day, six days a week and enjoyed every minute of it.

"Investors counted on me to comment as soon as new company information was released," he says. "I needed to react quickly and be precise and available to them."

Global MBA student Takahiro Kazahaya chose the Ross School for its broad-based management curriculum.

That commitment recently earned Kazahaya the honor of being named one of Japan's top securities analysts for 2005. He placed fourth on the StarMine Analyst Awards Top 10 Stock Picker list for his coverage of the retail sector. StarMine, the world's largest source of objective equity research performance ratings, measures analysts' performance based on the return of their stock recommendations and accuracy of earnings estimates.

Kazahaya spent five years analyzing the fashion industry before coming to the Ross School. "I covered about 20 companies in Japan, and most of the time I was in the field visiting their factories, stores or headquarters," he explains.

In looking at a company's strategy for growth, he says it's not just about the numbers. "To pick a good stock, I look at not only the financial statements, but also the facts behind the figures. It's more important to evaluate the company's real value."

Kazahaya became interested in the retail industry after working as a sales representative at a Japanese department store after finishing graduate school in 2000. At that time, a poor economy had resulted in many retailers going bankrupt.

"There were two approaches to change," he says. "Internally, working for the retailer, or externally, working as an industry analyst." By choosing the latter, Kazahaya was able to apply his department store sales experience. "I learned about the store structure, merchandising and, of course, the customer."

Kazahaya chose the Ross School for its broad-based management curriculum. "As an analyst, I should understand all aspects of business, including corporate strategy, marketing and supply chain management, not just finance and accounting," Kazahaya says, adding that Ross' diverse student population and collaborative environment were a pleasant surprise.

After graduation, he plans to return to Nomura Securities and relocate to an international city. "My short-term goal is to analyze companies like Gap Inc. or LVMH (a luxury goods retail network that includes Louis Vuitton and Donna Karan) in New York or London," says the fashion enthusiast.

A LIFT

Boeing Taps Students' Lean Manufacturing Skills

When three University of Michigan graduate students started analyzing how the Boeing Co. conducts hundreds of functional tests on its wide-body, fuel-efficient 777, the interns didn't realize how complex or rewarding the assignment would be.

To capitalize on growing demand for new commercial aircraft, Boeing challenged itself to complete a 777 airplane every three days, a production rate increase from its current output of one plane every four days. In addition, to avoid creating a bottleneck in the assembly process or incurring additional costs, Boeing identified a need to trim the time spent performing functional tests on each plane from six to three days. If Boeing does not achieve this manufacturing improvement, it will incur significant costs for additional facilities and labor.

Looking for a more cost-effective solution, the aerospace giant tapped into the operations and lean manufacturing skills of **Wilfredo Durand**, MBA '07, **Vince Giovannetti**, MBA '07, and **Taoufik El Khazzani**, MSE-IOE '06, all members of the Tauber Institute for Global Operations. The institute was created as a joint effort by the Ross School, the College of Engineering and industry to develop executives who combine capabilities in engineering and operations management with general management expertise and leadership skills.

The Boeing 777 team was one of 17 teams that worked for 14 weeks this summer with corporate sponsors on what Tauber Institute Managing Director Diana Crossley described as "operations-related consulting." Projects ranged from developing a strategic supply chain collaboration for Dell Inc. and Intel to assisting John Deere with its Russian export business.

Durand, Giovannetti and El Khazzani analyzed thousands of details in the testing system, looking for ways to make it more stable, reduce variability and improve the tests.

The team advised Boeing to identify and manage the functional test critical path, reduce the variability and time it takes to conduct the tests and rebuild functional tests from the ground up to avoid redundancies. Many of the tests for

Left to right, Boeing 777 team members Vince Giovannetti, Taoufik El Khazzani and Wilfredo Durand, winners of Spotlight!

the 777 are legacy tests from older airplane models, and over time the reasons for the tests had become blurred.

"The Tauber students were excellently equipped and prepared to help us solve complex business issues," said Tim Thomas, manager of Boeing's Airplane Systems Engineering. "I was surprised that students could so quickly comprehend and analyze problems of broad technical scope and complicated organization and functional dynamics. The outstanding and positive results they delivered could well affect the way we conduct business for years to come."

In mid-September, the Boeing 777 team took top honors at Tauber's annual Spotlight! competition, at which students present their project findings to an audience of corporate executives, students, alumni, faculty members and recruiters. Industry judges evaluate each project's scope, implementation and impact, as well as the team's presentations skills. Each student on the Boeing 777 team won a $4,500 scholarship. The top four teams earned scholarship prizes totaling more than $30,000.

The Boeing 777 team also presented its project at the Council of Supply Chain Management Professionals meeting in San Antonio, Texas, in mid-October.

"This was one of the most challenging and rewarding projects I've worked on," El Khazzani said. "Boeing is a huge organization. Boeing's management placed a lot of trust in us and made resources available. It was great to see how much impact we can have."

COOKING UP IDEAS

Product Design for the One-Armed Chef

It looked like an in-home kitchen gadget show gone wild on November 29 at Tishman Hall in the U-M Computer Science and Engineering Building, as people sliced and diced their way through vast amounts of vegetables and cheese — all using only one arm.

The on-campus trade show was part of the Integrated Product Development (IPD) course's "One-Handed Kitchen" competition featuring students from the Ross School, College of Engineering and School of Art & Design. The course, sponsored by the Tauber Institute for Global Operations, is taught by William Lovejoy, the Raymond T. Perring Family Professor of Business Administration and chair of operations and management science, and Shaun Jackson, associate professor at the School of Art & Design and the A. Alfred Taubman College of Architecture & Urban Planning. The eight multidisciplinary student teams were asked to design, build and present self-contained food preparation systems to allow people to prepare a complete meal with the use of only one arm.

At the on-campus trade show, voters munched on crudités while receiving tutorials of the unique design features and functions of each kitchen system given by their enthusiastic creators.

TOP Left to right, Hip Grip team members Justina Chiang, Vince Giovannetti, Steve Kren and Charles Covey-Brandt, winners of the "One-Handed Kitchen" competition.

BOTTOM Left to right, Express Cuisine team members Kwan Chul Lee and Yu-Jen Chen demonstrate their product, a one-handed kitchen that works as a jar opener, pot holder and cutting board, to faculty members William Lovejoy and Shaun Jackson.

AMANDA NAGLE

SCOTT GALVIN

In addition to researching the market needs and designing a functional product, the competition required each team to create a Web site to market its system. Before launch, the teams designed a manufacturing process and estimated the fixed and variable costs of production. These calculations influenced the prices they were to declare prior to competition. During product reviews leading up to the contest, designers and engineers from industry critiqued the students' designs and offered advice on improvement.

Just as in real life, the market determines the winners. Following an intense 14-week course, the products were displayed for online voters and guests at the trade show to review. All eight fully functional products were ranked by both features and price, and the top three prototypes were selected. Market results from the online and actual trade shows determined students' grades.

The Hip Grip team won both the online and trade show competitions. The winning teammates are **Justina Chiang**, MSE-IOE '06; **Charles Covey-Brandt**, BFA '08; **Vince Giovannetti**, MBA '07; and **Steve Kren**, MSE-IOE '06.

"The problem the students faced was more difficult and complex than in years past," said Lovejoy, who created the course 16 years ago while at Stanford University. Impressed with the results of the 2006 competition, he hopes the top teams will take their products to the next level. "In fact, we are trying to create a follow-up class through the Samuel Zell & Robert H. Lurie Institute for Entrepreneurial Studies that will focus on the entrepreneurial side of product development," he said.

For more information about the IPD course and to view the "One-Handed Kitchen" competition entries, visit www.tmi.umich.edu/IPD/2006/.

STAR POWER

The Script and the Balance Sheet

For **Robert Shaye**, BBA '60, founder, co-chairman and co-CEO of New Line Cinema Corp., the producer of such blockbusters as *The Lord of the Rings* trilogy, *Rush Hour* and *Austin Powers*, his ability to read a balance sheet, and the independence it brings, can be as important as reading a script.

Shaye received the David D. Alger Alumni Achievement Award at the Ross School Reunion weekend October 27–28. Established in 1989, the award was renamed in honor of **David Alger**, MBA '68, president and CEO of Fred Alger Inc., who died on September 11, 2001 at the World Trade Center. It recognizes an alumnus whose professional achievements have brought distinction to the individual, credit to the business school and benefits to others.

Accepting the award, Shaye said, "My somewhat unique personal take-away from my time at the Michigan business school has been a synthesis. I learned both to think and reason, and to be reflective and pragmatic. And probably more than anything, I learned the value of independence. Business skills mean independence."

PAUL JARONSKI

Film producer Robert Shaye, left, receives the David D. Alger Alumni Achievement Award from Dean Robert J. Dolan.

As a 16-year-old Detroiter matriculating at the U-M for the first time, Shaye looked forward to the "Socratic ideal of learning, a place of discovery and philosophy." When he arrived to enroll, he realized with some horror that the Registrar's Office had assigned him to the business school queue.

"After the shock and the request for immediate counseling, I was shown my admission application essay, which clearly stated that I thought, after college, I would be going into my father's business.

"Well, sure, I didn't exactly know what I wanted to do, and my dad was a successful grocer, but who wants to prepare for wholesale grocering at the temple of learning?"

When he learned that the business school required one year of a foreign language rather than the two years required of graduates of the College of Literature, Science and the Arts, Shaye said, "The decision suddenly became easier.

"So I enrolled in business administration, and my blue class registration card stood out like an alien visitor in the classes I took in English and philosophy. It was a badge of certain pride. And so, eventually, was the decision to continue in business administration."

Citing such outstanding professors as the late Robert L. Dixon in accounting and Ross J. Wilhelm in business economics and marketing, Shaye said he experienced the best of both worlds by taking classes in LSA and the Ross School. "I was so eager to cram it all in, I even graduated in three and one-half years."

The bag of academic tools he assembled from both schools has served him well. "I love what I do. I was blessed with the passion for my profession from a very early age. And I am blessed to have had a father who brought me up in business, as I realize now, not to take over his, but to create and manage mine.

"Business for me became a means to an end, and not just the making of money, which, as a passionless exercise, can be a dreary achievement. Understanding business allowed me to realize my dream."

MLK DAY

A Call for Economic Justice

Martin Luther King Jr. was more than a dreamer. He was an economist and a "doer," according to Julianne Malveaux, who talked about King's role as a fighter for economic justice in her 2007 Ross School of Business Martin Luther King Jr. Day lecture.

More than 500 students and members of the community gathered in Mendelssohn Theater for Malveaux's lecture titled "Economic Justice in the Beloved Community: Where Do We Go from Here?"

King's idea of a fair economy was one that works for everyone and includes fair trade, budget and tax policy, protection of worker rights and equal access to resources, said Malveaux, president and CEO of the multimedia production company Last Word Productions Inc. in Washington, D.C.

In King's 1963 "I Have a Dream" speech, he proclaimed that the country gave blacks "a bad check…a check which has come back marked 'insufficient funds.' We've come to cash this check, a check that will give us upon demand the riches of freedom and the security of justice."

"If we could get people to say 'cash a check' as often as they said 'I have a dream,' we might get a different kind of vision of Dr. King," Malveaux commented. "We have to put Dr. King in economic context. We can't just have him talk about the beloved community as utopian. For him it was about a commitment to nonviolence but also to economic justice."

One example of King's commitment to economic justice took place in Memphis, Tennessee, in 1968, where black garbage collectors were paid 60 percent less than white co-workers. On rainy days when collection was delayed, black workers were sent home without pay while white workers were allowed to work inside and were paid. Prevented from organizing, black workers carried signs asserting "I am a man."

"What we do know about this notion of Dr. King as a dreamer is that he was also a doer," Malveaux said. "He was not dreaming in Memphis; he was trying to raise the wages of garbage workers."

In his 1964 Nobel Peace Prize acceptance speech, King said "I have the audacity to believe that people everywhere can have three meals a day for their bodies, education and culture for their minds, peace and freedom for their spirits." Malveaux characterized King's "audacity" as an economic platform about the distribution of resources and eradication of poverty.

Malveaux reported that 38 million Americans still live in poverty. Many working people run out of money before the end of the month and cannot afford housing in 20 major U.S. cities. This is everyone's problem, she added, citing one of King's tenets: Whatever affects one directly affects all indirectly.

Malveaux also expressed dismay about Proposal 2, a Michigan constitutional amendment passed in 2006 banning affirmative action programs in public institutions. She emphasized the need to close the gaps in education by improving the quality of education in the inner city and making college more accessible to all people — perhaps through free tuition — so graduates are not burdened by excessive debt due to student loans.

Julianne Malveaux speaks to more than 500 students and community members on Martin Luther King Jr. Day.

GOOGLE IN ANN ARBOR

Organizing and Advertising the World's Information

Online advertising is increasing by 30 to 40 percent a year and is quickly eclipsing more expensive and less measurable forms of advertising such as television and print.

John Kelley, MBA '93, manager of Google AdWords online sales and operations, and Helena Beem, associate manager of online sales and operations, spoke about "Search Engine Advertising: What It Is and How to Use It Effectively" on November 15 as part of the Yaffe Center for Persuasive Communication speaker series at the Ross School.

Google, co-founded by Larry Page, a University of Michigan alum, is best known for its search engine, but it also offers other products such as Google Maps, Google Video, Google Calendar, Gmail and Google Earth, a virtual 3D global application. Google opened an Ann Arbor office in 2006 and expects to staff 1,000 positions here over the next five years.

The firm's philosophy is that online advertising should be measurable and accountable, companies should only pay for what they get, the online ad campaign should be flexible and, above all, advertising should benefit all of the advertiser's assets, all the time. "Advertising is the economic engine that drives everything at Google," Kelley said.

With Google ads, advertisers only pay when a Web user clicks on the ad, not every time the ad is displayed. When a search is performed, results are framed with "sponsored links" (or paid ads) at the top or on the right-hand side of the page. Google takes the user's search terms

D.C. GOINGS

Left, John Kelley, manager of Google AdWords online sales and operations

and retrieves matching Web pages as well as any ads that match the user's search terms. Advertisers work with Google to define and select the best keywords for their online campaigns.

Advertisers also determine how much they are willing to pay for their ad to be displayed on Google. The price range runs from a few cents to $50. Every time a user searches on Google, an auction determines the ads that are most relevant based on how much the advertiser is willing to pay and the relevancy of the ad. This real-time auction is seamless to the user.

Google's ads also show up on other search sites, including Ask.com and AOL. Google AdSense is an additional service that allows webmasters and bloggers to use Google search technology in return for posting Google's ads on their sites. AdSense can run online video ads as well.

Google AdWords offers several fine-tuning options to advertisers. Geo-targeting sets an ad to run only in a specific geographic location, ad scheduling sets an ad to run only during a specific time period and site selector determines the sites to include or exclude from the ad campaign.

Google Analytics allows advertisers to "make smarter decisions for free," Beem said, by measuring return on investment for marketing efforts, evaluating user navigation to identify site improvements and tracking e-commerce metrics such as revenue, cost and conversion rates.

When asked how Google advertises its products, Kelley replied that the key is word of mouth. When Google launched Gmail, a free e-mail service, users were invited to try the service before it was available to the public. "Think about the user first," he said, "then everything else will follow."

SOX

Counting the Cost

The high cost of complying with the Sarbanes-Oxley Act, the most significant securities regulations enacted since the 1930s, may adversely affect the U.S. economy, according to four Ross School alums who work in corporate finance.

Although the regulations provide benefits to companies and shareholders, the act should be refined, they told a group of Ross School students at a Dean's Seminar on November 30.

The panel of alumni, moderated by Joel Slemrod, the Paul W. McCracken Collegiate Professor of Business Economics and Public Policy, discussed the Sarbanes-Oxley (SOX) Act of 2002 and FIN 48, the Financial Accounting Standards Board's new regulations about accounting for income taxes.

SOX was enacted in the wake of corporate scandals involving Enron and WorldCom and requires higher standards for corporate financial reporting, including the certification of financial reports by CEOs, CFOs and independent auditors. It also established the Public Company Accounting Oversight Board, which oversees the auditors of public companies to protect the interests of investors and further the public interest in the preparation of audit reports.

FIN 48 attempts to standardize reporting of uncertain income taxes and determines when and how corporate tax reserves can be released, effective for fiscal years beginning after December 15, 2006.

The four panelists were:

- **Dean Bergy**, BBA '81, vice president and chief financial officer of Stryker Corp., a leading provider of orthopedic implants, equipment and other medical products.
- **Dan Susik**, MBA '83, senior vice president of Ryder System Inc., a worldwide transportation and logistics solution provider.
- **Robert Totte**, BBA '74, MBA '76, vice president of Jarden Corp., a company of brand-name home goods, including Sunbeam and Mr. Coffee.
- **Joel Wittenberg**, MBA '92, vice president and treasurer of Kellogg Co., the world's leading producer of cereal and maker of other convenience foods.

The panelists expressed mixed feelings about the regulations. They concluded that while compliance has brought some benefits to companies, the high cost of compliance is onerous, particularly for small companies.

Costs of complying with SOX reporting requirements include hiring more auditors and updating or implementing new information systems.

Bergy said that morality cannot be legislated. "To some extent, SOX tries to do that. The message from the top of the company is more important."

Wittenberg pointed out the benefits of greater documentation and more disclosure regarding off-balance-sheet operations, but the costs for complying with SOX have been high, he said.

Susik said compliance is important for corporate governance ratings, which make the company more credible to investors and analysts.

According to Totte, increased corporate tax regulation has affected all corporate tax functions, creating significant time and labor to perform functions beyond complying with SOX.

PHILIP DATTILO

Left to right, Dan Susik, Dean Bergy, Joel Slemrod, Joel Wittenberg and Robert Totte discuss SOX compliance costs.

Slemrod noted that "it is harder to quantify the benefits than the costs," because the costs are tangible while the benefits of better outsider access to company information would be reflected in a lower cost of raising funds. While the cost of implementing these controls has been substantial, the cost is highest during the first year and is expected to decrease in subsequent years, he said.

Nancy Davis, Mary Jo Frank, Adrienne Losh *and* **Heather Thorne**
contributed to Across the Board.

Leading Innovation: A Playbook for Growth

Jeff DeGraff, clinical associate professor of management education at the Ross School of Business, teaches in the school's MBA, Executive MBA and Executive Education programs. His teaching and research focus on change and innovation strategy and practices, organizational competencies and creativity. DeGraff, a core faculty member in the University of Michigan Center for Leadership, Change and Innovation, is a managing partner of the consulting practice Competing Values Company. Clients include Pfizer, General Electric and Toyota, as well as dozens of other Fortune 500 firms. His latest book, *Leading Innovation: How to Jump Start Your Organization's Growth Engine* (McGraw-Hill, 2006), presents a holistic approach to creating innovation at all levels of an organization.

Jeff DeGraff describes his new book as "a playbook for a successful leader in a managerial capacity who is suddenly charged with growing the business." It explains how to evaluate an organization's competencies and culture, cast a strategy, mobilize an organization to execute that strategy, jump-start projects that take the strategy forward and develop a small group of what DeGraff refers to as "innovation black belts" to run the projects. He tells how to make corrections to organizational processes like resource allocation, the planning cycle and metrics so those processes can be scaled for a larger organization.

In this Q&A, DeGraff shares examples of innovation superstar firms, talks about new forms of innovation that should be on the radar screen of savvy businesspeople and explains how to identify and encourage individuals who make innovation happen.

***Dividend:* What is innovation?**
DeGraff: True innovation is any activity that results in making the organization better or new. It must produce value, and it always has four characteristics:

- It enhances something. Google enhanced the search engine and made it simpler.
- It destroys something or makes it obsolete. Think about how Charles Schwab made full-service brokerages obsolete.
- It returns us to something that we once prized or felt that we have lost. I think of Barnes & Noble bookstore, which allows us to feel like students again — we read books, drink coffee and sit in leather chairs.
- It reverses into its opposite over time. Remember when we thought that e-mail would be a great time-saver? Now we try to get around e-mail because it is consuming more and more of our lives.

***Dividend:* How did you develop that definition?**
DeGraff: Most definitions of innovation involve technology and words like big and fast. But that's often not the case. Some of the most potent types of innovation are social, incremental and slow. Think about the eco-movement, which started in 1962 with the publication of Rachel Carson's *Silent Spring*.

My definition for innovation comes from Marshall McLuhan, the great University of Toronto professor-guru and author of *Understanding Media*. Innovation has to provide tangible outcomes and employ some sort of useful novelty. It is just as likely to happen around inbound supply logistics, marketing or service support. The concept of the R&D guy working alone in the science lab ended in the late 1970s. Our definition for innovation must reflect a more contemporary and open view.

***Dividend:* Could you share some examples of companies that illustrate the approaches to innovation you present in your book?**
DeGraff: Google exemplifies the *create* type of innovation. It is a hodgepodge of loosely federated, smart people pursuing dozens of growth agendas and different technologies with a high adaptation rate. Google has a lot of slack resources to invest, which has resulted in some breakthrough innovations. We know Google has done incredibly well with its search engines and maps. However, it has literally hundreds of other innovations whose impact we won't know for years to come. The anticipated big payout occurs in the future. This focus on high-risk and high-return innovation is typically associated with a newer firm.

Contrast this breakthrough approach with Toyota, which illustrates a classic *control* form of innovation, taking on little risk. Toyota has a checklist and process for everything, with all employees trained in the "Toyota Way." Toyota has never really distinguished itself as a radical innovator, but it has perfected incremental innovation. For example, Toyota took the hybrid engine that GM worked on in the 1970s and made it viable. In contrast to Google, Toyota is a low-risk and low-return innovator that seeks productivity on a large scale.

Both companies are innovative, but use different pathways to arrive at their innovation goals. Google looks for breakthrough innovation and organic growth while Toyota looks for productivity and quality. Of course, most firms need to do both. That's the trick, coordinating these oppositional forms of innovation through effective leadership and organizational practices.

***Dividend:* What about the *compete* and *collaborate* forms of innovation you cite in your book?**
DeGraff: We also can look at how fast a company innovates. My favorite examples

in terms of speed are IBM and W.L. Gore & Associates. IBM has an amazing ability to break the organization into teams and move quickly. I call this the *compete* approach. IBM aggressively acquires businesses and technologies, which gives it an advantage in the immediate future. IBM's focus is on revenue. It develops bundles of innovation, which it calls a solutions business. IBM will design, develop and deliver whatever you want to buy from it and do so very quickly. It offers an amalgamation of strategies, problem solving, technology, design and back-office systems. Some elements of its solutions business are breakthrough, but for the most part they are relatively minor improvements on existing technologies and approaches very well executed. IBM responds rapidly to market demands, and it has great esprit de corps.

Contrast IBM with W.L. Gore, which has taken the *collaborate* viewpoint toward innovation. W.L. Gore, the maker of Gortex, is a privately held company that tries to keep its business units below 50 people. It is a family-type business. Instead of figuring out how to make more money this quarter, W.L. Gore's goal is to develop good people, who will in turn develop terrific products and services. Their philosophy is "Let's develop a good culture and make sure that we give our products and services the time to develop the right way, so that we have something sustainable." They believe that the markets, products, services and competitors will change, but as long as they have a highly competent culture and competency, they will be able to make the necessary adjustments to thrive.

***Dividend:* What is an example of a breakthrough resulting from the *collaborate* form of innovation?**
DeGraff: Glide dental floss, marketed by Procter & Gamble, is one. W.L. Gore actually developed the technology, but no one wanted to adopt it for dental floss. So Gore made thousands of dental floss dispensers and distributed samples to dentists, asking them, in return, to use the floss and share their patients' reactions. Before long, the dentists were asking for more, and their customers couldn't find Glide in stores. W.L. Gore took this data to Procter & Gamble and was able to report that people liked the product. The development of Glide wasn't the result of a corporate mandate. Rather, a self-authorizing team in one of W.L. Gore's small operating units in Delaware thought that using Gortex technology on dental floss was a good idea and took the concept forward. W.L. Gore has a lot of these stories of small groups navigating the internal organization and external markets to produce high-growth, innovative products such as Elixir Strings, which outlast other guitar strings. These ideas don't come from a central portfolio or produce short-term revenue. The downside of the Gore approach, which is a *collaborate* or social approach, is it takes a long time to develop a product. The upside is it is sustainable. The upside of the IBM *compete* approach is it is very fast. The downside is it is not terribly sustainable.

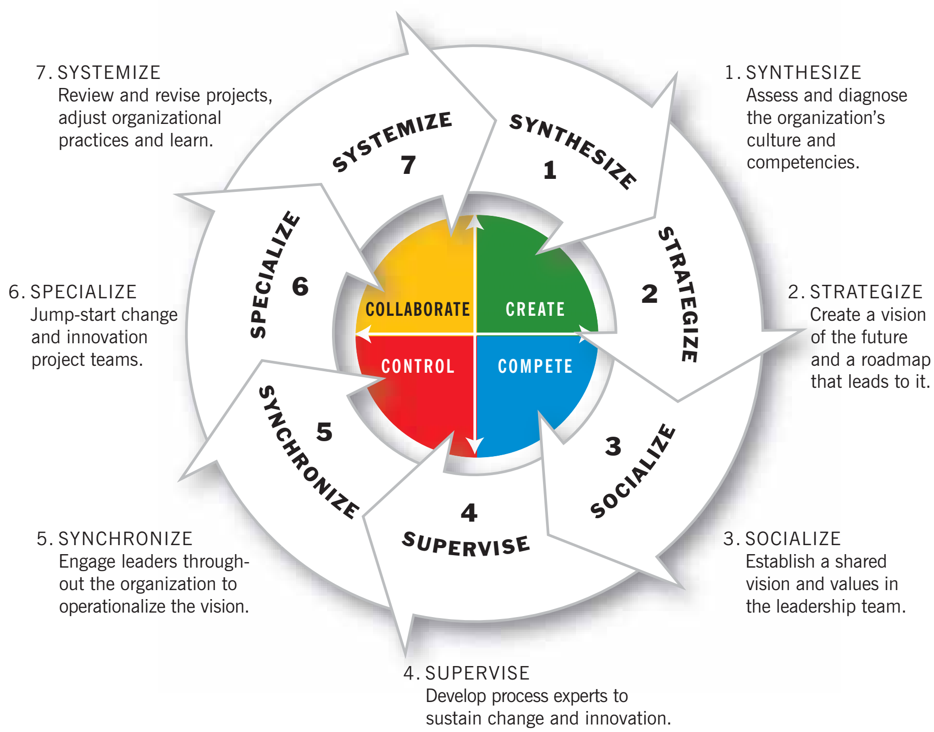
***Dividend:* What do you foresee on the horizon for new forms of innovation?**
DeGraff: I believe that businesses are overlooking a revolution in the collaborative or social approach to innovation. That is, these are business model innovations that change the very nature of how we make, sell and support innovation. Three companies—Linux, eBay and Procter & Gamble—are changing the way we do business.

Linux makes open-source software. The firm believes that if 30,000 people contribute to the Linux kernel, the basic operating system, that its open-source software will be much more robust and powerful than any one individual company can make it. The downside is the process is slow, and the business model isn't really designed to produce profits. We refer to this approach to innovation as a post-capitalist model. Linux software is nothing short of spectacular in as much as so many people are willing to support it. If you are Microsoft, how do you compete with Linux or Mozilla's Firefox, a Web browser that uses the collaborative approach?

eBay, also a community-based model of innovation, gets Web users to spend more time per viewing on their site than any other site on the Web. eBay has the potential to challenge government jurisdiction and boundaries. For example, some of the transactions on eBay are actually more akin to swaps, where money doesn't trade hands. More so, illegal and potentially dangerous forms of activities are harder to police. The power of governments to collect taxes, regulate commerce and enforce laws designed for traditional markets quickly evaporates. That's why several governments around the world are so concerned about eBay.

THE SEVEN STEPS

Jeff DeGraff lays out seven steps that can be replicated by leaders anywhere in their organization to create best practices for innovation. In his book, he goes into detail about the steps, which can be used singly or in combination depending on the needs of the organization.



***Dividend:* What are large firms doing to compete in this changing environment?**
DeGraff: We're finding more of what we call the "federation model" in larger companies these days. Companies are no longer going alone; they are collaborating with other companies. In 1997, Procter & Gamble had some trouble with Wall Street, which was upset with its growth numbers. In a remarkable move, P&G, one of the most conventional innovator firms, created a number of novel ways for smaller firms and even consumers to collaborate with the company to develop products, producing winning results like Crest Whitestrips and SpinBrush for teeth, and the Swiffer mops. Procter & Gamble's R&D expanded from one company to a wide federation of companies, and P&G has become the point where all these parts to the innovation puzzle are put together and marketed.

While people are doing a lot of work on the technical and business parts of innovation, I believe the community-centered model is changing the market, and it is a change for which large Fortune 500 firms are unprepared. Big blue-chip companies desperately are trying to create innovation networks and incubator centers, but their own organizational processes act as roadblocks. A lot of the traditional practices that we teach in business school are not supporting the growth agenda and must be rethought.

***Dividend:* What is the main obstacle for large companies that must innovate to grow?**
DeGraff: How you innovate determines what you innovate. For example, a mature firm will declare that it is actively seeking pathways to organic growth. This is usually accomplished via the *create* form of innovation we see at Google, which grew its net income last year by 278 percent. So we should expect these more mature firms to follow the Google playbook of speculating new markets, diversifying through radical experiments and making strategic high-risk, high-reward bets. Instead, we are more likely to find these mature firms building large and complex systems with lots of associated processes for doing things the "right way." Typically there is some form of certification that accompanies the roll-out of these humongous systems that are almost indistinguishable to the uninitiated from a vanilla version of a lean manufacturing process with a label like "Very big innovation process" slapped on at the end for good measure. There is very little evidence that these systems produce substantial growth. Instead, they more than likely support productivity and quality, which are important and valuable results but can strangle breakthrough innovation and organic growth. The number-one problem mature firms have is that they want one outcome while embracing the opposite practices with which they are most familiar. In other words, the challenge is to overcome their own conventions and innovate how they lead.

***Dividend:* What convinces you that innovation takes root from experiments and experiences within an organization and surfaces in ways that companies often don't anticipate?**
DeGraff: First, I've learned personally from working with 50 Fortune 500 companies and helping them create double-digit growth.

Second, with the conventional business approach, strategic planning creates a clear roadmap from point A to point B. But the more radical the innovation, the more useless the roadmaps are. When an innovation starts out, you're not sure what it is. You have to nurture and protect it. That innovation has to interact with the environment and grow. You need patience. Sometimes you have to be directive. Other times you have to be hands off. Innovation pays in the future, not today.

Imagine going through the normal planning cycle where every January you plan and every December you reconcile the plan. In a world of innovation, events don't follow the typical planning cycle. As Professor Bob Quinn puts it, "Leading innovation is about building the bridge as you walk over it." Leading innovation is about what you learn along the way and how you interact with that knowledge.

Third, even if a firm has developed some interesting product or service, the real challenge with innovation is to have people buy into it. The amazing thing about innovation is that it has a second life. A lot of innovation makes it into the world, where it takes on a whole new set of attributes.

***Dividend:* What would be an example of an innovation with a second life?**
DeGraff: Cell phones' text messaging feature, for one. Originally, text messaging was to support phone messaging. If people couldn't reach you or leave a voice recording, they could type you a number and ask you to call. Not too exciting; but when you gave text messaging to a teenager restricted from making phone calls or passing notes in class, suddenly you had an entire community, language and culture around text messaging. Something we viewed as a minor ancillary addition to phone service has become a central piece of telecommunications.

***Dividend:* What industries and companies are most in need of this innovation framework and why?**
DeGraff: Large corporations that have a great deal of scope and scale, because they are mature firms that have the four forms of innovation I talk about in the book—*create, control, compete and collaborate*—operating concurrently. Unfortunately, too often one form of innovation becomes so powerful that it strangles the other three.

For example, General Motors is still one of the great innovative firms in the world. The problem for innovative giants is not so much about developing new technologies, but moving innovation quickly through the entire enterprise. Enterprise innovation means connecting the dots of the various units, departments and locations. When GM develops a new technology, like the new hydrogen-powered Highwire concept vehicle, it is engaged in *create* forms of innovation; but when they go to market with this car, they will need to focus more on *control* forms of innovation. It's the handoff between these oppositions that are so difficult for large firms to get right.

It is like being right- or left-handed. One of the arms becomes so strong that the other becomes weak. Large firms must be multidimensional, particularly when they get into trouble for not hitting their growth targets. The tendency is to retreat to cost-cutting maneuvers.

You see this by visiting blogs about these companies. Bloggers inevitably will say, "We were once a very innovative company.

Now we spend all our time adhering to the prophets of bureaucracy. We don't spend enough time with clients. We don't spend enough time experimenting, and yet we wonder why we don't have more radical innovation."

***Dividend:* Any specific examples?**
DeGraff: I can't think of an industry that suffers more from this risk-avoidance maneuver than the pharmaceutical industry. The formula for success was spending big on R&D to create blockbuster drugs. These drugs came from a diversified portfolio of radically different tracks of experimentation generated by independent-thinking, brilliant doctors. Over time, the expense of this type of R&D become prohibitive, and pharmaceutical companies adopted industrial models for efficiency and applied them to their drug discovery practices. Predictably, these firms are more cost efficient but often at the expense of new blockbuster drugs. They are now prisoners of their own innovation systems and processes. If the innovation systems that exist today had existed 20 years ago, I suspect not nearly as many of the blockbuster drugs we take for granted would have made it to the market.

As is often the case, the systems and processes put in place to help the company effectively manage large-scale innovation at some point have the potential to become counterproductive and actually become the barrier to success. I'm not against stage-gating systems or hurdle rates, but beware of their bias and keep them in their place. If you let them pervade everything in the organization, you may find yourself in search of a growth engine.

***Dividend:* How does a firm or industry become strangled by its own processes?**
DeGraff: When a company starts, it has a *create* form of innovation. It is searching for organic growth. It is looking for radical innovation because it can't compete on scope or scale with more heavily resourced, mature firms. It relies on ingenuity and imagination. The problem with those firms is that they often don't make any money, or they grow so fast that they blow up. Look at Silicon Valley or biotechnology now. These firms have high mortality rates.

With luck, a start-up will find a manager who has mastered the *compete* form of innovation. Competitive innovators focus on the short term, on the three or four areas that are going to make money quickly. The Ross School of Business is well known for producing these terrific *compete*-type leaders. You see them at Microsoft, General Electric and Procter & Gamble. They are very smart about money and know how to increase revenue quickly.

If that works, then the firm has to do two things simultaneously — figure out how to sell that innovation and develop a client base and organization around it. The firm must have *collaborate* innovators who are interested in community and culture and developing competencies and knowledge. Second, *control* innovators must come on board to develop scalable processes and systems. They are the people who are interested in quality and productivity and know how to make and distribute a billion units worldwide.

By the time the firm grows up and has the scope and scale it wants, the practices found in the largest parts of the organization are contrary to the practices used to start the firm. Leading innovation is about competing values. The high-risk breakthrough *create* innovator must make the handoff to the low-risk incremental *control* leader who will bring productivity and quality. The key is finding and developing leaders who can integrate these opposing tensions.

***Dividend:* In your book you refer to innovation black belts as "creativizers." What is a creativizer?**
DeGraff: Creativizers are those people who don't have a technical role in making innovation happen but make it happen anyway. There is always the HR person who knows how to hire someone who is substantially different than the traditional hiring profile. There is always an accounting person who knows how to take a charge differently on the books to allow that $25,000 experiment. There is always a vice president on the capital committee who is pro-innovation and can convince others to approve that very interesting marketing campaign or help a new product over the hurdles. These people are the creativizers.

***Dividend:* What is the secret to hiring and retaining creativizers?**
DeGraff: You don't produce creativizers. A pro-innovation constituency exists in every firm. The first challenge is identifying these people. The second challenge is supporting them with freedom, resources and encouragement. The third challenge is helping them connect with each other. Otherwise, they can be disenfranchised.

***Dividend:* What firms successfully champion their creativizers?**
DeGraff: My favorite examples of creativizers being recognized and rewarded come from early in my career. I was a senior executive at Domino's Pizza. We called these creativizers Olympians. We gave them special privileges and had regular forums to listen to their advice. After I left Domino's, I was on an advisory board for Apple Computer. They had created the Apple Fellows program for individuals who demonstrated self-authorizing behavior, took ownership to advance a product to the market and navigated the company system to implement substantive change. At Domino's and Apple, we didn't have to change all the business processes or reallocate resources. We just empowered the people who knew how to get through the organizational system to make innovation happen.

***Dividend:* How do you find and support the individuals who can take a project from concept to implementation so they can develop their talent?**
DeGraff: Some of these ambidextrous leaders are born that way. But most of them learn through apprenticeship, similar to how the medical profession trains doctors. Medical students learn by observing, then practicing under the watchful eye of a master and finally by teaching others. It is a model that we see in innovative organizations: See one, do one, teach one.

My favorite example of training through apprenticeship is at W.L. Gore. The firm's CEO says that his job is to develop an understudy, a project that takes years. People learn by hearing what worked and what didn't. Great innovators are lifelong learners; with these people, there is a lot of mess and struggle and doing things over and over again.

Organizations that reward first-time perfection don't have a strong innovation capability and usually are not high-growth organizations. Remember, innovation is connected to organic growth. You have to make something new or sell it to someone new in order to grow organically, as opposed to growing inorganically by acquiring another company.

To grow you have to have a sufficient innovation culture and competencies and enough people who are involved in striving and learning. Innovative organizations learn. That is the ultimate secret to enterprise-wide innovation and growth.

Mary Jo Frank

The Stranger at the Water Cooler

Building Community in a World of Free Agents

Exploring Positive Relationships at Work: Building a Theoretical and Research Foundation, **co-edited by Jane Dutton, the William Russell Kelly Professor of Business Administration at the Ross School of Business, is the first book to focus on "positively deviant" relationships at work — relationships that are marked by higher than normal degrees of such characteristics as trust, vitality and respect. Dutton is professor and chair of Management and Organizations at the Ross School, a founding member of the Center for Positive Organizational Scholarship at the University of Michigan and a fellow of the Academy of Management.**

Jane Dutton

Company badge. Building keys. Cubicle. These are some of the accoutrements new hires expect when they join a company. For many, the sense of belonging that comes with the job is just as important.

For temporary staff, independent contractors and other "free agents" who move from organization to organization, feeling part of a community is not a given, says Carl T. Camden, president and CEO of Kelly Services Inc., a leader in providing staffing solutions to some of the world's largest companies, including Johnson & Johnson, Intel, Baxter Healthcare and Sara Lee. Camden, who holds a doctorate in communications, has a scholarly as well as professional interest in the rapidly changing workplace.

Carl T. Camden

"Permanent employment already is an oxymoron," says Camden, who admits even he is astounded that free agents make up a fifth of the U.S. workforce.

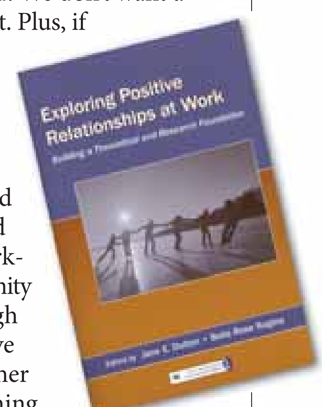
Given this workscape, how do free agents who are physically, administratively and temporally separated from the employing organization and from each other find a sustaining workplace community?

It is a question that Camden and Ross School PhD student **Ruth Blatt** set out to answer. Their findings are part of *Exploring Positive Relationships at Work: Building a Theoretical and Research Foundation,* which was published in November. The book, which features the work of scholars from Michigan and other universities, is co-edited by **Jane Dutton**, the William Russell Kelly Professor of Business Administration, and Belle Rose Ragins, professor of management at the University of Wisconsin, Milwaukee.

"We read in the literature about the unraveling of the country's social fabric," says Camden. "It has been a popular topic among social scientists. People don't bowl together anymore. They don't join community groups like the Kiwanis Club that provide a sense of place and community. Still, there are a lot of people who care a whole lot about belonging."

For many, a sense of community comes from work, says Blatt. It meets what many psychologists identify as "the fundamental need to belong" and provides a powerful source of attachment. Incentives that might motivate permanent employees — benefits, promotions and raises — carry little weight for temporary staff because they probably will not stay. The payoffs for firms that nurture a sense of community for temporary staff, many of whom are hired for their special knowledge or expertise, include a more motivated workforce comprised of people who are excited about coming to work and are willing to help other people and share their knowledge rather than hoard it.

Camden says it is easy to spot the detached free agents. "You can see them. They're not engaged. We don't want a temp to feel like that. Plus, if temporary workers don't like the customer or assignment, they quit."



From in-depth interviews, Blatt and Camden discovered that temporary workers' sense of community is developed through small acts of positive connecting with other co-workers, something as simple as a meet-and-greet over coffee. For temps, Blatt says, a sense of community develops swiftly and

"We found that positive connections—being invited to lunch by co-workers, attending staff meetings or participating in celebrations—boosted temporary employees' motivation to come to work and increased the likelihood that they would stay despite alternative job offers."

* * *

involves immediate connections that generate feelings of inclusion, a sense of importance, perceptions of mutual benefits and shared emotions.

"We found that positive connections—being invited to lunch by co-workers, attending staff meetings or participating in celebrations—boosted temporary employees' motivation to come to work and increased the likelihood that they would stay despite alternative job offers," Blatt says.

The best thing executives can do to foster positive relationships at work is to allow them to form naturally by not creating obstacles. "Relationships will happen," she promises. Exclusionary practices, such as not inviting temporary employees to the company picnic or describing a temp who works full-time as a part-time person, too often are dictated by management.

Camden's own experience confirms that permanent and temporary staff do create positive connections independently. For example, he cites recent joint celebrations organized by Baxter Healthcare and Kelly workers at several Baxter locations to celebrate Kelly Services' 60th anniversary and Baxter's 75th anniversary. The spark for the community-building activity came from employees, not corporate headquarters.

"Successful free agents come to a sense of community quickly," says Camden. "We do 75 percent of our hours with 25 percent of our employees. They wouldn't take a permanent job if offered. The other 75 percent of our employees work for Kelly as part of career transitions."

Blatt and Camden's findings, says Dutton, have ramifications for executives dealing with workforces spread across the globe, projected labor shortages among white collar workers in the United States and the imminent retirement of baby boomers.

In fact, retirees already serve as a rich talent pool for Kelly. "This has been the demographic destiny for 20 years," says Camden. "Boomers have many more productive years. Their health is better than that of their parents. They are willing to work longer. They just want to make work adjust to their own life needs and passions."


Ruth Blatt

Each school day, 8,000 to 9,000 classrooms in the United States are staffed by Kelly substitute teachers, many of them retirees. "We have people who love teaching but can't teach on a permanent basis. They have child-care or elder-care responsibilities or hobbies. We're better at recruiting them than most school districts," explains Camden, who says a typical district can fill only 70 percent of its needs for substitutes, whereas Kelly fills 98 percent. One reason: Kelly Services provides benefits such as vacation time and a 401(k) plan, which are usually not available to substitute teachers.

Camden already has identified a new research question: "I'd like to study what helps people decipher the codes in new situations. How do you know which employees are going to figure out the nuances of the organization?"

The free agents who are good code breakers are able to merge with the host culture or community more quickly, he says, adding value to the business and helping to build a sense of community through work relationships that are professionally and personally satisfying.

Mary Jo Frank

FACULTY RESEARCH

Managing Uncertainty

Hyun-Soo Ahn, MSE '97, PhD '01, the Sanford R. Robertson Assistant Professor in Business Administration at the Ross School, develops and analyzes mathematical models related to supply chain management, dynamic pricing and revenue management, workforce agility and resource allocation. He also is interested in modeling customer behavior and how that behavior affects profits. Ahn was an assistant professor of industrial engineering and operations research at the University of California, Berkeley before joining the Ross School faculty in 2003.

Hyun-Soo Ahn

How can managers make smart decisions about staffing, inventory, production scheduling and pricing? Too often such decisions are made haphazardly, says Hyun-Soo Ahn, who believes that insights from analytical models can help businesspeople make better choices. The assistant professor of operations and management science at the Ross School develops and analyzes mathematical models that guide resource allocation and pricing.

"My research can be applied in manufacturing, supply chain design and management, and retail and service operations such as call centers and healthcare delivery systems," explains Ahn, an industrial engineer by training. He has worked with several companies, including 3M, GE Healthcare, Intel, Medtronic and Powerlight.

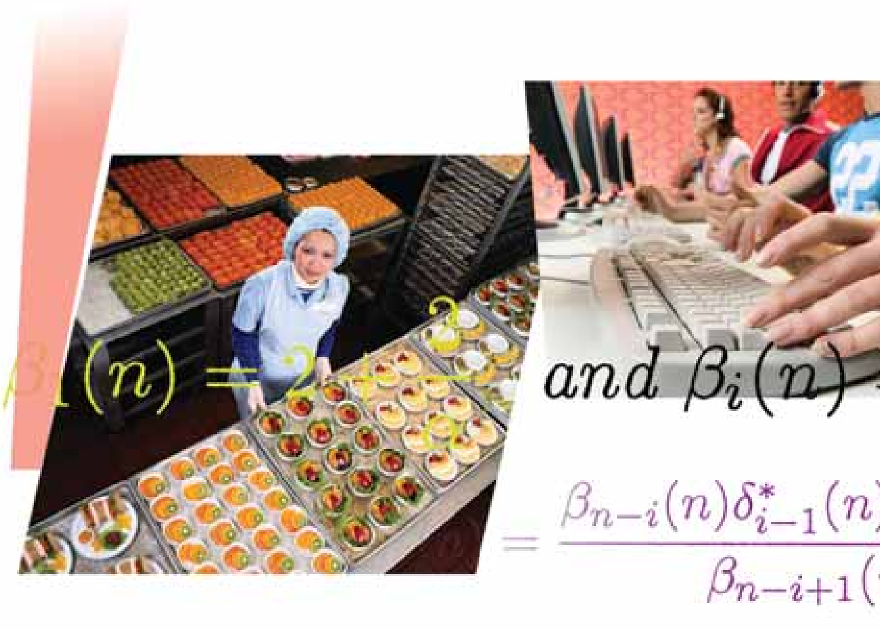
"The beauty of analytical models is that they can transcend biases and limitations present in real-time human decision-making processes. Carefully analyzed models create insights to support decision makers when they are faced with uncertainties," explains Ahn, who uses stochastic models, mathematical models that contain random variables that represent random factors, to prove his theories about optimal resource allocation and decision making.

In managing workflow, no simple rule works in every case, he admits. Even in the simplest case, some workers may be faster or slower than others, which complicates how resources should be allocated. In a highly flexible environment, natural workload balancing can be achieved by a simple "bucket brigade," named for the way firefighters once lined up and passed buckets of water to extinguish fires. Tasks are completed as they move down the line. When employees finish their tasks, they walk "upstream" to take over their predecessors' tasks. To avoid bottlenecks and for maximum efficiency, Ahn says, employees must be arranged so that the fastest person is at the end of the line.

Another practice that Ahn says works well in a flexible environment is "last-buffer, first-served" (LBFS), in which employees finish tasks that are closest to completion even if the task is primarily another employee's responsibility.

"Each activity along the way adds value," says Ahn. "So it is natural to think that the company should not pile up valuable work in process (WIP). Following LBFS minimizes the WIP and generates a smooth flow of finished output, both of which are consistent with the just-in-time production associated with a successful pull-based manufacturing system, most notably Toyota's."

Another common workflow approach used in retail and service operations, he says, is the "pick and run," in which one employee handles a task from beginning to end. It is used in IBM's order processing department where "it is much more desirable to have one person who can perform multiple duties associated with a single client or job," says Ahn, rather than have one person take the order, another check the customer's credit and a third provide a price quote. "Coordinating information takes time. When individuals are trained to do multiple tasks, it eliminates time spent communicating and simplifies the process."



However, Ahn's research shows that assigning one employee to complete a job from start to finish doesn't always work. In a less flexible environment, the manager needs to evaluate each production resource — what task each resource can do and at what speed — and the importance of each job and adjust the resource allocation accordingly.

Using cross-trained employees works well in environments where employees can quickly change from one task to another and the tasks are simple enough that it is easy to train workers, like a sandwich shop or order-fulfillment center. However, cross-training is not necessarily beneficial when tasks are so complicated that it takes a long time for a worker to become proficient at each task.

As part of his research portfolio, Ahn also studies dynamic pricing and issues at the interface of operations and marketing. Traditionally, marketing has set prices, and the operations department has managed production schedules, says Ahn. Both decisions were made in isolation. Because activities that increase revenue do not necessarily improve profits, he adds, it is valuable to look at pricing and production decisions together.

One model he works with assumes that consumers make purchasing decisions based not only on prices in the period in which they enter the market, but also on past and future prices. For example, suppose a person plans to buy a computer and wants to spend $3,000 or less. If the computer costs more than the consumer is willing to pay, the consumer can wait until the price drops, change preferences or buy a competitor's computer.

"Consumers look at price history as well as current prices," Ahn says. "This kind of behavior can change the manufacturing strategy for firms whose capacity at times is not sufficient to meet demand. In order to maximize sales, firms need to realize that while they are selling at a high price, more and more low-price customers are waiting patiently. To make sure all this demand is met, the firm might need to build up inventory for its low-price sales. For retailers using periodic sales to price discriminate, having enough inventory is crucial to the company's profit picture."

Ahn says the healthcare delivery system is another field ripe for study using mathematical models. "In healthcare, the division of labor has limits, since doctors and nurses can spend a significant portion of their day simply transferring information to one another. In such environments, cross-training makes sense.

"Determining what tasks to cross-train and how many doctors and nurses a healthcare system needs is a natural application of this kind of research. A great thing about being at the University of Michigan is the opportunity to do this kind of multidisciplinary research," says Ahn.

"The beauty of analytical models is that they can transcend biases and limitations present in real-time human decision-making processes. Carefully analyzed models create insights to support decision makers when they are faced with uncertainties."

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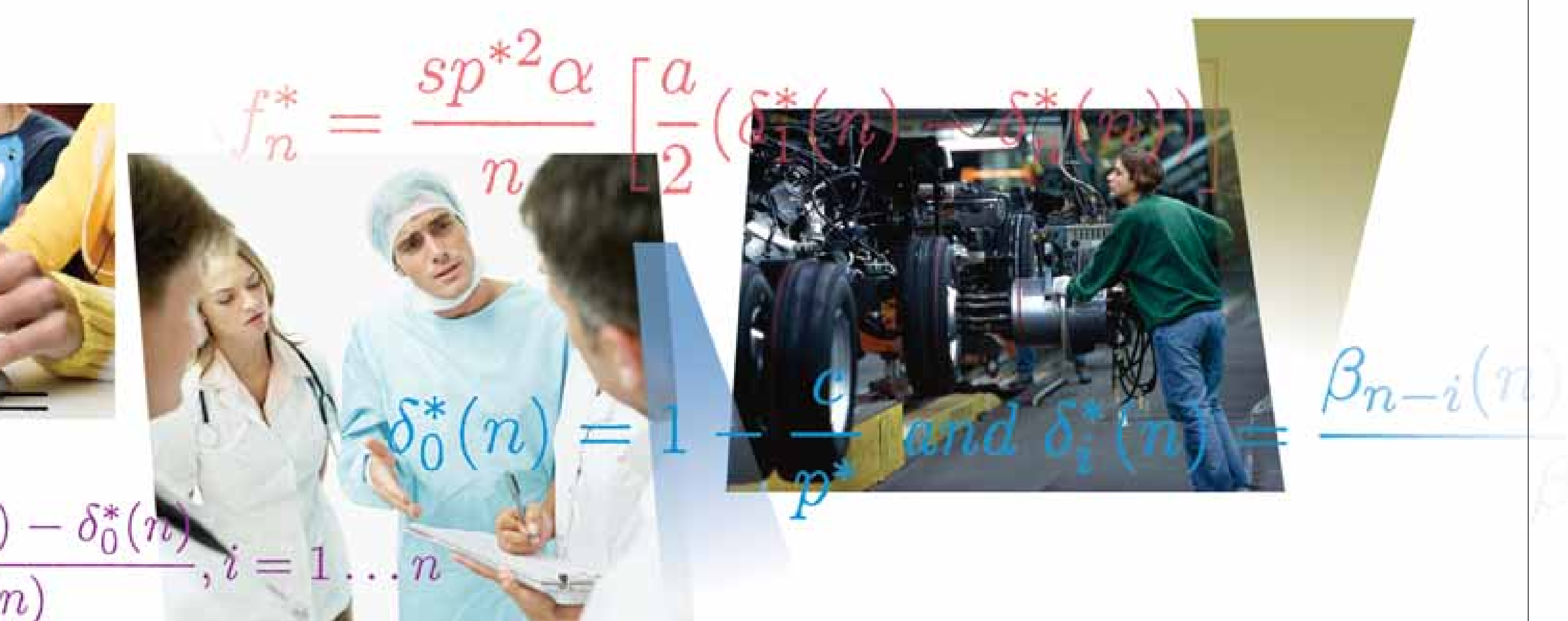
In January, Ahn and BBA students who have taken his statistics and management science course began working on a project with the U-M Hospital's emergency medicine department. "The students like analytics and decision making and want more experience. This is a test bed of action-based learning for BBAs in statistics, management science and operations."

Ahn, who received the Ross School's 2006 BBA Teaching Excellence Award, frequently uses mathematical models when advising Multidisciplinary Action Project (MAP) teams and Tauber Institute for Global Operations summer internship team projects.

"Through Tauber and MAP, I am helping future managers gain analytical skills that can be applied to solve problems. Analysts who appreciate data have better tools to make decisions."

Mary Jo Frank



FAULTY RESEARCH

The "Spillover" Effects of Foreign Investing

Ross School researchers who examined small and large manufacturing and service firms in transition economies found that exports consistently increase their efficiency, but imports do not. Supplying goods or services to foreign-owned firms, whether in the host country or outside its borders, produces knowledge spillover effects, according to Katherine Terrell, professor of business economics and public policy, Jan Svejnar, the Everett E. Berg Professor of Business Administration and professor of business economics and public policy, and Yuriy Gorodnichenko, doctoral student in economics at the University of Michigan. Terrell's research and teaching focus on the effects of globalization in the Central and Eastern European and Latin American regions. Svejnar's research interests include the determinants and effects of government policies on firms and labor and capital markets, corporate and national governance and performance and entrepreneurship.

D.C. GOINGS

Left to right, Ross School faculty members Jan Svejnar and Katherine Terrell and graduate student research assistant Yuriy Gorodnichenko.

The impact of foreign direct investment (FDI) in emerging-market economies may not be as broad-based and beneficial to local firms as many observers believe.

In a recent study, researchers from the Ross School of Business investigate when, where and under what conditions foreign investments by multinational enterprises in developing countries produce knowledge "spillover" effects that increase the efficiency and productivity of those countries' own firms, thus improving the welfare of those nations. Since the late 1990s, governments in transition economies have attempted to attract FDI in order to spur economic development. The commonly held belief is that FDI increases productivity directly through "greenfield" investments and acquisitions of domestic firms, as well as indirectly through positive productivity spillovers on other local companies.

Multinational enterprises can have spillover effects on local competitors within the industry (horizontal spillovers) as well as on upstream and downstream domestic firms that serve as suppliers or purchasers of their products (vertical spillovers). Although local companies may benefit by learning to imitate a new process or to improve the quality of their products through observation or coaching, multinational corporations also may have a negative effect on domestic firms' output and productivity by "stealing" their markets or draining away their best human capital. Hence, the question is whether the net effect is positive or negative.

In their study, Katherine Terrell, professor of business economics and public policy, and Jan Svejnar, the Everett E. Berg Professor of Business Administration, both of the Ross School, and graduate student research assistant **Yuriy Gorodnichenko**, PhD '07, analyze 2002–05 Business Environment and Enterprise Performance Survey data on small, medium and large manufacturing and service firms in 26 transition economies. Theirs is the first study to use data that cover this many countries and such a broad range of firm sizes, in addition to including the service sector. Most studies examine only large manufacturing firms in one country.

Their findings suggest that there is an increase in the efficiency of those domestic firms that either supply local industries dominated by foreign-owned companies or export a majority of their output, i.e., sell more goods or services to foreign firms than to those with operations inside their own country.

In contrast, domestic firms that buy from foreign-owned firms either domestically or through imports do not gain from knowledge spillover effects of multinational enterprises. Furthermore, the researchers found that only large domestic firms benefit via horizontal spillovers from the presence of foreign firms in their industries. There is no similar improvement in the productivity of small local firms.

In other results, Gorodnichenko, Svejnar and Terrell find no difference in the productivity spillovers of multinational enterprises from wholly owned versus partially owned foreign firms. Nor do they find evidence of any advantage in having foreign investments made by more developed Organisation for Economic Co-operation and Development (OECD) countries compared to those of less advanced non-OECD nations.

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Since the late 1990s, governments in transition economies have attempted to attract FDI in order to spur economic development.

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The researchers also conclude that the strength of spillovers does not vary with the degree of corruption, bureaucratic red tape or openness to trade in the host country. In addition, they find that domestic companies in industries where the technology gap with foreign firms is greater are less efficient and less likely to benefit from horizontal spillovers. Similarly, they report that large domestic firms with more highly educated workers (who presumably can more easily apply new technology) do indeed tend to realize positive horizontal spillovers.

Claudia Capos

QUOTE UNQUOTE

"China is thinking in much more active terms about its strategy, not only regionally, but globally, than it has done in the past. We have seen a sea change in China's fundamental level of confidence. The Chinese wouldn't put it this way themselves. But in their hearts I think they believe that the 21st century is China's century."

Kenneth G. Lieberthal, the William Davidson Professor of International Business and professor of political science, discussing China's expanding role in the international community.
—*Time*, January 22, 2007

"I think the future of unions is pretty bleak. But I suppose in the reality of this global economy, I'm seeing that expensive workers drive firms under and this is going to hasten the unions' death."

Katherine Terrell, professor of business economics and public policy, commenting on efforts by labor unions to reach out to younger workers.
—National Public Radio, August 18, 2006

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"There is no doubt we have a long way to go. But the good news is the direction and the momentum are right. If we do not mess with the momentum, industry and consumers will certainly propel India as a high-growth country."

C.K. Prahalad, the Paul and Ruth McCracken Distinguished University Professor of Corporate Strategy, asserting that India can attain growth levels of 12 percent or more.
—*Gulf News in Dubai*, United Arab Emirates, January 2, 2007

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"A lot of entrepreneurs are so excited about what they're doing that they're not rigorous enough about listening to customers."

Thomas Kinnear, the Eugene Applebaum Professor of Entrepreneurial Studies and executive director of the Samuel Zell & Robert H. Lurie Institute for Entrepreneurial Studies, commenting on the early demise of some start-up companies.
—*USA Today,* October 26, 2006

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"It's one of the last great American entrepreneurial opportunities."

Jeff DeGraff, business professor, talking about the upscaling of hot dogs, buns and condiments.
—*USA Today*, September 18, 2006

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"Talented employees now have enormous choice over where they work, and the social stigma about moving from companies is less than ever. What an employee may want varies, but it might include a sense of purpose; the chance to learn, grow and be recognized; impact, or doing work that makes a difference; incentive, in terms of pay that is equitable; community and flexibility. When employees who give a lot have a personalized value proposition, they stay and are engaged."

David Ulrich, professor of business administration and co-director of the Human Resource Executive Program, discussing HR trends, including employee retention strategies.
—*Incentive*, August 1, 2006

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"About 38 percent of U.S. households that are accelerating their mortgage payments instead of saving in tax-deferred accounts are making the wrong choice."

Clemens Sialm, assistant professor of finance, reporting research findings that demonstrate the financial cost of paying off a mortgage early instead of investing in a tax-deferred retirement plan.
—*Chicago Tribune*, September 24, 2006

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"G.E. is still the best training ground on the planet, but that doesn't mean that everyone is going to succeed."

Noel M. Tichy, professor of management and organizations and director of the Global Leadership Program, commenting on the effectiveness of G.E.'s management approach when applied to other organizations.
—*The New York Times*, January 4, 2007

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"There is such a close link between carbon reductions and increased energy efficiency, the logical first step for any business is to cope with climate change. Right now, U.S. companies use twice the energy per dollar of gross domestic product as European Union member countries. Where is the world going? Energy efficiency is the future and, if nothing changes, the U.S. industrial sector will be left behind."

Andrew J. Hoffman, the Holcim (US) Professor of Sustainable Enterprise, speaking in support of California's decision to reduce emissions of carbon dioxide to 1990 levels by 2025.
—*San Francisco Chronicle*, October 15, 2006

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"For the mainstream, it's an added benefit. But the primary objective is to find clothes they like. The stuff has to be something they want to buy anyway. There are people who are very price-insensitive and are willing to search for these things. Everybody else is looking out for themselves first, and if they can help somebody along the way, they are happy to do so."

Christie Nordhielm, associate professor of marketing, talking about fair-trade fashion aimed at middle-market consumers.
—*Chicago Tribune*, October 6, 2006

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"There's no question that some people are obsessed with writing plans that are too wrought with detail. Early on, all you really need is a compass."

Thomas Kinnear, the Eugene Applebaum Professor of Entrepreneurial Studies and executive director of the Samuel Zell & Robert H. Lurie Institute for Entrepreneurial Studies, commenting on the value to start-up firms of preparing business plans filled with financial projections, market research and day-to-day organizational details.
—*The Wall Street Journal*, January 9, 2007

Full-Court Press in China

GERALD ERASME, MBA '92


HEATHER THORNE

Gerald Erasme, like some 300 million others in China, loves to shoot hoops. He also has more than a passing interest in the sport's business side. As Nike's marketing director for basketball in China, Erasme is responsible for all of Nike's basketball business.

"Basketball is the No. 1 participation sport in China, and we are the industry leader," says Erasme, who moved to Shanghai in April. Its swoosh logo helps make Nike one of China's most recognizable brands.

"We're doing a good job as far as people understanding the value of our brand. I don't think we're quite at the same level as in the United States or Europe because the Chinese haven't had as much exposure."

Because of the steep learning curve in his new post, Erasme often works 12-hour days. Still, he finds time to lace up a pair of Nikes to play point guard in a weekly game in an intramural league.

"There have been times when I've asked myself 'Why did I take this job?' Then I look at the timing. The Olympics are one year away. China will be the next global superpower at some point. I am a black man working for a great brand and making history. That's why I am here."

China's 1.3 billion people and growing economy make it Nike's top growth opportunity globally, he explains. "I look at basketball from the full 360 degrees, the entire marketing mix." Nike will sponsor 22 of China's 24 sports federations, including basketball, in the Olympics in Beijing.

Before earning his MBA, Erasme worked in banking for Dreyfus. When he was looking for a graduate program, one of the attractions of the Ross School was its proximity to Detroit and family. "I also had the opportunity to meet Professor Al Edwards. That sold me. Michigan is such a great program academically, socially and in sports. Everything is at the highest level. It made the best sense. I never regretted it."

Erasme maintains his ties with the Ross School, serving on the Alumni Society Board of Governors, contributing financially, supporting alumni activities in Shanghai and recruiting future students.

"I volunteer when I can and was incredibly flattered to be asked to join the alumni board. I get tons of e-mails and phone calls from students who are applying to the Ross School and from alumni."

Before joining Nike 14 years ago, Erasme worked as a production assistant with NBC Sports at the Olympics in Barcelona. When the 1992 Olympics ended, he worked at the Metropolitan Athletics Congress, the New York metropolitan area's association of USA Track & Field, where he helped organize more than 70 track and field meets. "I pursued Nike the entire time," he recalls.

Shortly after joining Nike as an assistant brand manager, Erasme was promoted to regional brand manager, a move that took him from New York City to Portland, Oregon, where he became director of sports marketing for Latin America and Canada. He returned to New York and worked at various positions within brand marketing before his latest promotion.

"I'm constantly surprised at how quickly China's economy is expanding," Erasme says, "making it possible for more Chinese to purchase consumer goods such as Nike athletic shoes."

Also, China is experiencing the one-child generation. "These only children, sometimes called 'little emperors,' have a lot of buying power. Their parents and two sets of grandparents wait on them hand and foot," says Erasme, and will pay $120 to $150 (U.S.) for athletic shoes.

Although Canadian missionaries brought the game of basketball to the Chinese in the late 1800s, it didn't take off until basketball superstar Yao Ming, the 7-foot-6-inch center who dominated the Chinese Basketball Association in the late 1990s, joined the National Basketball Association.

Because the U.S. game represents basketball's pinnacle, the Chinese watch and mimic what is happening in the United States, Erasme notes. "You can't take a cookie-cutter approach to marketing. We really understand the category very well and are able to bring enough of the basketball element and tweak it to make it appropriate for China."

The Chinese are passionate about basketball, explains Erasme, because the game allows participants, especially teenagers, the freedom to create.

"In China, much like in the United States," says Erasme, "how well you do in high school determines the rest of your life, what college you get into and your career path. Parents place a high premium on schoolwork, so the kids are stressed. Basketball allows them to get out and express themselves."

For the first several months after he arrived in Shanghai, Erasme says, "my head was spinning, trying to adjust to the nuances and culture. I'm from New York so I'm used to some aggressiveness, but here it's at a whole different level. They're more aggressive, I think, because so many people are vying for limited space and commodities.

"China has its own pace, especially in Shanghai. There's communism and then there's capitalism. They're tying to learn to live with one another. It can be fascinating and frustrating to watch. All I learned about business had to be turned on its head. You have to make up a lot as you go along."

Mary Jo Frank

ALUMNI AT LARGE

The Dealmaker's World

LEE MEDDIN, MBA '93

How much can one person do to boost the economy of the developing world? As deputy treasurer and global head of Structured Finance for the International Finance Corporation (IFC), Lee Meddin leads a team that has engineered more than 70 transactions in more than 20 developing countries. In 2006, *Treasury and Risk Management* magazine again named him one of the "100 most influential people in finance" under the heading "Artists of the Deal."

Since joining the IFC, the private-sector arm of the World Bank Group, in 2000, Meddin has pioneered the business of providing partial credit guarantees on structured assets in emerging markets. He has mobilized more than $6 billion (U.S. dollar equivalent), primarily in local currency, for his clients.

One category of assets the IFC has securitized successfully is residential mortgages. "Home ownership is a key toward building wealth in a country. But a bank can only provide so many mortgages," he points out. "And banks have better functions, such as originating and servicing, rather than continuously warehousing mortgages."

Home loans are small individually but substantial when pooled as a group of several thousand. Meddin and his team have helped banks in countries like Colombia, South Africa and Russia sell these pools, structuring the deals so that the bank and the IFC absorb the first percentage of losses. This lowers the risk to investors, whose cash enables the bank to extend more mortgages.

He also has raised money for health and education. "Universities in developing countries have difficulty securing loans since their only collateral is land and buildings," he observes. "Obviously, no investor wants to repossess a library in the middle of campus.

"So for the Universidad Diego Portales in Chile, we identified a different class of assets: the students." Based on the certainty of future enrollment, Meddin's group set up a trust to capture tuition fees over the next eight years. The IFC partially guaranteed the $23 million bond issued by the trust and backed by the future flow of student tuition payments. This improved the bond's credit rating, thus making it more attractive to local institutional investors. The university used the funding to build a medical school and modernize the campus.

"We have duplicated this structure with a $15 million bond at the Universidad de San Martin de Porres in Peru," he adds, "and there is no reason it can't be adopted in the United States."

Meddin also worked with Financiera Compartamos in Mexico, a leading provider of micro loans to groups of women in rural areas. IFC provided a 34 percent guarantee on a 500 million peso ($43 million equivalent) bond issue, enabling Compartamos to achieve an investment-grade rating and thus access domestic investors for attractive five-year financing in local currency.

After graduating from Tulane University in 1989, he developed a system for Shell Oil to detect leaks in its offshore oil production in southern Alaska. "This was just after the 1989 *Exxon Valdez* oil spill," he notes, "when all oil companies were becoming much more environmentally conscious."

When he decided to pursue an MBA, he chose Michigan because it was highly ranked and looked "collegial rather than cutthroat. I liked that it emphasized practical aspects and group work." He followed the U-M basketball team to the Final Four and the football team to the Rose Bowl, and calls his time at the business school "two of the most fun years I've ever had." That's no small tribute, given a career that has taken him to more than 80 countries throughout Europe, Asia, Africa and South America.

Meddin was the first associate at First Chicago (now JP Morgan Chase) to be placed internationally after completing training. He specialized in exotic derivatives in London and then joined ABN AMRO as head of Structuring–Asia, based in Singapore. In 1999, he assumed global responsibilities for credit-enhanced products in London.

He had decided to return to the United States when the World Bank offered a

EILEEN COLTON

unique opportunity — to build a new investment banking capability in emerging markets. He agreed to spend a year or two before returning to traditional investment banking. Each year the choice feels more rewarding.

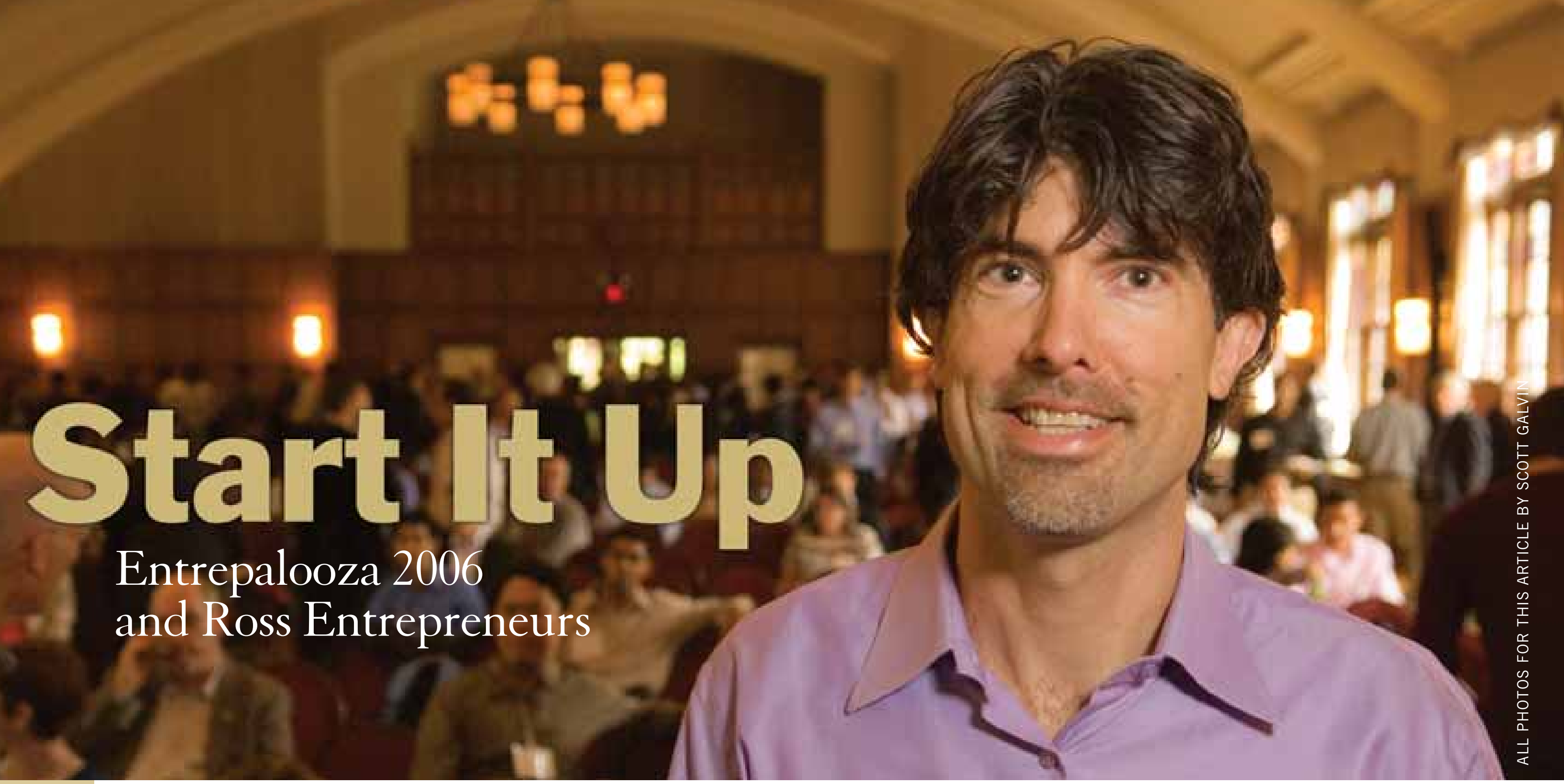
Now married, Meddin spends his lunchtime reading to his son, Samuel, at the World Bank's child-care center. He and his Venezuelan-born wife Erika are raising their son to be bilingual. Learning Spanish also has been useful, Meddin notes, because a large portion of the IFC's current investment projects are in Latin America.

"One of the things I like most is that we typically would not be in a transaction unless it's innovative in some way," he concludes. "We always have to come up with new ways of doing things. This is one of the few careers I can imagine in which the learning curve is still as steep as when I started." M

Pat Materka

Start It Up

Entrepalooza 2006 and Ross Entrepreneurs



ALL PHOTOS FOR THIS ARTICLE BY SCOTT GALVIN

Jim Buckmaster, CEO of craigslist, at Entrepalooza 2006

Entrepreneurs can come from almost any circumstance. Just ask **John C. Kennedy**, MBA '05, the Ross School's Entrepreneur of the Year, who likes to assure would-be entrepreneurs that they too can realize their dreams.

Kennedy, president and CEO of Autocam Corp., started in public accounting, a field not exactly known for an entrepreneurial bent. "I was more entrepreneurial than the job allowed," he told the more than 300 Ross School students, entrepreneurs and venture capitalists who attended Entrepalooza 2006: Dream Big! sponsored by the Ross School, Samuel Zell & Robert H. Lurie Institute and Entrepreneur & Venture Club in September at the Michigan League.

John C. Kennedy

Entrepalooza showcases success stories and role models — people like Kennedy, craigslist CEO Jim Buckmaster and entrepreneurs working inside big corporations, as well as Ross students who have launched their own start-ups.

At age 23, Kennedy made the leap from public accounting to CFO of an automotive machine shop. Six years later he purchased the assets of Autocam in a leveraged buyout for $13 million. Today, Autocam is a worldwide manufacturer of precision machine components for the automotive and medical instruments industries, employs 3,000 people and earns $350 million in revenues annually. The firm has been ranked by *Forbes* magazine as one of the best small public companies nationwide.

In his keynote, Kennedy recounted Autocam's ups and bumps since he purchased its assets from Autodie in 1988. In the late 1990s, at the urging of customers, Autocam expanded its footprint globally by purchasing competitors in Brazil and France. Today, less than 50 percent of the firm's sales and manufacturing are in North America. An expansion into medical instruments in 2005 grew out of an Executive Multidisciplinary Action Project that Kennedy worked on with classmates in the school's Executive MBA program for senior executives.

"We do a market study of every market we're in — fuel systems, power steering, airbags, medical instruments. We're looking at the business very entrepreneurially, always asking 'what can we do next?' We target product segments likely to grow faster than the overall markets." Currently, Autocam is working on a gasoline direct-injection system, a hybrid that promises 25 percent better fuel economy than existing systems.

Keep It Simple

The online community craigslist is an entrepreneurial enterprise of a different stripe. It allows people to post classifieds and serves as a place to find jobs, housing, goods and services, social activities, advice and community information.

With a small staff — only 22 people — who work out of a Victorian home in the Inner Sunset neighborhood of San Francisco, craigslist operates in 310 cities and

Panelists Eric Jacobson, left, and Josh Linkner answer questions following their presentations.

attracts four billion page views per month, making it the seventh largest among English-language Web sites. More than 15 million people use craigslist each month to find everything from jobs and life partners to furniture and cars.

When Craig Newmark founded craigslist in early 1995, "he wanted to give people a break," Jim Buckmaster told the audience. The firm, incorporated as a for-profit in 1999, supports its operations by charging businesses below-market rates for help-wanted ads in cities such as San Francisco, New York and Los Angeles and for broker apartment listings in New York.

"Craig still has zero interest in a business that makes a lot of money. We try to keep our business very simple by keeping costs low, following up on users' requests and molding the company based on what users are asking for," explained Buckmaster, who joined the firm as lead programmer in 1999 — a job he found on craigslist — and has served as CEO since 2000.

"During the dot-com era, people made fun of us, but 99 percent of them are out of business. We're doing well as a business, so there is no reason to push monetization to the max."

The site's goal for the next 10 years is to keep it simple and mold the company based on what people say they want. "We don't think in terms of competition. We're just trying to make the site useful to the end-user. We'll focus on meeting user requests. We can't think of a better way. If someone is able to do a better job, that's great."

Buckmaster's advice for others who want to launch an Internet business: "Start small, keep costs low and put a prototype in front of users so you get feedback. Avoid spending money on advertising until you know that you have a site that will appeal to people."

Founding and Growing Start-ups

Keeping costs low, organic growth and meeting customers' needs — craigslist's business model — is sound, according to a panel of experts who discussed the ins and outs of "Founding and Growing Start-Ups."

Eric Jacobson, CFO of the software company Janeeva Inc., suggested that entrepreneurs not waste money on an expensive written business plan. "Most VCs won't read it. They prefer PowerPoint rather than verbose narratives." Good uses of cash, he said, include product development, an executive summary and a high-end PowerPoint presentation and Web site.

Jacobson, who specializes in helping small companies raise money and grow, also advised would-be entrepreneurs to assemble a strong team, know their cost structure and have a sustainable advantage, which will serve as a barrier to keep other businesses out of their niches.

When it's time to raise money, Jacobson advised, go out with a full-court press. The longer an entrepreneur takes to raise money, the more likely venture capitalists will think others have passed on the opportunity and they should too. "Don't get left at the altar. Market with confidence. Push forward quickly and close the deal," he concluded.

A second panelist, Howard Cash, president and CEO of the bioinformatics firm Gene Codes Corp., said, "Big companies take advantage of economies of scale. Small companies make money on innovation and by being agile." Cash, who designed and developed the program used in academic and commercial DNA sequencing labs, described how his firm used guerilla marketing — distributing Gene Codes-branded T-shirts and conference organizers/planners at an academic conference — to successfully diminish the impact of a larger competitor's product launch that coincided with the meeting.

Gene Codes, with 50 employees, has intentionally stayed small, Cash said. "I know every one of them." He also advised business owners "to be slow to hire and fast to fire," noting it is a mistake to retain a person who is not working out.

"Entrepreneurship will take a toll on your personal relationships," Cash predicted. "This can suck up a huge amount of time, and it's hard not to blame the company."

The third panelist, Josh Linkner, founder and CEO of ePrize, talked about the importance of culture for an entrepreneurial organization. "You have to overcome the gravitational pull to do what's already been done," said Linkner, whose firm produces interactive promotions for clients like Coca-Cola, American Express, The Gap, Procter & Gamble, Dell, Adidas and Home Depot.

"Culture is the single big advantage a company can have," Linkner said. "It's the difference between winning and losing. Employees are your best asset. Why not market to them?" ePrize hires based on cultural attributes like humility, creativity, passion and the ability to get things done rather than on skills alone. "We're looking for people with the right essence."

Left to right, Nick Takessian, MBA '07, moderator, and panelists Howard Cash, Eric Jacobson and Josh Linkner.

No one at ePrize punches a clock. The staff stays motivated through a weekly production huddle where people share successes and challenges. Staff members also pit themselves against an imaginary competitor called the Slither Corp., which never has a down quarter. "It's a great tool to encourage free thinking," said Linkner, who converted an old brewery into ePrize's main office in Pleasant Ridge, Michigan. The building has a 2,000-square-foot rooftop deck where employees can work on their laptops and get a tan. "We create a nontraditional work environment because we want nontraditional work."

Robert Mazur, right, shares his story about starting a business.

Merrill Guerra, MBA ’07, said she attended Entrepalooza because “I want to start my own business. I came to get tips and to meet some potential team members.” Guerra, president of the Ross School Evening MBA Association, dreams of opening an online retail clothing business for plus-size children, an underserved market. A summer internship with Spirit Shop, an online retailer of customer-designed T-shirts, led to a part-time job with the growing firm. “The internship changed my whole view,” she said, and convinced her she too could launch a business. Guerra’s boss, Spirit Shop CEO **Todd Sullivan**, MBA ’05, was one of a half dozen Ross students and recent grads who spoke at Entrepalooza about how to launch a business while earning a degree.

Mekhala Vasthare

Intrapreneurship: Working on the Inside

What about those folks with a yen to be entrepreneurial who don’t own their own business? Established firms need entrepreneurs to drive innovation within the corporate setting, according to panelists from 3M, IBM, Google and Ultrasound Tomography, a subsidiary of the Karmanos Cancer Center at Wayne State University, who discussed corporate intrapreneurship.

Mekhala Vasthare, MBA ’02, senior product marketing manager at Google, said, “Google is a market-driving company, and the focus is on coming up with compelling new product ideas that surpass user expectations and notions of what the product should do. So we have opportunities for people from all functional areas to propose new product ideas and to make a case for them.”

Google employees submit ideas for new products and business models to the firm’s Idea Factory for evaluation. “It makes every employee think and act like an entrepreneur,” Vasthare said. “We’re talking about the wisdom of crowds, of harnessing their collective intelligence. We have people proposing ideas and soliciting feedback almost all the time.”

One of the luxuries of working for an online company is the ability to receive and act on customer responses in real time, she acknowledged, which “plays a big role in helping us refine products and act on feedback.”

The former computer science engineer added, “Entrepreneurs identify with Google because we have the autonomy to make decisions — be it proposing new product ideas or new go-to-market plans. There is a lot of emphasis on fresh thinking and debating new ideas. You can be very entrepreneurial when the organization provides the right framework, and Google does that.”

Panelist Ann Strosaker, manager of IBM Extreme Blue, said IBM has not forgotten what happened in the early 1990s, when the firm was struggling. Extreme Blue, an incubator that evaluates new product ideas percolating from all levels of the organization, helps IBM tap into the lifeline provided by innovation. Teams of business and technical students work for 12 weeks on an idea, scoping out the possibilities. More than 50 projects have gone to product.

“My job is to create innovations that matter and push IBM forward.” Sometimes, Strosaker explained, this means

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Google employees submit ideas for new products and business models to the firm’s Idea Factory for evaluation.

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finding customers who are willing to take a risk and be co-entrepreneurs to take changes to market.

Another panelist, Earl Holsapple, CEO of Ultrasound Tomography Corp., is working with 75 scientists and technicians to improve breast cancer detection. Entrepreneurship, he said, is the catalyst that brings together clinicians, businesspeople and organizations to work on what he hopes will be a breakthrough technology.

“We’ve used a multidisciplinary approach to develop this product. All that matters is

Left, Frank Loftus, general manager of the 3M Automotive Market Center, answers questions.

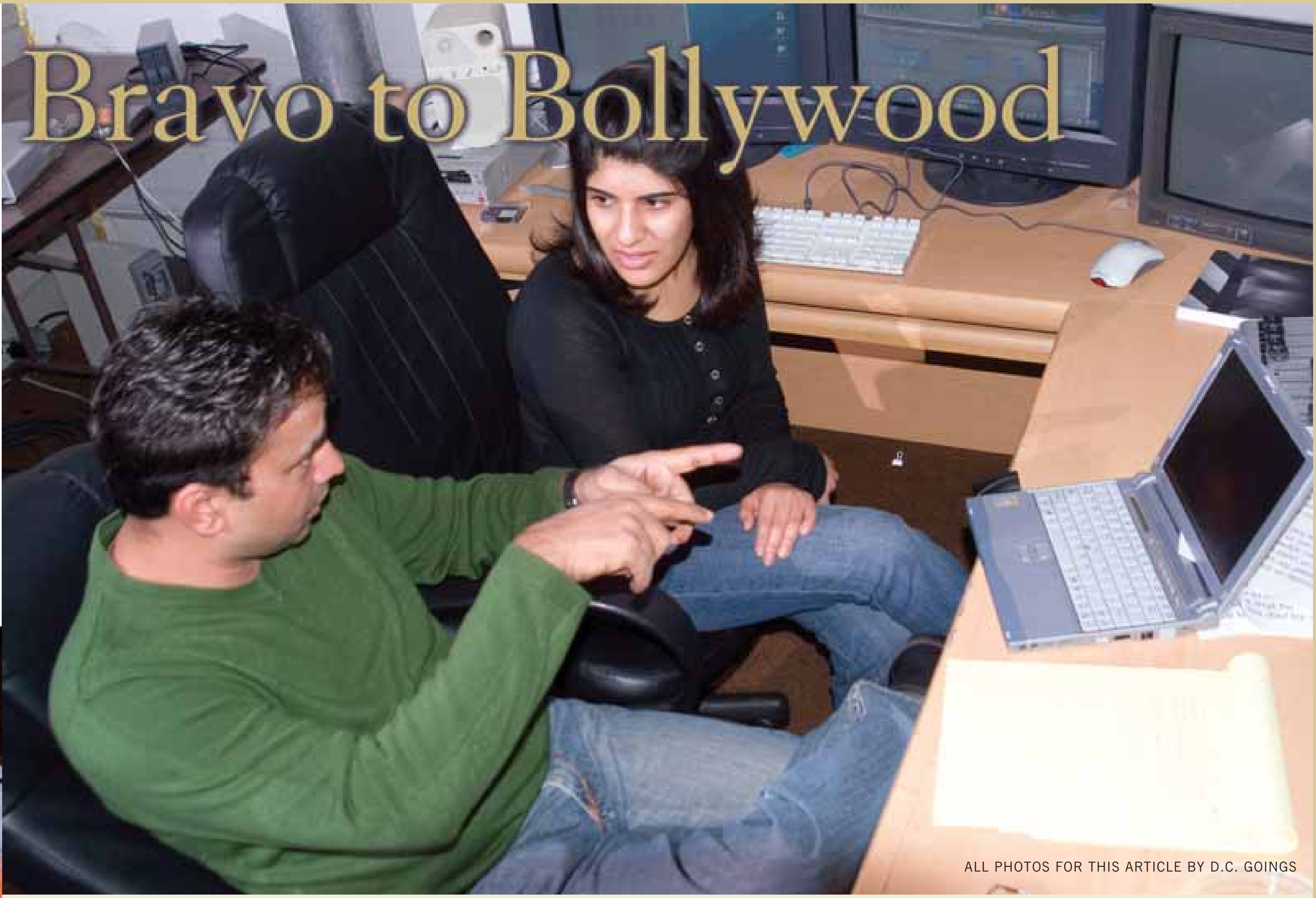
if it is useful.” If successful, it would destroy the current infrastructure for breast cancer detection, in which many institutions and people are invested, he acknowledged.

Entrepreneurs looking for riches won’t find it in corporate America, according to the panelists.

“The big money is one in a thousand,” said IBM’s Strosaker. “If you’re trying to be a billionaire, it won’t be in the corporate environment.” IBM does reward those who go beyond their comfort zone and create value. Strosaker said one of the things she likes about her job is the ability to work on something different every three months without changing companies. “You have to know what drives you. I believe I’m making a difference.”

Mary Jo Frank

Bravo to Bollywood



ALL PHOTOS FOR THIS ARTICLE BY D.C. GOINGS

Sunil Thakur, left, and Ruchi Rikhi confer on a business development plan.

Sunil Thakur, MBA ’04, never attended a corporate presentation during the two years he was enrolled at the Ross School.

“It saved a lot of time,” said Thakur, who instead founded a media business devoted to Bollywood, Indian, music and other South Asian cultural products. Bollywood is the term that describes the Hindi film industry in Mumbai, formerly Bombay.

“A growing number of people, including non-Indians and non-Asians, are discovering Bollywood films. It almost has become a fashion statement in the Western world. Our users range from fans who are on top of all the gossip and news to people who have a casual interest in Indian cultural products,” said Thakur, CEO of WahIndia, Inc., which he launched as a first-year MBA student.

“I wanted to create my own brand. I used to own a business that sold disposable medical and dental supplies like gloves and face masks but realized there was no value added. I was competing on price alone.”

Starting small, Thakur bought air time from Comcast and Bright House Network of Livonia (formerly Time Warner) and broadcast a weekly one-hour program about Bollywood that could be viewed throughout southeast Michigan. “I didn’t really have the media or television background, so it was a lot of learning.” His student apartment doubled on weekends as a studio for taping sessions, and he tapped the U-M student community to find talent. His team includes **Shan Sadiq**, a senior at U-M Dearborn, who manages technology; **Atasi Satpathy** and **Parmiss Nassiri**, both juniors, who serve as anchors; and **Ruchi Rikhi**, BBA ’07, who helps with business development.

“With rapid technology changes in the media business, the way content is distributed and people connect with each other is undergoing revolution,” Thakur explained. “Every time there is a disruption in technology, there is an opportunity for a young company like ours to build market share.”

WahIndia, translated Bravo India!, attracts 100,000 unique visits per month from 110 different countries, with India, the United States and the United Kingdom being its top markets. About 40 percent of the visitors register; almost 75 percent of those who register are under age 35,

WahIndia attracts 100,000 unique visits per month from 110 countries.

Members of the WahIndia team in Ann Arbor are, left to right, Sunil Thakur, Parmiss Nassiri, Atasi Satpathy, Shan Sadiq and Ruchi Rikhi. The firm also has an office in Mumbai.

and the majority are under 25.

In the United States, young people have PCs or laptops at home or at school and are always connected through high-speed Internet. In India, a majority of people go to an Internet café or, if they work for a large firm, access the Internet through a company computer; broadband is still in its early days. Men make up 75 percent of WahIndia's audience in India. The U.S. audience is split more evenly between men and women. "We see India as the largest market in the long run while the United States continues to be a very lucrative market," said Thakur. "So we think hard how to balance content to satisfy users in each market."

The Internet is crowded with sites offering Bollywood content, including large mainstream players like YouTube, MovieLink and Apple iTunes. "Our challenge is to create a strong brand, especially around Indian films and entertainment, so people will come to us first," said Thakur.

Part of Thakur's business model is to make WahIndia a community gathering space similar to MySpace or Facebook. "We're at a critical stage. We produce content for the Web and syndicate it through partners, large companies like Sify and other Web sites, but this is still a one-way street. We're working at integrating a social network into the site. We want people to become part of the community and share their content through our platform so it will become a two-way street."

The goal is to create a space for artists to market their talents such as acting or dancing and for people who are looking for such talent. "If this works, it will make WahIndia much stronger in terms of a community with common values," Thakur predicted. "In the long run, it will give us a huge competitive advantage." To build and grow the business, he has raised money from angel investors and is seeking growth capital from venture capitalists and strategic investors.

In addition to Thakur, WahIndia has one full-time employee and four part-time staff at its modest office in southeast Ann Arbor. The firm's Mumbai office opened in October with three full-time and two part-time employees.

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"We're working at integrating a social network into the site. We want people to become part of the community...."

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Thakur, who was born and raised in a small town in Bihar, India, grew up in an entrepreneurial family. "My father is a farmer, teacher and businessman and has been a constant source of inspiration," said Thakur, who earned a BS degree in mechanical engineering at the Bihar Institute of Technology in 1992 and an MS degree in mechanical engineering from the University of Alabama in 1994. He worked as an engineer for Motorola and Pall Life Sciences before enrolling at the Ross School.

As a business student, he was active in the Entrepreneurship & Venture Capital Club, assisted with Professor David Brophy's Michigan Growth Capital Symposium and served as president of the Ross School's Student Government Association.

Among the best parts of a Ross School education, Thakur feels, are classes taught by alumni who also are entrepreneurs: **Keith Alessi's** "Entrepreneurial Turnaround Management," **Thomas Porter's** "Managing the Growth of New Ventures" and **J. Michael Davis'** "Entrepreneurship via Acquisition," as well as Gerald Meyers' "Business Leadership in Changing Times."

Thakur recalled people describing entrepreneurship as a hard path to follow. "You don't realize how hard it is until you do it on your own. It tests you on every front. Still, I've never had so much satisfaction, both on the intellectual side and growing my capabilities. I wouldn't trade it for anything."

Thakur is fortunate, he said, because his wife Saloni is supportive, gives him honest feedback and runs her own successful business. The U-M School of Dentistry graduate bought a dental practice in Fowlerville, south of Lansing, in 2006.

"It's important to balance your life overall," said Thakur. "You have to keep track of your family. You can't lose sight of the big picture."

These days Thakur's big picture is a double feature: Bollywood plus family time with his wife, their eight-year-old son and one-year-old daughter.

Left to right, anchors Parmiss Nassiri and Atasi Satpathy and, behind the camera, Ruchi Rikhi and Sunil Thakur create WahIndia content.

Looking for the PurrFect Gift?

Twenty students crowd around a circular table at the Michigan League, listening intently to **Robert Mazur**, MBA ’03, explain how he launched a business while enrolled as a student at the Stephen M. Ross School of Business.

Mazur, co-founder, president and CEO of B.A. Maze Inc., is what they want to be—an up-and-coming entrepreneur. The 35-year-old doesn’t sugarcoat the choices he has made. He has credit card debt and a line of credit on his house, converted two bedrooms into an office and drives an 11-year-old Ford Contour.

Still, the inventor of the PurrFect Opener® and the DogGone Opener™, designed to help consumers open medicine packaging and household products easily and safely, would do it again. Along with the MBA, says Mazur, have come opportunities, including speaking to and mentoring Ross School students. He returned most recently for Entrepalooza.

“I keep coming back because the Samuel Zell & Robert H. Lurie Institute for Entrepreneurial Studies helped me get started. I take every chance I can to give back.

“The experiences I’ve had and the people I’ve met along the way have been incredible sources of inspiration,” says Mazur, who cites guest hosting a segment on the QVC television shopping channel in January as something he never anticipated.

Mazur has demonstrated the openers that look like cats and dogs over a thousand times at 30 trade shows and expositions. “On QVC, a computer screen displays sales per minute, so if you say something during the demo that causes an uptick, the producers can tell immediately and suggest repeating that part of the demonstration.”

Each design element on the PurrFect Opener and the DogGone Opener has a purpose. The ears and tail pierce plastic, paper and foil seals. The tail reaches into narrow openings to remove cotton from bottles. On the back are templates for pushing single-dose, blister-packaged pills of varying sizes into the corresponding size pocket. A rubber pad on the back helps open childproof lids, and a magnet makes it easy to hang the openers on the refrigerator.

Mazur worked on a prototype of the PurrFect Opener, received $10,000 in the Zell-Lurie Institute’s Dare to Dream Grant Program and met business partner **Matthew Shankin**, MSW ’98, vice president of operations, all at the Ross School. Shankin and Mazur shared office space at the Ann Arbor IT Zone, a hub of creative activity for small IT firms. They sold their first PurrFect Opener at the Ann Arbor Art Fair in July 2002.

Mazur encourages students to leverage assets like U-M faculty expertise, business plan and pitch competitions, entrepreneurial events and opportunities to partner with students and scientists to launch businesses that commercialize U-M technologies or creative ideas. “Other resources I used while in school were the panel discussions and guest speakers. To hear other people’s successes and to meet them after the presentations was very valuable.”

He chose Michigan because the Ross School is a top program with a great history and strong alumni, and the program was an excellent fit. “I wanted to change direction. Business school was an opportunity to step back and look at other options.” As it turned out, many of the classes he took had an entrepreneurial slant, including a course on how to write a business plan, which provided the template for B.A. Maze.

The hardest part of starting B.A. Maze was the marketing, Mazur says, because it took so much time and attention to detail in getting the word out. “We had a limited budget. We had to do a lot—putting together a marketing slogan, packets, sales presentations and advertisements—ourselves.”

“Financing is a continuing thing for us,” says Mazur. “We have to prove our marketing is producing sales, and we’re constantly juggling all aspects of the business, whether it’s legal, sales, product development, marketing or human resources. We’re positioning ourselves for growth.”

B.A. Maze, located in Canton, Michigan, outsources some engineering and design to contract employees and consultants and works closely with a supplier in western Michigan that produces, warehouses and ships the openers. Mazur’s firm has customers in Puerto Rico, Panama, the Netherlands and Canada. Catalog companies and Meijer are B.A. Maze’s largest accounts.

The company launched a new product in November called MOLLI, an acronym for Medicine Opening Lid-Lifting Instrument, in both cat and dog versions. A slightly scaled-down version of the PurrFect Opener and DogGone Opener, MOLLI is designed for the promotional products industry. With reduced functionality, MOLLI features a large area for a company logo.

MORGAN ANDERSON

Robert Mazur researched the markets, distribution channels and ways to write a business plan and build a company while a Ross School student. His inventions, the PurrFect Opener® and the DogGone Opener,™ are designed to help consumers open medicine packaging and household products easily and safely.

In addition to protecting B.A. Maze’s intellectual property through utility and design patents and trademarks on names, Mazur says, “we’re striving to develop new products each year that will keep us a step ahead of the competition.”

Inspiration for the PurrFect Opener came from Mazur’s grandmother, who had arthritis and struggled to open medicine packaging. “I started noticing people using knives, scissors, teeth or just about any potentially dangerous tool to get to their medicine. While in school, I researched the markets, distribution channels and ways to successfully write a business plan and build a company.”

Although his grandmother passed away seven years ago, he says, “She is still with me in spirit.”

An Rx for Success

Medicine and Business

Manish Singhal, MBA '04, showed up for the wrong class on the wrong day at the wrong time. Even though Professor David Brophy's venture capital course wasn't what Singhal had signed up for, it turned out to be the right place.

"When I saw how finance and entrepreneurship could be merged and integrated with medicine, I knew I'd found my niche," says Singhal, MD and vice president of MedCI, a consulting company that helps pharmaceutical and biotech companies develop and license drugs internationally.

Manish Singhal, left, and Kyojin Park launched MedCI in February 2004. The consulting company helps pharmaceutical and biotech companies develop and license drugs internationally.

* * *

"Great things are created by people who do something different and are willing to take the risk."

* * *

MedCI, with headquarters in the San Francisco Bay area and offices in Seoul and Tokyo, evolved from an earlier business model developed by Singhal and his partner, **Kyojin Park**, MBA '04. The two met as first-year MBA students while working on a Multidisciplinary Action Project with Trinity Health Systems of Novi, Michigan, which operates a network of hospitals and healthcare services across the country.

Park, now MedCI's director of Asian operations, and Singhal launched MedCI in February 2004. "We provide strategic, marketing and development support," Singhal explains. "The mix is different, depending on the customer. For a U.S. company seeking to develop drugs, we might help with a market analysis and drug valuation in Japan or South Korea. We would identify the potential partners based on experience, structure the terms and negotiate the deal. For a Korean company, we would provide more support, including strategic guidance on the best way to develop the drug, find investors or put together a joint venture."

MedCI is in an early growth stage. "Our initial hurdle was developing our concept and business model, which we have proved works. Now we're focusing on growing the business," says Singhal. MedCI is looking for clients among small- and mid-cap pharma-biotech companies focused on commercializing their drug technology for their domestic market.

"With the capitalized drug development cost of a single successful drug surpassing $1.5 billion, alliances allow companies to utilize different disease patterns and market conditions between the East and West to expand therapeutic indications while effectively managing risk," he explains. Most of the drugs MedCI is working on are in clinical development and won't hit the market for two to three years.

When Singhal enrolled at the Ross School, his initial goal was to integrate medicine with business operations. After earning his MD from the University of Texas Health Science Center in 1998, he practiced internal medicine in Massachusetts at Baystate Medical Center in Springfield, Falmouth Hospital in Falmouth and Veterans Health Administration in Leeds. "I wanted to tackle medical errors in hospitals and chose Michigan because it is very good in public health as well as operations.

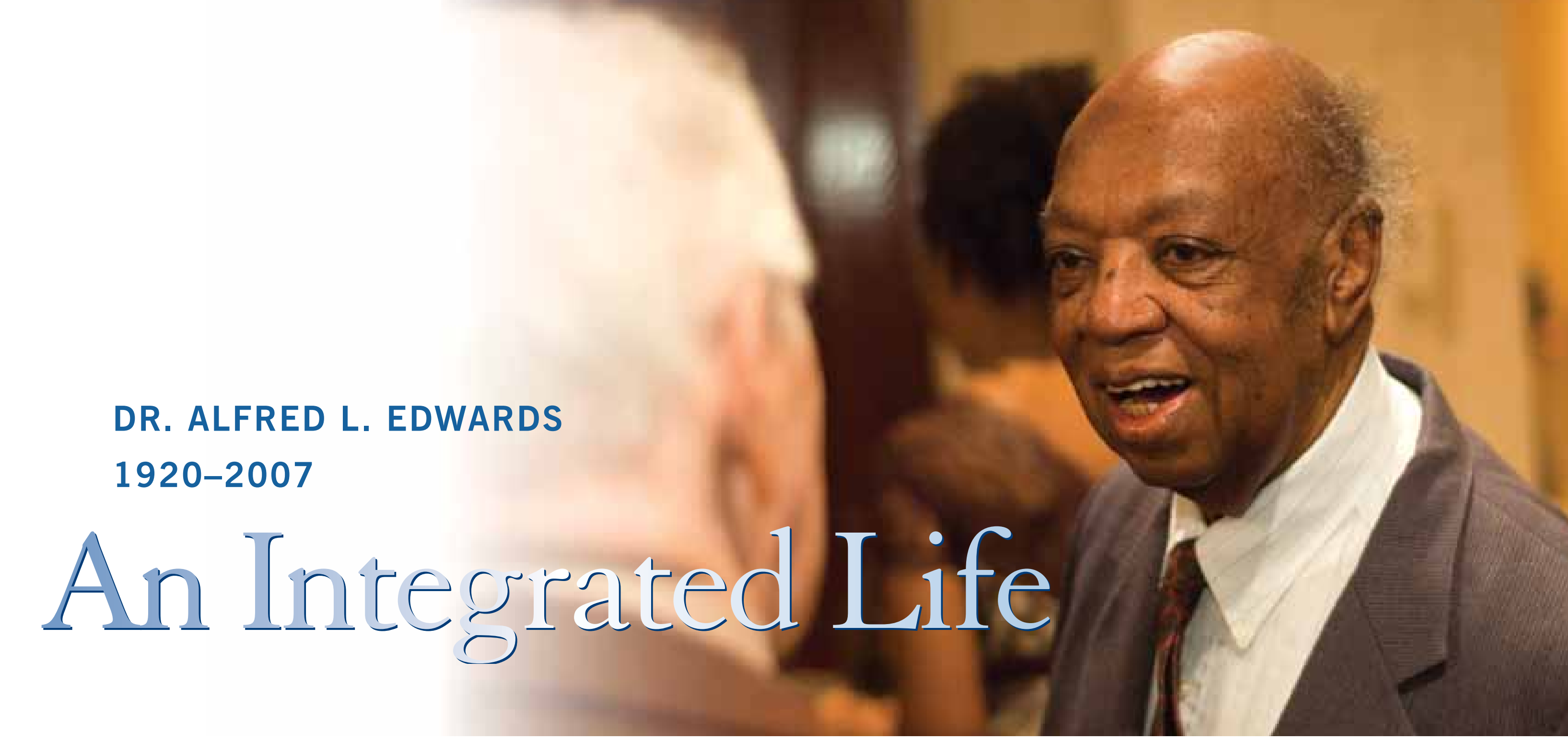
When he started taking business classes, Singhal says, "I was thrilled by operations, marketing and finance, but I couldn't see myself doing medicine or big consulting for the next 30 years."

Singhal's first entrepreneurial venture was an internship sponsored by the Samuel Zell & Robert H. Lurie Institute for Entrepreneurial Studies at Xoran Technologies in Ann Arbor, which manufactures and sells small CT scanners that can be used in doctors' offices. Singhal worked closely with Xoran's founder and CEO on a business plan for the miniaturized CT scanner. "It was a perfect fit," says Singhal. "I had a fabulous time. I was practicing both medicine and business in a small, fast-paced environment."

In addition to Brophy's class, he enrolled in entrepreneurial studies classes taught by **Keith Alessi**, MBA '79, and **Thomas Porter**, MBA '67, executive-in-residence at the Zell Lurie Institute, and networked with other Ross School entrepreneurs.

When asked by classmates about what it takes to start a business, Singhal says, "I tell them that great things are created by people who do something different and are willing to take the risk. You just have to get out there and do it. You'll never be totally ready with financing and everything in place."

Singhal has noticed that once a person starts a business, other opportunities follow. "People have ideas, and they want to bring you on board. Given the space we're in, I must be committed to MedCI 120 percent. I'm not in the position to take on those outside opportunities." These days, the internist also has less time to practice medicine.



DR. ALFRED L. EDWARDS
1920–2007

An Integrated Life

When Alfred L. Edwards, professor emeritus of business administration, died January 26 in his sleep at age 86, the Ross School and the University of Michigan lost one of its greatest teachers. Edwards was a driving force in recruiting and mentoring minority students at the business school for more than 30 years. He was instrumental in leading the Ross School's effort to join the Consortium for Graduate Study in Management, the alliance among business schools that works to bring African American, Hispanic American and Native American managerial talent into MBA programs. Last year, he was honored by the Black Business Students Association (BBSA), which named its annual conference after him, and by the Black Business Alumni Association, which awarded its first scholarship in his name in 2006.

Dr. Edwards lived a consummately integrated life. He modeled integrity of character by being a man whose actions were in harmony with his words. As a catalyst for integrating the business school, he exhorted African American students to participate fully in the life of the community. And he was integral to the growth of the business school, reaching out to colleagues and students, making himself indispensable through both formal and informal channels.

Edwards liked to quip that he "integrated the faculty" when he was hired as a professor of business economics in 1974. During a recent interview, he described how his colleagues welcomed his arrival at a time when there were very few African American professors at American business schools. "I got a rousing standing applause at the faculty dinner. I was very pleased with that," he recalled fondly. "They actually acted as if they were glad to see me." Now, more than 32 years after he joined the business school faculty, the world is full of alumni, colleagues and others who are considerably more than glad to have known the man they came to know affectionately as Dr. E.

"One of the personal highlights of my time here," said Ross School Dean Robert J. Dolan, "was getting to know Dr. E and having the chance to understand the legacy he created here and in the business world generally through his students. Though we are all obviously saddened by his death, I am happy that I can count myself among the many 'students' who owe him a great deal of gratitude for the life lessons he taught."

From Key West to Washington

Alfred L. Edwards was born on August 9, 1920 as the only son of Eddie and Kathleen Edwards in Key West, Florida. After his parents divorced, he was raised by his grandparents at around the same time that Ernest Hemingway was living and writing on Key West. After he graduated from high school, Edwards worked in an aspirin factory in New York before enlisting in the Army, from which he was honorably discharged toward the end of WWII. Four years after he graduated from high school, and with the help of two friends who helped him find a job and lent him clothes, Edwards enrolled at Livingstone College, a historically Black college in Salisbury, North Carolina. "I'm forever indebted to those two guys for helping me along, introducing me to the college and letting me find my way through." It was at Livingstone that Edwards met Willie Mae Lewis in 1944, whom he married in 1949. At Livingstone, too, Edwards received the kind of encouragement from mentors that he would one day provide to so many. The dean of the theology school brought him to conferences and appointed him to leadership positions. ("I was one of the few students, he said, who understood his sermons.") An English professor encouraged him to start the campus newspaper, of which he became editor-in-chief. In 1948, Edwards graduated magna cum laude. With characteristic modesty, he attributed the attention and support he received from his professors to his status as "a slightly older student who got along well with the faculty."

After earning his MA in economics from the University of Michigan in 1949, Edwards obtained his first academic appointment at Southern University, a historically Black college in Baton Rouge, Louisiana. He later joined the faculty of Michigan State University as an assistant professor of economics and, in 1958, earned his PhD in economics from the University of Iowa. As a member of the Michigan State faculty, Edwards was assigned to a team of professors and administrators assembled to establish the University of Nigeria,

Dean Robert J. Dolan and Dr. Alfred L. Edwards

Nsukka. He joked that he was omitted from the team originally selected for the assignment until "my good liberal friends told them that they could not send a team to Africa without sending at least one African American. And since I was the only one on staff, that meant me."

In Nigeria, Edwards focused primarily on designing a curriculum that would provide the needed foundations in the social and applied sciences. He placed special emphasis on agriculture economics, management and engineering. After he completed the assignment, he returned to East Lansing where he received a phone call from the White House inviting him to come to Washington and consider a position in government.

In 1963, President John F. Kennedy appointed Edwards to the position of deputy assistant secretary of agriculture. In this capacity, he developed policies to enhance rural economic development. He held this position for 10 years, served under Presidents Kennedy, Johnson and Nixon, and in 1969 received the Distinguished Service Award for the department. In 1974, with a warm recommendation from Professor Paul McCracken, who had been chairman of the President's Council of Economic Advisers in the Nixon administration, Edwards returned to Michigan to join the faculty of the business school.

* * *

Edwards received the kind of encouragement from mentors that he would one day provide to so many.

* * *

A Michigan Man

Edwards joined the business school as director of research and as a professor of economics, teaching a course on the development of minority enterprise that had previously been taught by Professor David Brophy. However, he soon found other ways to contribute. "Whenever a minority student had trouble of some kind, like academic trouble, they always called me and I would call the student and we would try to resolve it," he recalled. "It was [the faculty's] interest in the students that led them to talk to me, which I thought was a great thing." When the admissions staff lamented their inability to attract minority students, Edwards agreed to attend the next recruitment event. He noted that "as a result of my presence at the table, a lot more African American students came by and I was placed on the admissions committee where I was able to influence the number of African American students brought to campus. When I began there were only six African American students, but by the time I conclude this, I guess there will be a hundred or so."

Edwards attributed the success in attracting a diverse student body to two factors: the membership of the business school in the Consortium for Graduate Study in Management, which the business school joined in 1987, and the hiring of Judith Goodman as director of admissions. The Consortium provided access to a pool of qualified minority applicants, and the presence of Judith Goodman, as the school's first African American admissions director, made a statement about the school's commitment to diversity. As more and more minorities applied and were admitted to the business school, said Edwards, "we thought it was a great thing. The University thought it was a great thing. And we were proud to have that accomplishment. It engendered competition from all over the country." Edwards often identified three important benefits of attracting a diverse student body. First, the school achieved prominence in the rankings by assuming leadership in an important area. Second, Ross became more attractive to companies that valued diversity but did not previously recruit at Michigan (with the result that the entire student body enjoyed better employment opportunities). Third, peer schools began to emulate our activities and open their doors for more minority students.

Each year at the annual orientation program for the Consortium, he welcomed students by exhorting them to make the most of their experiences at Ross by becoming active members of the community and leaders of various student organizations. He spoke proudly of former students such as **Ralph Johnson**, MBA '92, currently director of professional development and administration at McKinsey & Company, and **Al Leandre**, MBA '02, currently president and CEO of Vyalex Management Solutions, who became presidents of the Student Government Association. "These were no slouches," he insisted. "These were really good students who took the lead in doing things for the school." He was especially pleased to know that "they had a great interest in making sure that their peers succeeded in the classroom." Edwards took great pride in those students who initiated tutoring sessions, group study sessions and other imaginative approaches to help their classmates succeed, viewing their active involvement as "the highlight of my work here."

During his tenure at Ross, Dr. Edwards served as director of the LEAD Program in Business, a member of the Board of Trustees for the Consortium for Graduate Study in Management and faculty adviser of the Black Business Students Association (BBSA). In addition, he served on the Western Michigan University Board of Trustees for 16 years, including four years as chairman; sat on the board of directors for Security Bank Corporation; and participated actively in the National Economic Association (NEA), including stints as president and secretary-treasurer. The NEA gives an Alfred Edwards Award for distinguished service to the organization.

Patrice Harduar and Dr. Edwards

The Lounge

Not long after Edwards arrived at Michigan, students began to congregate in his office to discuss family, work and school in an environment they viewed as safe and supportive. "His office would be packed," said Professor Gautam Kaul, the John C. and Sally S. Morley Professor of Finance. "It was funny because he would have people sitting there even when he was not in his office. It was like the lounge for people. That level of comfort has to show his uniqueness." Edwards himself recalled that "one of my faculty colleagues asked to be moved because there was so much laughter and talk coming from my office." Thomas C. Kinnear, the Eugene Applebaum Professor of Entrepreneurial Studies & Professor of Marketing and director of the Samuel Zell & Robert H. Lurie Institute for Entrepreneurial Studies, enjoyed his proximity to the "lounge." "I had the pleasure of having an office for a long time down the hall from him," said Kinnear. "I thought it was a rock concert half the time." In fact, many students had the sense that Dr. E knew more about their social lives than did many of their classmates. There are legends about couples (including my wife Lynn and me) who met in Dr. E's office and eventually married.

In her recent tribute published in the *Monroe Street Journal,* **Patrice Harduar**, MBA/MPP '07, described how her relationship with Dr. Edwards developed after she began to have doubts about her goals. She recalled that, "I found myself surrounded by incoming MBA students interested in pursuing more traditional career paths. I wanted an MBA to work with nonprofit organizations that addressed community development and poverty issues in urban environments.... I told him that I was not yet sure how it was all going to work out and that I was feeling that my goals might not be realistic. Perhaps I should be thinking about a career in consulting or finance instead? But Dr. Edwards' words calmed my fears and concerns. He simply told me that what I wanted to do was wonderful. He said that there are so many opportunities for me to make a difference and have an impact," she recalled. That was the first of many interactions with Dr. Edwards. "Initially, I stopped by to talk about potential opportunities that would fit within my career goals. Dr. Edwards was very open about providing ideas and connecting me with individuals who might have additional career advice for me. However, as time went on, I found myself stopping by his office just to say 'hi,' to take a break from the hectic MBA life and perhaps to hear an interesting life story or two."

Edwards dismissed the notion that he was responsible for solving so many problems. "The truth of the matter is that they solved their own problems. I simply listened," he insisted. "They talked it through and found a solution and I'd say 'that's right!' They just needed someone to talk to who understood and would listen and give them some advice from time to time."

Dr. Edwards was as proud of his students as they were grateful for his gentle, constant advice. He loved to celebrate the achievements of PhD students who had gone on to become deans at other institutions and of MBA students who had achieved success and prominence in corporate finance or consulting. And he always gave a shout to those who went into the nonprofit sector. "We have a significant number of our MBA graduates who have a mission to do something good for the world and they work in nonprofits at a lower salary, but they're doing a great job."

Left to right, Isadore and Linda King and Al Edwards (front row), Ralph Johnson and Saquent Robinson (back row), at the Ross School of Business 2006 Annual Scholarship Dinner for donors and recipients.

Before he died, Edwards had opportunities to see how much he has meant to the Ross School community. In 1994, he saw the establishment of the Alfred L. Edwards Collegiate Professorship. In March 2006, the BBSA renamed its annual conference in his honor. The Black Business Alumni Association recently raised $100,000 to endow the Alfred L. Edwards Scholarship. And, true to form, Dr. Edwards expressed his gratitude for the honor and attention, but showed reluctance to accept credit for his contributions to the school. "Whatever it is that I did," he asserted, "I did because I felt I was paying back. I remember how vividly my high school teacher showed me the way. My college professors and my graduate school professors all helped me along. So to talk to students for over 30 years was small pay for the great honor they led me to."

At the 2006 Dr. Martin Luther King Jr. Day lecture, Dean Dolan overheard a conversation between MLK speaker Michael Eric Dyson and Edwards: "Michael asked Dr. Edwards what he did at the business school," recalled Dolan. "And his response was, 'I taught economics.' The *last* thing I'm going to say is that he just taught economics."

David Wooten

In 2006, the Black Business Students Association named its annual conference after Dr. Edwards.

Climate Change Strategies Help Companies Stay Ahead of the Curve

A growing number of companies are learning that implementing sustainable business practices isn't just good for the environment. It also can be good for the bottom line, says Andrew J. Hoffman, associate director of the University of Michigan's Erb Institute for Global Sustainable Enterprise and author of the report *Getting Ahead of the Curve: Corporate Strategies That Address Climate Change.*

Hoffman's report, a "how-to" manual for companies interested in developing effective climate strategies, was released last fall and featured at the national conference, Corporate Strategies That Address Climate Change, sponsored by the Pew Center on Global Climate Change and the Erb Institute on November 10, 2006 in Ann Arbor.

"Companies with a history of climate-related activity are shifting their strategies from a focus on risk management and bottom-line protection to an emphasis on business opportunities and top-line enhancements," said Hoffman, the Holcim (US) Professor of Sustainable Enterprise at the Ross School and School of Natural Resources and Environment.

"Firms that incorporate climate change into their core business strategies will be in the best position to take advantage of emerging opportunities and gain competitive advantage in a changing market environment," Hoffman said. "Sustainable climate strategies cannot be an add-on to business as usual; they must be integrated with a company's core business activities."

Hoffman's report is based on a 31-company survey and six in-depth case studies of Alcoa, Duke Energy (formerly Cinergy), DuPont, The Shell Group, Swiss Re and Whirlpool Corp. It offers eight steps clustered into three stages that describe the various components of a climate-related strategy. Steps include measuring a company's greenhouse gas emissions, gauging how operations and sales may be affected by climate change, evaluating options for reducing emissions, setting targets to reduce emissions, developing financial mechanisms to support climate programs, getting employee buy-in, formulating a policy strategy and managing external relations.

U-M School of Natural Resources Dean Rosina Bierbaum, second from left, and Professor Tom Lyon, center, discuss climate change with attendees of the 2006 conference.

According to Hoffman, nearly all of the companies surveyed — mostly large, publicly held multinational corporations — believe that government regulation is imminent, and about 87 percent believe federal standards will take effect before 2015.

Hoffman's report presents "lessons learned" at each step of a climate-strategy development process. Taken together,

Left to right, the Erb Institute's Andrew Hoffman, Winston Hickox, Rosina Bierbaum and The Pew Center's Truman Semans.

Whirlpool Corporation's J.B. Hoyt, Kevin Leahy of Duke Energy and Swiss Re's Mark Way.

four overarching themes emerge: Ensure strategic timing, establish appropriate levels of commitment, influence policy development and create business opportunities.

Hoffman said the companies in the report identified three key drivers that "will hasten the transformation to a carbon-constrained world." These include the establishment of regulations, rising energy prices and growing interest within the investment community.

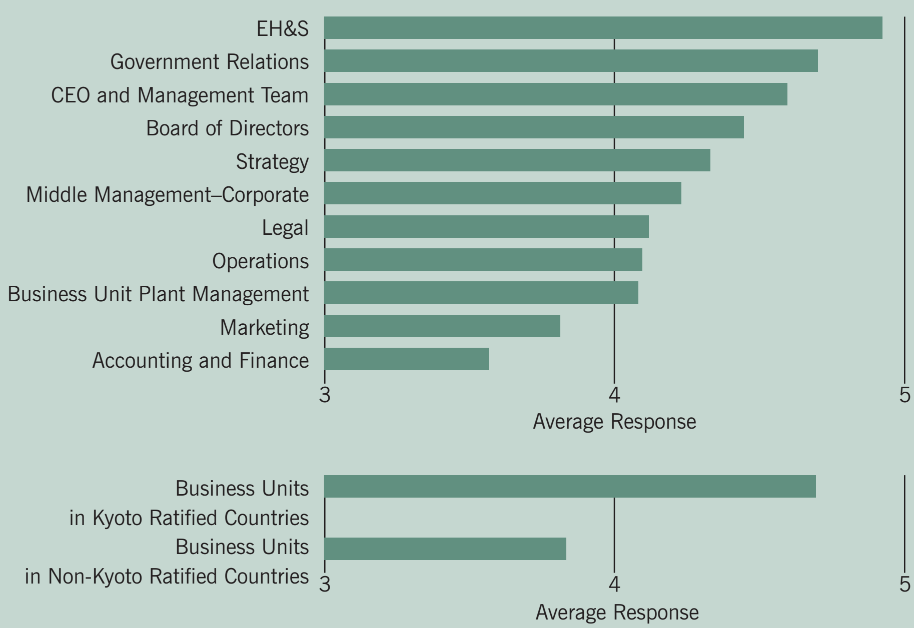
"The prospect of greenhouse gas controls is already altering existing markets and creating new ones, changing the business environment in ways that are real and yet still fluid," said Hoffman. "As in any market transition, there are risks and opportunities, and there will be winners and losers. All companies will be affected to varying degrees and all have a managerial and fiduciary obligation to at least assess their business exposure to decide whether climate-related action is prudent.

"The companies in this report believe a proactive approach is necessary to prepare for the coming market transformation and that doing nothing means missing myriad near-term financial opportunities and setting themselves up for long-term political, operational and financial challenges. The rules of the game are changing, and companies ignore these changes at their peril."

Representatives of the six firms featured in the report were among the conference participants, as were keynote speakers Winston Hickox, senior portfolio manager for the California Public Employees' Retirement System, who discussed "Motivating Climate-Related Strategies: A View from the Investment Community," and Bill Townsend, deputy CEO of Holcim (US) Inc., who talked about "Linking Climate and Business Strategy." The conference was designed to help companies consider the range of available options for developing a climate strategy and to help financial analysts identify benchmarks for industry best practices on the issue.

To see videos of conference presentations, visit http://www.erb.umich.edu/News-and-Events/Nov10webcast.htm.

ORGANIZATIONAL RESISTANCE AND BUY-IN FOR CLIMATE-RELATED STRATEGIES



What positions and/or departments within your company are significantly involved in the IMPLEMENTATION of your strategy, and what is their level of BUY-IN OR RESISTANCE toward your corporate climate-related strategy? (Rank their level of buy-in: 1=Resist; 3=Neutral; 5=Embrace, Leave blank if uninvolved.) Total Respondents: 26

Bean Counters, Not Tree Huggers

ANDREW J. HOFFMAN

Andrew J. Hoffman, the Holcim (US) Professor of Sustainable Enterprise at the University of Michigan, holds joint appointments at the Ross School and the School of Natural Resources and Environment. He also is associate director of the Frederick A. and Barbara M. Erb Institute for Global Sustainable Enterprise. Hoffman has published more than 50 articles and four books, including *From Heresy to Dogma,* winner of the 2001 Rachel Carson Prize from the Society for Social Studies of Science, and the Pew Center on Global Climate Change report *Getting Ahead of the Curve: Corporate Strategies That Address Climate Change,* which was released last October. In this *Dividend* viewpoint, Hoffman writes about how enterprising businesses and policymakers are responding to climate change.

Looking for proof that climate change is happening? Stop looking for receding glaciers, rising sea levels or increasing storm severity and start looking at the changing marketplace. Some business associations and lobbyists still dispute the science of climate change, but businesses, many of which remain agnostic about the science, are focusing on the undeniable economics of the problem. Companies are already incurring significant costs associated with climate change and have forecast much more. Accordingly, they are adopting strategies to address the issue.

First, companies are developing *adaptation* strategies to respond to the physical effects that climate change imposes on their operations. For example, Diavik Diamond Mines Inc. relies on ice bridges to move equipment and materials through the northern regions of Canada. Last winter, however, the ice never thickened enough to allow transport of the heaviest trucks. So Diavik absorbed the additional costs of shipping materials by helicopter. Continued warming will disproportionately affect other vulnerable sectors such as agriculture, fisheries, forestry, healthcare, insurance, real estate and tourism, as well as offshore energy infrastructure such as oil rigs and pipelines, prompting many in those sectors to explore their own adaptation strategies.

Second, we see the growing prevalence of *mitigation* strategies. To date, more than 60 corporations with net revenues of roughly $1.5 trillion have voluntarily set reduction targets for their greenhouse gas emissions. While there is certainly some public relations value in professing concern for the environment, voluntary reductions are based on the need to create and protect shareholder value. The intersection of fiduciary responsibility and climate risk is coming into focus, particularly around the "materiality" of greenhouse gas emissions under the Sarbanes-Oxley Act of 2002, which some believe creates new climate-related legal risks for companies and their directors. This possibility is not just hypothetical: Eight states and New York City have filed a lawsuit against five of the nation's largest power companies demanding that they cut carbon dioxide emissions. Some insurance companies are beginning to rethink their policies for directors and officers accordingly.

Finally, *competitive* strategies underlie all good management decisions. More and more companies are shifting their responses to climate change from a focus on risk management and bottom-line protection to an emphasis on new business opportunities and top-line enhancements. For some, this means plans to alter existing technologies and capitalize on emerging markets for existing products. For example, Alcoa has developed a new process technology that improves operations while reducing greenhouse gas emissions from the smelting process. Looking ahead, the company sees an opportunity in recycling because aluminum produced from recycled materials requires only five percent of the energy needed to make primary aluminum. That means a 20-fold reduction in greenhouse gas emissions and a reduction in operating costs. Additionally, as automakers face pressure to improve gas mileage, they are likely to buy more aluminum and less steel in an effort to lighten their vehicles.

For others, competitive climate strategies can involve an alteration of the core business model. DuPont has identified its most promising growth markets in new bio-based materials that employ renewable resources instead of traditional petrochemical feedstocks. This year, the company announced a partnership with BP to develop, produce and market a next generation of bio-fuels. The first product to market will be biobutanol, which is targeted for introduction in 2007 in the United Kingdom as a gasoline bio-component that offers better fuel economy than gasoline-ethanol blends and has a higher tolerance to water contamination than ethanol. In the next few decades, Dupont hopes that over 60 percent of its business will stem from the use of biology to reduce fossil fuels.

The most ambitious climate strategies involve efforts to develop clean, green technologies. In 2005, global investment in wind power and solar power reached $11.8 billion and $11.2 billion respectively, up 47 percent and 55 percent from 2004. Announcing a set-aside of $100 million for investments in cleaner energy, transportation and air and water technologies, venture capitalist John Doerr of Kleiner Perkins Caulfield & Byers said, "This field of greentech could be the largest economic opportunity of the 21st century." Wall Street stalwarts such as Goldman Sachs, Bank of America, JPMorgan Chase & Co. and Citigroup are seeing the opportunity as well, adopting guidelines for lending and asset management aimed at promoting clean-energy technologies. How large is the magnitude of the costs related to climate change? A recent report by Sir Nicholas Stern, former chief economist for the World Bank, states that mitigation costs could rise as much as 3.5 percent of GDP, but the economic benefits of early action to curb greenhouse gases would far outweigh the costs, eventually by as much as $2.5 trillion a year.

Corporate lobbyists and avowedly pro-business politicians love to talk about the invisible hand of the market, but the fact is that companies know they need rational regulation in order to develop and execute an effective mix of adaptation, mitigation and competitive strategies. Individual states are already acting. California's recent landmark legislation to require a 25 percent cut in industrial greenhouse gases by 2020 is only one of many state-level standards. Much like the events preceding the formation of the Environmental Protection Agency in 1970, a growing patchwork quilt of state and regional regulation is motivating many corporations to support a national climate policy.

Naturally, businesses want a seat at the table when that policy is defined. Policies, by their nature, entail choices that favor certain actions, companies and industries over others. But this much is certain: The debate about whether or not climate change is occurring is over. The market shift proves the climate shift. The bean counters are now moving faster than the tree huggers. They're just waiting for the federal government to catch up and help them write the new rules.

Alumni & Energy

At the White House

As a Presidential Management Fellow, **Richard Chandler**, MBA/MS '04, advises White House policy officials on U.S. energy policy, including the direction of the Department of Energy and other federal agencies that regulate energy.

"I am responsible for formulating the budget for programs dealing with energy as part of President Bush's annual budget submission to Congress. I review and clear legislative proposals and testimony for senior officials as well as perform policy, economic, program management and regulatory analyses."

Chandler also has worked with the U.S. House of Representatives' Committee on Science Energy Subcommittee and helped draft proposed legislation to promote renewable energy and energy efficiency.

Before joining the White House Office of Management and Budget, Chandler worked on energy and environmental issues for Green Mountain Energy Co., Booz Allen & Hamilton, Weyerhaeuser, Solar Electric Light Fund and the University of Michigan's Center for Sustainable Systems. Formerly an investment banker for Salomon Smith Barney in New York City, Chandler also has consulted with the World Bank on water and sanitation financing issues.

"My current position affords me the opportunity to shape energy policy and to gain executive skills needed to improve how organizations are managed. By meeting with technical experts, Congressional staffers, White House policy officials, leaders of nonprofits and corporate executives, I learn about new energy technologies and issues that impact the energy sector."

Chandler, who earned a BS degree in economics from the University of Pennsylvania's Wharton School, says, "The program at the Frederick A. and Barbara M. Erb Institute for Global Sustainable Enterprise helped me continue to build the technical, financial and analytical skills needed to evaluate various energy technologies. In addition, the multidisciplinary nature of the Erb program has given me a well-rounded perspective on problem solving."

Mary Jo Frank

EILEEN COLTON

Alumni & Energy

Developing Technology

TOM WEIS

Environmentalist **Matthew Johnson**, MBA/MS ’01, came to believe in the power of markets to bring about change while working in New York in the mid-1990s. “Global warming and other environmental issues were just beginning to come to the attention of the public, and I was looking for a way to make a positive impact on issues that I felt were important.” The Philadelphia native majored in environmental policy at the University of North Carolina, where he earned a bachelor’s degree, and worked a summer at the Environmental Protection Agency.

“I think that business is the best way to get things done quickly,” says Johnson, director of business development for Gaia Power Technologies, “and I believe that we will all benefit if the market can quickly drive adaptation of environmentally friendly and energy-efficient technologies.” In addition to identifying long-term markets for Gaia Power Technologies’ main product, a turnkey energy storage system called the PowerTower, Johnson’s responsibilities include strategy development, direct sales and management of government R&D contracts.

“The PowerTower is a plug and play system. In the past you would buy batteries from one source, power electronics from another and cables from yet another. We package it in one box so all the components can be dropped into a building in a single system,” explains Johnson.

Gaia Power Technologies, founded in 2002, helps businesses reduce energy bills by using stored energy instead of purchasing power during times of peak power consumption. A major coffee retail chain is testing the PowerTower in some of its New York City stores.

The PowerTower also is capable of replacing fossil-fuel burning generators. The PowerTower is cleaner than generators that burn diesel fuel or gasoline and helps utilities reduce carbon emissions, says Johnson. Utilities can use one or more PowerTowers to meet demand peaks instead of firing up their peaking power plants, usually older plants that often are dirtier and less efficient than modern plants. Individual consumers also can install a PowerTower, instead of a generator, as a clean backup power solution.

The firm also offers proprietary software that helps utilities increase the value of renewable energy. “An inherent weakness of solar and wind power is that you don’t know when they will be available,” Johnson says. “With a PowerTower unit on a house, the utility can store renewable energy in batteries and use our software to tap into stored renewable energy during peak use times.”

The PowerTower costs $10,000-$12,000 installed and has no fuel or maintenance costs, unlike generators, says Johnson, who also notes that a growing number of municipalities are placing restrictions on generators due to pollution concerns.

Though he had no ties to Michigan, Johnson chose the Ross School because of the Frederick A. and Barbara M. Erb Institute for Global Sustainable Enterprise. “At the time not many schools were combining environmental studies and business,” he says.

Prior to moving to Gaia Power Technologies, Johnson was assistant vice president for electricity and distributed generation at Sentech, a clean energy consultancy based in Washington, D.C.

“The Erb Institute and the Ross School gave me the confidence and skills to overcome any problem that is thrown at me, which is important today, especially working for a small company. When I sell a system, I might have to help install it and follow up with customer service, all things that at one time would have been out of my normal comfort sphere. Now I know I’ll be able to deal with it.”

In their spare time, Johnson and his wife **Megan DeYoung**, MBA/MS ’02, who also graduated from the Erb program and works as a senior associate on corporate responsibility issues for Pricewaterhouse-Coopers, like to explore New York City, where they live and work.

Remembering New York’s warm temperatures last winter, Johnson says, “I’m definitely concerned about global warming. Seventy degrees in January is odd. I don’t think our government has taken climate change very seriously. It is good to see that some businesses are.”

Mary Jo Frank

Alumni & Energy

At the EPA

A dual degree has paid off for **Carey Bylin**, MBA/MS '04, whose career combines her professional goal of using business skills to protect the environment along with her personal interests, a desire to travel and fluency in Spanish.

Bylin is program manager for the U.S. Environmental Protection Agency (EPA) Climate Change Division's Natural Gas STAR Program, a voluntary partnership between oil and gas companies and government to reduce methane emissions.

Methane is a greenhouse gas that contributes to global warming, second only to carbon dioxide. Methane is also the primary component of natural gas, making it a valuable clean energy source. While methane emissions come from a variety of sources, including landfills and livestock, the majority of anthropogenic (man-made) emissions result from oil and natural gas production, processing, transmission and distribution.

Bylin works with companies to show how participating in the Natural Gas STAR Program provides economic, social and environmental benefits for all partners. The program promotes best management practices and knowledge sharing about cost-effective technologies.

"The voluntary partnership suits their bottom line and creates a positive impact by reducing emissions," Bylin said. "It also addresses the mindset that business and environmental goals are mutually exclusive."

On the economic side, capturing natural gas emissions gives a company more product for market while the cost of natural gas is steadily rising. It also helps companies that have had to adapt to more stringent state emissions regulations in California and the Northeast.

The Natural Gas STAR program was founded in 1993 and now has 110 partners, representing more than 50 percent of the oil and gas industry. Current partners represent the production, processing, transmission and distribution sectors of the industry and include energy giants Exxon Mobil Corp. and BP.

The EPA is expanding its program internationally and in 2006 launched Natural Gas STAR International. As part of that effort, Bylin recently traveled to Colombia and Ecuador, where she met with private and state-owned companies and government agencies.

Bylin's concern for the environment began in earnest while working at the Boston Consulting Group, where she was part of a committee that promoted volunteerism among employees. At that point, she says, a lightbulb went off, and she realized that strategy and consulting skills could be leveraged to promote environmental conservation. Bylin decided to pursue a dual degree in business and environmental studies and chose the Ross School because the program is "more comprehensive than that of any other school."

She encourages students in the dual degree program to make the most out of summer internships and work with a variety of organizations, including corporations, government agencies and nonprofits. Through the Erb Institute, Bylin worked on a sustainability tool for farmers sponsored by Ben & Jerry's and an analysis for Dow Chemical of business opportunities from capturing and using methane emissions in India.

"The dual degree program at Ross is driving real change," she says. "You can see your work is having an effect on the environment and business."

Adrienne Losh

Harnessing the Wind

Mark Tholke, MBA/MS '03, has found a career doing something he loves: Promoting a product that is fundamentally and environmentally sustainable, wind power. A 100-megawatt wind farm can cleanly power 35,000 homes per year.

Tholke, a California native, spent hours outdoors as a child and later worked as a camp counselor. After graduating from the University of California, Santa Cruz, he worked as a research assistant and was asked to do research for his boss' presentation on climate change. Worried by what he had learned, Tholke's career path became clear.

His decision to study at the Ross School of Business was wholly driven by its dual degree program with the School of Natural Resources and Environment (SNRE). He says the Ross School provided him the core tools to operate in the business environment, and SNRE gave him an understanding of the role of policy and policy implementation.

"Much of renewable energy is based on policy," says Tholke. "Policy sets the rules and framework in determining what we do as a business. The role of policy cannot be underestimated."

As regional project development manager at enXco Inc., an affiliate of EDF Energies Nouvelles, Tholke oversees the various components of developing and building large-scale wind energy projects in California and the Southwest. Building a wind farm involves managing permits, conducting technical wind studies, transmission studies and negotiating with utility companies.

According to Tholke, the biggest challenge to renewable energy is that the market is a non-level playing field. The renewable energy industry relies on subsidies and inconsistent policies. He believes that fossil fuel industries should be responsible for carrying the full cost of liability insurance and waste cleanup. If these industries would pay their fair share, wind energy no longer would have to rely on subsidies.

In 10 years, Tholke predicts, wind energy will no longer be a novelty. Today, wind power is approximately two percent of the energy market; in 10 years, it may be approaching five percent to seven percent.

Since Tholke graduated, job opportunities with a large environmental component have been on the increase. "I'd bet my career this is not a fad," says Tholke. He advises students "who have a high risk tolerance to join a solar start-up. For those who do not, join a larger company and secure a role that focuses on renewable fuels."

Adrienne Losh

Alumni & Energy

Developing the Market

EILEEN COLTON

Achieving a clean energy future requires both new technologies and a sense of excitement, opportunity and conviction among individuals, asserts **Jennifer Layke**, MBA/MS '97, director of business engagement and deputy director for the World Resources Institute's (WRI) Climate and Energy Program, which has an annual budget of $2.5 million.

Layke, who focuses on energy policy, climate change and corporate strategy worldwide, founded WRI's Green Power Market Development Group, a partnership with 12 major U.S. businesses, including Alcoa, General Motors Corp. and DuPont (www.thegreenpowergroup.org). For over five years, the Green Power Group companies have led U.S. corporate purchasing of renewable energy with the largest private contracts for on-site solar power and support for grid-based wind power, according to the U.S. Environmental Protection Agency (EPA).

The world has been slow to acknowledge the need for alternative energy because conventional sources are cheap, she says. "We have aspirations around cheap energy. We've focused innovation elsewhere, on breakthroughs in electronics and consumer products. If we had that kind of entrepreneurship around energy, we would see dramatic changes.

"The marketing side is critical. U.S. consumers do have choices, including buying green electricity in a number of states. There is nothing to keep individuals from greening up their electrical consumption except becoming familiar with how to do it."

WRI's Green Power Market series includes guides to walk managers through different technologies. The U.S. government also runs a Green Power Network, which informs consumers about where they can purchase renewable certificates. And firms that believe energy reduction is both good strategy and good public relations are computing their greenhouse gas emissions and sharing the information through organizations such as the California Climate Action Registry, the Carbon Disclosure Project, the EPA's Climate Leaders Program and the Department of Energy 1605(b) registry.

Firms and investors also are buying and trading carbon credits through groups such as the Chicago Climate Exchange and other private sellers. Layke explains how carbon offsets works: "Let's say a school has an old boiler and a company like WRI wants to offset its emissions impact from travel, energy and paper use. We contract with a broker who finds enough investors to invest in a new energy-efficient boiler for the school. The school gets the energy savings and the investors can claim environmental improvement. Although we continue to use electricity and paper, we are lowering the impact of our operations."

Unfortunately, Layke says, the United States is no longer at the forefront of developing green technologies, largely because public policy doesn't offer sufficient incentive. "We haven't demonstrated the will to tackle energy issues. We have so much coal, plus we've focused on other areas of the economy."

Germany and Japan are in the vanguard, Japan for solar power and Germany for wind energy. Both have created conditions and built markets that make solar and wind energy profitable, she notes. With the lack of technological support for photovoltaic arrays, a technology that uses solar cells to convert the sun's energy into electricity, the United States has given much of its competitive advantage to other countries with more progressive energy policies.

But public perception and policymakers are changing, according to Layke. "We're at a tipping point. In the next several years, we'll define the vision of the energy infrastructure and emissions path we'll be on," she predicts. In fact, President Bush's 2007 State of the Union address signaled an interest in making biofuel technology one area for U.S. leadership.

Layke points to other encouraging signs, including increased interest among investors and large companies that have adopted renewable energy as part of their portfolios. "We have major investors moving into the energy space. G.E. purchased Enron Wind. Goldman Sachs recently took a stake in a wind development company." In response to rising natural gas prices, Austin Energy took out a contract for wind power at a fixed price and passed the savings on to customers, including FedEx Kinkos and IBM.

"Energy suppliers are putting together entire packages, and the prices are almost the same as conventional forms of energy although the marginal returns can vary." Citigroup, for example, asked a supplier to include some green sources in its energy mix.

The market is ripe for a variety of new contracts, structures and products, comments Layke. In many states, green pricing programs are more expensive because utilities limit themselves to local resources instead of looking broadly across the market. "It is not in the utility's interest to have green sources be a large portion of its market. Utilities are not interested in a mass market unless that market is willing to pay more for green energy."

Layke agrees with former Vice President Al Gore, who said the United States energy sector needs what distributed technology provided for household computers: the infrastructure to allow new technologies to be deployed. "We would see costs come down significantly with increased demand and modular designs," she predicts.

The next big challenge then would be to deploy the new energy technologies globally. "China is putting up coal-fueled plants at an alarming rate. Although the plants are raising China's standard of living, the health impact on the country is serious," notes Layke.

"If the United States doesn't deal with demands for electricity in China and India, we're not going to have a healthy and safe environment; air pollution travels and global warming gas pollution affects us all. The United States, which put most of the emissions into the air to date, must exert leadership going forward."

Business can provide the technologies, Layke says, but will only do so if there is a market signal that they are needed. "We look to business to provide the lowest-cost solutions. We look to government to support experiments and the initial diffusion of technology. We must change an aging energy sector and challenge the people in that sector to learn new skills and manage differently."

According to Layke, many utilities face new investment decisions right now and need to know what their risks will be if they invest in conventional coal technologies in the next few years. In January, WRI, 10 large corporations and three other leading environmental groups announced a framework for climate change policy in the United States that would help guide the private sector and the government to make investments in clean technology (see www.US-CAP.org).

Before earning master's degrees from the Ross School and the School of Natural Resources and the Environment through the Frederick A. and Barbara M. Erb Institute for Global Sustainable Enterprise, Layke received an AB degree in Asian studies and political science from Pitzer College in Claremont, California. She also worked as a consultant with the World Bank and the EPA on technology transfer under the Montreal Protocol.

Mary Jo Frank

Green Energy Glossary

Carbon Credits — Carbon credits, measured units of certified emission reductions (CERs), are certificates awarded to countries that successfully reduce the emissions that cause global warming. Each CER is equivalent to one metric ton of carbon dioxide reduction. Developed countries can cut down their level of emissions or borrow or buy carbon credits from developing countries. The idea of carbon credits grew out of the Kyoto Protocol.

Green Tags — Green tags, also known as Renewable Energy Credits or Tradable Renewable Certificates, represent the environmental benefits of generating electricity from renewable energy sources. Green tags function as a nongovernmental subsidy on pollution-free electricity generators. In states that have a green-tag program, green energy providers such as wind farms are credited with one green tag for every 1000kW of electricity they produce. A certifying agency gives each green tag a unique identification number to make sure it is not double-counted. The green energy is then fed into the electrical grid, and the accompanying green tag can be sold on the open market.

Greenhouse Effect — The greenhouse effect is the process by which the absorption of infrared radiation by an atmosphere warms a planet. Without greenhouse gases, the Earth's surface would be up to 30° C cooler. In addition to the Earth, Mars, Venus and other celestial bodies with atmospheres (such as Titan) have greenhouse effects. The term "greenhouse effect" may refer either to the natural greenhouse effect, due to naturally occurring greenhouse gases, or to the enhanced greenhouse effect resulting from gases emitted as a result of human activities.

Greenhouse Gases — Greenhouse gases are gaseous components of the atmosphere that contribute to the greenhouse effect. Some greenhouse gases occur naturally in the atmosphere, while others result from human activities. Naturally occurring greenhouse gases include water vapor, carbon dioxide, methane, nitrous oxide and ozone. Certain human activities, however, add to the levels of most of these naturally occurring gases

Kyoto Protocol — The Kyoto Protocol, an international agreement among 141 countries, aims to reduce the greenhouse gas emission by 5.2 percent below the 1990 levels by 2012.

DARN SOX

Does Sarbanes-Oxley Work?

ALL PHOTOS FOR THIS ARTICLE BY D.C. GOINGS

M.P. Narayanan

The courts have weighed in on the scandals at Enron and WorldCom that cost employees and investors billions of dollars. However, the debate rages on about the need for and efficacy of remedies enacted in the wake of the wrongdoing.

When Congress overwhelmingly approved the Sarbanes-Oxley Act (SOX) in 2002, author Senator Paul S. Sarbanes from Maryland said the law's purpose was "to see that once again our capital markets deserve the enviable reputation for fairness, efficiency and transparency that they have enjoyed through the years." Since the passage of SOX, corporations operating in the United States have enacted more stringent and costly internal controls. Also, SOX has made CEOs and CFOs more accountable for the accuracy of their firms' financial statements.

Has it worked? Twenty business and legal scholars from Michigan and other universities met to discuss SOX's ramifications with students and practitioners at the Louis & Myrtle Moskowitz Conference "The Impact of Sarbanes-Oxley on Doing Business," held on the Ann Arbor campus in November. Sponsored by the business and law schools and the *Michigan Law Review,* which will publish conference papers in its spring 2007 issue, the conference was in conjunction with a course that brought together MBA, MAcc and law students. The course was taught jointly by Cindy Schipani, the Merwin H. Waterman Collegiate Professor of Business Administration at the Ross School, and Law School professor Vikramaditya Khanna.

Cindy Schipani

Among the topics covered were SOX and the market, internal controls, accounting changes, stock options and efforts to extend stricter accounting requirements for nonprofits. "The interdisciplinary nature of the topic presents an ideal opportunity for business students to learn how to interact with legal counsel so that sound legal advice can diffuse into business strategy," said Kathleen Sutcliffe, associate dean for faculty development and research at the Ross School, "and for law students to learn more about the inner workings of business and the challenges of incorporating legal advice into everyday business practice."

Dating Games in the Executive Suite

One of the intentions behind SOX was to bring more transparency to executive compensation. Shareholder activists have argued for years that compensation levels are high because top executives have captured the compensation process, and it is no longer an "arm's-length" transaction between the board and top executives. Strong support for shareholder activists' view comes from the research of Ross School finance professors M.P. Narayanan and H. Nejat Seyhun, who uncovered the previously hidden, and legally murky, practice of backdating stock options for corporate executives.

Narayanan and Seyhun started studying executive compensation in 2004. Critics of high executive compensation have argued that top executives have weakened the sensitivity of pay to performance through deferred compensation benefits, subsidized loans and other perks. Backdating is another way executives can reduce the sensitivity of pay to performance.

"We read a *Wall Street Journal* article about springloading in one company, wondered if springloading was pervasive and began our research," Narayanan recalled. Springloading refers to the practice of postponing the release of good news until after an option grant. Bullet-dodging refers to the practice of delaying an option grant until after the release of negative news to take advantage of an anticipated lower strike price. The Ross School scholars soon realized that the stock price patterns they uncovered differed from typical springloading patterns.

"When we found both springloading and bullet-dodging — prices falling first and then rising around the granting of stock options — in the same firm, we thought 'how could this be?' It was too far-fetched," Seyhun recalled.

A possible explanation surfaced during a lunch conversation Narayanan, chair of Finance, had in the Ross School dining room with an investor who suggested that perhaps the companies were backdating. "This person, a serious investor who makes large investments, just threw this one-liner at me," Narayanan said. Surprised by the suggestion, the Ross researchers dug deeper.

"SOX requires that changes in executive stock ownership be filed within two business days," explained Seyhun, the Jerome B. & Eilene M. York Professor of Business Administration at the Ross School. "We examined data on more than 600,000 option grants post-SOX, from August 29, 2002, to December 31, 2004. If they were backdating, we knew there should be a built-in reporting lag."

Before SOX, firms had from 40 days to six months or even longer to report changes in stock ownership. Under those circumstances, an executive who received a stock option on a particular day and then watched the price of the stock rise over time could have exercised the option to buy the shares at a lower price and thus reap a windfall. The bigger the reporting lag, the more likely the price of the stock is to increase.

"Our hypothesis," said Seyhun, "was that if the company is backdating, the further you go back you will find a trough that is lower, so the potential benefit of backdating is bigger. If executives report late, they can receive up to 60 percent more in compensation."

Narayanan and Seyhun, the first to use the reporting lag methodology to make the case that executives were backdating, posted the first version of their paper on the Social Science Research Network Web site on January 17, 2005. "People didn't believe us," Seyhun recalled. "Critics said 'You're accusing top executives of nefarious activities,' which was true, of course." By November 2005, the Securities and Exchange Commission (SEC) was pursuing its first backdating case in Berkeley, California, against the software maker Mercury Interactive.

Narayanan and Seyhun's academic argument became a full-fledged scandal when *The Wall Street Journal* published a front-page article on March 18, 2006, under the banner headline "Perfect Payday," reporting that executives of six companies might have backdated their options. Based on the number of companies that reported large grant options more than a month late, Narayanan said, the evidence suggests up to 1,000 firms may have been backdating. So far, the SEC and U.S. Justice Department are investigating about 150 firms, Narayanan noted.

Misdating option grants has legal, economic, tax and governance implications, all of which are detrimental to shareholders,

H. Nejat Seyhun

Directed Trustees off the Hook

Enron and WorldCom employees whose retirement savings were invested in company stock were among those most hurt by the scandals. "In response, they sued their employer and the directed trustees of the big financial institutions that had managed their pension plans," said Dana M. Muir, professor of business law and a former member of the Department of Labor's Advisory Council on Employee Welfare and Pension Benefit Plans.

In all, U.S. pension plan assets total $3.6 trillion, and the Employee Retirement Income Security Act has a lot to say about regulating securities to protect employees from malfeasance in employer-sponsored benefit plans, Muir noted. The Department of Labor (DOL) and the Internal Revenue Service share regulatory authority for defined contribution plans, now the dominant type of employer-sponsored retirement planning vehicle in the United States.

The 401(k) plans of most large public companies provide an employer stock fund as one investment option. Companies that sponsor a 401(k) or Employee Stock Ownership Plan, as well as their directors, employees who administer the plan and the plan's directed trustee all have fiduciary responsibilities to the employees who participate in the plan, Muir said.

Prior to December 2004, courts were split over the extent of a directed trustee's obligation to review the prudence of investment directions. In the Enron case, the court refused to dismiss plaintiffs' claims that the directed trustee knew or should have known "from the company's financial statements that the employer company was in financial danger and its stock greatly diminished in value."

In December 2004, the DOL issued a bulletin largely relieving directed trustees of the obligation to question investment decisions. The bulletin came after lobbying from large financial institutions and the American banking industry, Muir reported. According to the DOL, federal fiduciary and securities regulation that ensure the accuracy of information flowing into the capital markets is good enough.

Muir said the DOL decision to exempt directed trustees from their fiduciary obligation of prudence ignores the possibility that specific stocks may trade in inefficient markets. "It also ignores the obvious point from modern portfolio theory: The purchase of a security at an efficient price does not necessarily mean that the purchase is prudent for a retirement portfolio," she added.

Dana M. Muir

as discussed in a follow-up paper by Narayanan, Schipani and Seyhun. When Narayanan and Seyhun examined 88 firms that were under investigation by either the SEC or the Department of Justice for backdating, they found that executives would have benefited at most by $2.5 million per firm by backdating between 2000 and 2004. "When firms are outed for backdating, share prices fall," said Seyhun, who noted backdating options is a perk usually not limited to just the CEO. Revelation of backdating results in an average loss to shareholders of about $430 million per firm as a result of market reaction to the revelation.

"The benefit to executives from clandestine backdating is minuscule compared to the potential damage to shareholders when this activity is revealed," said Seyhun. Backdating is not illegal as long as it is duly authorized by the board, fully disclosed and reported in accordance with tax rules. However, since introduction of the Statement of Financial Accounting Standards 123R, companies that grant stock options must record a compensation expense. Executives who backdate options are subject to different IRS tax rules. Undisclosed backdating also misleads shareholders about executive compensation and results in misleading financial information.

Why would executives misdate stock options? "A possible explanation is that consultants told the executives that other companies were misdating," Narayanan said. "There is some hubris to these things. It is difficult the first time; the second time it is easier. Tech firms are overwhelmingly represented among firms accused of misdating. They may use the same consultants or have overlapping boards and could quite easily convince themselves they were doing nothing wrong. And, of course, the most obvious reason — greed."

Only Somewhat Effective

While SOX has not eliminated clandestine backdating or other forms of manipulation, Narayanan and Seyhun reported SOX appears to have reduced the practice. However, one of the weaknesses of SOX, according to Seyhun, is that, while it has shed light on the behavior of some executives, it has not prompted investigations of directors. "Some of the members of boards were either complicit or ignorant, which means they either knowingly engaged in fraud or were not fulfilling their fiduciary responsibility," Seyhun said. "Unfortunately, the SEC has not treated it as widespread fraud."

Narayanan, Schipani and Seyhun offered some suggestions to boards of directors interested in showing a good-faith effort to prevent backdating scandals. Among the measures the three suggest are avoiding approving option grants by unanimous written consent and avoiding one-person compensation committees. Boards also should avoid conflicts of interest. "If there are conflicted interests between board members and executives who have been granted backdated options, courts are likely to look at the board with skepticism," said Schipani.

The SEC now requires companies to report the date a board or compensation committee finalizes option award details and the grant date as decided by the board or committee. While these changes are likely to eliminate backdating, they will do nothing to curb springloading or bullet-dodging. To stop these two practices, Narayanan, Schipani and Seyhun recommend the following remedies:

- Eliminate the exemption status of shares acquired through option exercises from some provisions of insider trading laws allowed by the Securities Exchange Act of 1934.
- Spread option awards throughout the year. Annual option awards could be divided into 12 equal monthly installments and awarded on a monthly basis at the same time executives receive their basic pay.

"Basically," said Seyhun, "our research is telling us that SOX did have a salutary effect in reducing the extent of backdating through a two-day reporting requirement for option awards. Unfortunately, many executives are ignoring this requirement and reporting late, thus allowing them to continue to backdate post-SOX. Unfortunately, SOX does not have any explicit sanctions for those who simply ignore the rule. What the backdating scandal tells us about SOX is that SOX does not go deep enough. Additional efforts are needed to stop these dating games."

Mary Jo Frank

Where Business and Law Intersect

The Louis & Myrtle Moskowitz Symposium and Research Professorship at the University of Michigan recognize the importance of collaborative work in the critical fields of business and law.

Established in 1989 by Republic National Bank of New York (now HSBC Bank USA), the Louis & Myrtle Moskowitz Research Professorship provides a cornerstone for joint endeavors in the areas of law, economics and finance. The professorship honors the late former Republic National Bank Chairman Louis Moskowitz and the memory of his wife Myrtle Moskowitz.

The Moskowitz endowment supports the work of a law professor and a business professor chosen by the deans of the two schools. Four Ross School faculty members have held the professorship: Dana M. Muir, professor of business law; Cindy Schipani, the Merwin H. Waterman Collegiate Professor of Business Administration, professor of business law and chair of Law, History and Communication; Scott E. Masten, professor of business economics and public policy; and Lynda J. Oswald, professor of business law. Law School faculty members who have held the Moskowitz Professorship include Vikramaditya Khanna, professor of law; James J. White, the Robert A. Sullivan Professor of Law; and Merritt B. Fox, formerly the Alene and Allan F. Smith Professor of Law.

Ethics Beyond Legality

David Hess

Culture has a greater impact than rules and punishments when it comes to reporting misconduct or the ability to handle misconduct when it occurs, according to David Hess, the Bank One Corporation Assistant Professor of Business Administration and assistant professor of business law and business ethics at the Ross School.

Integrity-based programs that focus on what it means to act ethically create corporate cultures in which employees can discuss ethical issues and are rewarded for responsible behavior, particularly when managers personally live up to the company's standards and incorporate those values into decision making. In contrast, compliance-based programs focus on rules and what happens when people break them. Compliance and integrity programs are not mutually exclusive, argued Hess, a panelist at the Louis & Myrtle Moskowitz Conference. In fact, research shows that successful programs have elements of both.

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A corporation's culture can have a significant impact on employees' behavior.

* * *

In a recent National Business Ethics Survey, 5 percent of 3,015 respondents reported they had witnessed "falsification or misrepresentation of financial records" within the past year, reported Hess. And the Association of Certified Fraud Examiners estimates that companies lose approximately 5 percent of their revenue to occupational fraud, or about $652 billion each year.

To promote honest and ethical conduct, SOX mandates that the U.S. Sentencing Commission review the Organizational Sentencing Guidelines (OSG), said Hess. Post-SOX, the New York Stock Exchange and the NASDAQ adopted listing requirements that compel firms to adopt and disclose codes of ethics for all directors, officers and employees.

An effective compliance program, including a code of ethics that follows the OSG, can help firms reduce or escape liability, Hess noted, but not all ethics codes and compliance programs reduce illegal behavior.

"An employee may already know that a certain action is wrong without the information provided in the code. An ethics code can encourage that employee to resist improper requests from supervisors or co-workers," Hess said.

However, firms that adopt compliance programs to protect top management from liability — window dressing — find the documents are ineffective and can backfire when it comes to promoting ethical behavior.

The Ethics Resources Center's National Business Ethics Survey (NBES) on compliance programs and organizational culture found that 45 percent of respondents who had witnessed misconduct did not report it. The main reasons employees cited for not reporting: no corrective action would be taken (59 percent), fear of retaliation (46 percent), fear of loss of anonymity (39 percent) and thought someone else would report it (24 percent). Of those who did report misconduct, 95 percent believed it was the right thing to do and 79 percent believed that corrective action would be taken.

Hess said a corporation's culture can have a significant impact on employees' behavior. "Many employees face strong pressure from leadership to engage in unethical behavior, and even though they have a negative attitude toward the behavior, they feel that they must obey." Not surprisingly, employees in corporations with such cultures see more unethical behavior and are less willing to discuss ethical issues, deliver bad news to supervisors or report violations.

Compliance programs consistent with OSG and integrity-based programs can improve employees' ethical behavior in four ways, Hess said:

- Compliance programs influence norms by reducing social pressure for unethical behavior and by creating an environment where employees feel free to discuss ethical issues and seek advice.
- Integrity-based programs improve attitudes by creating the perception of more positive outcomes from ethical behavior.
- Integrity-based programs enhance an employee's inclination to refuse to engage in fraud and to report misconduct.
- Integrity-based programs cause employees to feel empowered to act upon their own values and moral obligations. Among reforms Hess suggested is requiring firms to establish ethics committees. In the United States, an audit committee typically oversees ethics and compliance. In a recent study of 77 large U.S. corporations, none that responded to the survey had an ethics committee. Hess said this contrasts with Japan, where 63 percent of Japanese companies have ethics committees.

Although attention on the scandals leading to SOX focused primarily on the Ken Lays, Jeff Skillings and Andrew Fastows of the C-Suite, Hess said, a number of employees at all levels of the firms participated in, or were aware of, the fraudulent activities that permeated their corporations.

"The challenge is to find ways that the law can encourage employees to report misconduct of superiors and co-workers and to refuse to engage in fraudulent practices," Hess said. "Great strides will be taken toward this goal if firms adopt integrity-based compliance programs. Such programs have a positive impact on employee attitudes, improve subjective norms, increase perceived behavior control and strengthen moral obligations."

Mary Jo Frank

Ross Students Meet with Warren Buffett

Armed with a dozen carefully crafted questions, 80 expectant Ross School MBA and BBA students flew to Omaha, Nebraska, to learn from billionaire Warren Buffett, CEO of Berkshire Hathaway Inc. They were not disappointed.

"We had serious and humorous questions. It's a chat. It is not like you expect him to say something that will dramatically impact you for the rest of your life, but you hope he will," said **Jason Townsend**, a first-year evening MBA student who asked questions on behalf of the Michigan group. About 40 students from the University of Missouri also attended the November 3 session. "He would talk to every question. His answers were profound and professional and often humorous," Townsend said.

The visit, organized by Townsend and **Munish Gandhi**, MBA '07, and other members of the Entrepreneur & Venture Club, included tours of the Nebraska Furniture Mart and Borsheim's jewelry store, two of Buffett's early investments.

When Buffett's office issued the invitation to the club members, they were told it would not be a canned speech. As with other groups Buffett has hosted, no electronic recorders were allowed in the Cloud Room on the 15th floor of the Berkshire Hathaway headquarters, where he met with the students.

What do you ask the world's second-richest man? Topics covered everything from politics and campaign financing to microfinancing, poverty, management techniques, the market and Buffett's philosophy on life and philanthropy.

"He is dismissive of hedge funds, but this isn't surprising given his consistent philosophy of value investing," said Gandhi, who described Buffett as thoughtful, calm and patient.

"We asked him how his motivation has changed since going from nothing to millions and now billions," Townsend said. "He gave us some really profound pieces of advice."

Buffett said his motivation has not changed because he always has loved securities and investing. He counseled the students to do something they love, not hunt for the job that promises the most money. Buffett, 75, said that if it were up to him, he would run Berkshire Hathaway for at least five years after his death.

* * *

"There are lots of millionaires who have no one to hide them," he said. "Even their children would say 'he is up in the attic.'"

How does he measure success? It is about enjoying what you do and having family and friends who love you, according to Buffett, who told students that in the end it comes down to who would hide and protect you. Success is all about trust and relationships, he explained. He talked about the Holocaust and those who risked their own lives when they hid Jews from the Nazis. "There are lots of millionaires who have no one to hide them," he said. "Even their children would say 'he is up in the attic.'"

Buffett credited his success to good mentors and parents and winning the "ovarian lottery," a lottery the students already have won, he pointed out, by being born in a time and place where they are free to trade securities and start companies.

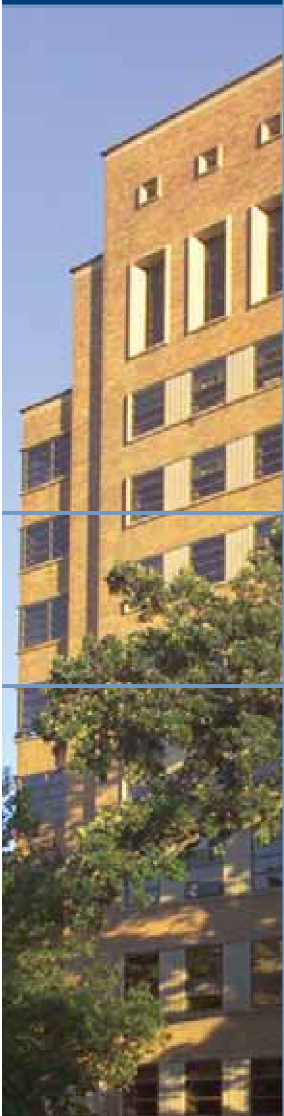
Reflecting on the visit, **Tom Lytle**, MBA '07, said, "The most important impact for me from the trip wasn't any one thought or comment, but instead the character of the man. Mr. Buffett is truly one of a kind."

After the Q&A session, Buffett hosted the students at a lunch at Gorat's Steakhouse. There, he took time for photographs with the students before driving back to his office.

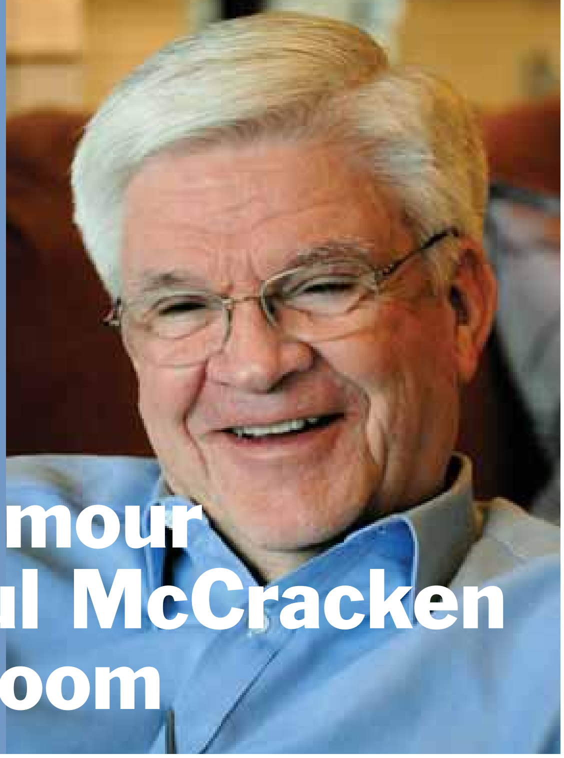
"We thought he would be followed by an entourage," said Townsend. "He wasn't. He was completely accessible and humble."

Mary Jo Frank

Warren Buffett, center, pauses for a photograph with Ross School MBA '08 students, from left to right, front row, Xin (Shirley) Feng, Caroline Koskinas, Yiqiong (Elsie) Pan and Lauren Rosenthal; back row, Max Yutsis, David Forsythe, Shashank Mara and Mark Lukehart.



Allan D. Gilmour Honors Paul McCracken with Classroom



Nearly 50 years ago, teacher Paul McCracken and pupil **Allan D. Gilmour**, MBA '59, met in a U-M business school classroom. It was a meeting neither will forget.

"Allan was an extraordinary student. I found myself predicting 'this man will wind up head of a company.' He was not going to be an ordinary guy. His track record turned out to be precisely that at Ford," says McCracken, the Edmund Ezra Day Distinguished University Professor Emeritus of Business Administration. "I think I gave him an A+, and I didn't give very many."

For Gilmour, the course taught by McCracken, who twice served on the Council of Economic advisers, first during the Eisenhower administration and again 10 years later as chairman for three years during Nixon's presidency, also was memorable.

"It was called something like Business Conditions," Gilmour recalls, and combined the practical and theoretical aspects of the economy, including how the various pieces work. McCracken supplemented the material with his personal knowledge, talking about what was happening in the world and the country and the resulting issues for policymakers. "He used a combination of lecture and the Socratic method because the material didn't lend itself to case teaching, but it was always more interesting when Professor McCracken answered the questions."

When the new Ross School building opens in 2008, an 85-seat tiered classroom will bear the names of Gilmour and McCracken, thanks to a $1.2 million gift from the Gilmour Fund.

Allan D. Gilmour

"When I was a student in Davidson Hall, classroom layouts were very different. Students were seated in rows and listened to the faculty member talk at the front of the room," says Gilmour. "Today, the focus is much more on projects and group learning, so academic facilities have to be different too."

Gilmour credits Ross School principal gifts director Frank Wilhelme for suggesting the classroom as a tribute to McCracken. "I reflected on the major contributions Professor McCracken has made for nearly 60 years at the business school, consulted with the co-directors of the Gilmour Fund and here we are."

McCracken, who works in his Executive Residence office most weekday mornings, admits feeling a slight twinge when Davidson Hall was torn down last summer. "It and I had the same career here. My first year in Ann Arbor, 1948, was the first year the building was in use." Getting a building completed after the war was not easy, recalls McCracken. The demand for construction people was intense. Offices weren't ready until the next semester.

"Overwhelmed" is how McCracken describes his reaction when he was told he and one of his brightest students would share a nameplate on a new classroom. "I didn't expect that kind of thing. I never would have thought of it. I am grateful to Allan and grateful that he thought to contribute to his alma mater."

But McCracken was not entirely surprised by the gift. "When I thought about it, it was quite in line with Allan as a person. And he has done very well professionally and been a strong supporter of the school."

Gilmour, former vice chairman of Ford Motor Co., received the Ross School's David D. Alger Alumni Achievement Award at spring commencement ceremonies in 2003. He is a member of President Mary Sue Coleman's Advisory Committee and honorary co-chair of The Michigan Difference fundraising campaign. Gilmour has served as an adviser to U-M presidents starting with Harold Shapiro and served as a chair of the Ross School Visiting Committee.

Gilmour, who grew up in Barnet, Vermont, earned a Bachelor of Arts degree from Harvard University before enrolling in the U-M Law School in 1956. Working the following summer in a law office convinced him to transfer to the business school.

"Within two or three weeks, I knew the business school was the right place for me. Compared to schools in the east, Michigan was much more collegial." He earned an MBA in 18 months and started working on a doctorate. "It was the best academic experience I ever had. Faculty members were knowledgeable and student oriented. The other students were smart and interesting," says Gilmour.

"I was a reasonably serious student and considered an academic career, but after three semesters, I was sick of being a student, my father was sick of paying tuition and I decided I didn't really want to do academic research. I figured I would go out into the real world and, at age 40, I would retire from business and go into teaching."

Of the six job offers Gilmour received, Ford's was the most enticing. "I tell people when you select a job, you select work colleagues. Also, the car business is fascinating. The auto industry was booming, and I liked the Ford people," says Gilmour, who started there in 1960 as a financial analyst

Paul McCracken

Schostak Family Supports Ross

With three generations of Schostaks attending the University of Michigan, the Detroit area family's maize and blue roots run deep. Through the Schostak Family Support Foundation, family members have enriched their Michigan legacy with a $1.5 million gift to support construction of the new home for the Stephen M. Ross School of Business. The 270,000-square-foot facility is slated for completion in 2008. In recognition for the contribution, a 95-person lecture hall in the building will be named the Schostak Family Classroom. It will incorporate such advanced capabilities as video conferencing and wireless connectivity.

"This wonderful gift from the Schostak Family reminds us that the Ross School's new facility is built on the strong foundation provided by the accomplishments and generosity of our alumni," said Ross School Dean Robert Dolan.

The family's dedication to the U-M began with **Jerry**, BBA '55, and **Elyse**, ABED '66, CERT EDUC '66, **Schostak**, who started attending University events long before they were students. "We wanted to exhibit our further support for the University with a gift that demonstrates our desire to maintain the Business School as the number one business school in the nation," Jerry Schostak said.

Jerry and Elyse Schostak

The Michigan legacy is carried on with the Schostak children, including **Robert**, **David**, AB '78, **Mark**, AB '84, **Richard**, MSW '89, **Lindsey**, AB '06 and **Stefanie**, a sophomore at the Ross School. The family's U-M alumni also include **Michael Louis**, BS '03, the son of Robert and his wife, Nancy; Michael's wife, **Becca**, BSN '03; David's wife, **Elise**, BFA '81; two cousins, brothers **Michael E.**, MBA '05, and **Steven**, AB '03, and their brother **Alexander** who is a sophomore in the Residential College.

and protégé of "Whiz Kids" Ed Lundy and Arjay Miller. During his first 34-year career at Ford, he would serve in a variety of roles, including president of the Ford Automotive Group, executive vice president of International Automotive Operations and vice president of External and Personnel Affairs. Earlier, he also served as president of Ford Motor Credit Co. and then as vice president-controller and EVP-CFO for the parent company.

Gilmour left Ford briefly in 1967 to work for a private equity firm but within a few months returned to Ford, staying there until he retired for the first time in 1995. "I was tired at the time and increasingly interested in other things, including several corporate boards and charities. I wanted to putter around. Ford had just selected a new CEO, and I figured he didn't need me." Gilmour returned to the automaker in 2002 and retired a second time in 2005.

Cars are more than a career for Gilmour, who each year scouts out the concept cars at the North American International AutoShow. His favorite at the 2007 show: the Lincoln MKR. "Being in the business for so many years, I care about everything from design to financing and enjoy having nice cars," says Gilmour, who drives four Fords: a Mustang GT convertible, Explorer, Jaguar and Range Rover.

Ford and the domestic auto industry have serious problems, Gilmour acknowledges, but they go far beyond management incompetence. "Some of the problems are a result of Japanese trade and currency policies back as far as the 1970s. Healthcare costs are another big problem," he says. "Ford, General Motors and DaimlerChrysler are doing their darndest on these problems, but the real key, as always, is to build cars that people are wild about. Customers want their needs and desires met," says Gilmour.

These days, in addition to serving on three corporate boards—Whirlpool, DTE Energy and Universal Technical Institute (a school that trains automotive technicians)—Gilmour, who lives with partner Eric Jirgens in Birmingham, Michigan, frequently speaks on behalf of diversity.

"Since retiring the first time, I've given more than 30 talks on the topic. I always start by asking if anyone in the audience has too many customers or too much talent in their organization, and then I ask who can afford to leave out whole groups of people. The only customers you don't want are those who can't pay."

Gilmour, who never talked about his sexual orientation during his first career at Ford, says, "I was closeted because I thought that an executive who was gay would be controversial, which wouldn't have been fair to Ford or to me. I hid that part of my life. Once a reporter asked why I wasn't married, and I responded that I had married Ford Motor Co."

However, when he came out of retirement to return to Ford, the world of business had changed so much in the area of diversity, particularly regarding sexual orientation, that being gay was no longer an issue.

"Business has been a leader with anti-discrimination policies and benefits for same-sex partners because it makes good business sense," Gilmour says. He is proud that in 2005, when members of the religious right threatened to boycott Ford because the company had advertised in gay publications and had made charitable contributions to gay, lesbian, bisexual and transgender organizations, Ford didn't change its principles. "We may have lost some sales, but we may have gained some too."

Widening the Ross School World

More than 2,000 Ross School alumni celebrated the school's first Worldwide Club Day on September 27. They attended events in homes, eateries and businesses around the world.

Alumni renewed friendships and networked, recruited prospective students, heard from faculty members about cutting-edge research and participated in panel discussions, community service projects and career workshops at the locally planned get-togethers.

Dean Robert J. Dolan and Ross School faculty members spoke at many of the events. Dolan traveled to Europe to present a state-of-the-school address to alumni in London and attended networking events for alumni and prospective students in Paris and Madrid. Among the faculty members who were on the road were Associate Dean Kathleen Sutcliffe, who spoke about "Managing for Resilience" in San Francisco; marketing professor Rajeev Batra, who discussed marketing trends in Minneapolis; and Christie Nordhielm, clinical associate professor of marketing, who met with alumni in Hong Kong.

Here is a sampling from this year's events. Plans are already under way for the next Worldwide Club Day on September 19.

WORLDWIDE CLUBDAY
ROSS SCHOOL OF BUSINESS

BALTIMORE—**Linda Murphy**, MBA '85, center, hosted a networking event at T. Rowe Price Associates. Participants listened to a video message from Bob Dolan. Attendees included, left to right, **Jonathan Nellis**, MBA '05, **Adam Borden**, MBA '05, Murphy, and **Dinesh Mehta**, MBA '89.

BEIJING—More than 60 alumni met at Brown's Pub in Beijing. The event was a networking opportunity for alumni of all generations. This group was one of many who listened to Dolan's video message.

BOSTON—Left to right, **Jeff Bistrong**, MBA '88, **Bob Maloney**, MBA '88, and **Harry Hedison**, MBA '87, were among more than 30 BBA and MBA alumni who gathered to hear Graham Mercer, Ross School assistant dean, strategic planning and special projects, lead a discussion on key issues that successful managers must consider in a changing global environment.

BUENOS AIRES—Left to right, **Fernando Pardo**, MBA '95, **Diego Regueiro**, MBA '99, club president **Christian Sieling**, MBA '96, and **Rogelio Nores**, MBA '89, met for an alumni dinner hosted by Sieling in Buenos Aires.

CARACAS—Among those who attended an alumni event in Venezuela hosted by **Pedro Blanco**, MBA '99, were, left to right, Daniela de Blanco, Blanco, Anna T. de Madrigal and **Miguel Madrigal**, MBA '99. The group had a good time networking and reminiscing about their MBA experiences.

CHICAGO—Left to right, **Henry Gorecki**, MBA '86, **Doug Mott**, MBA '84, and **Bob Crespi**, MBA '99, were among 75 alumni who met at an event hosted by the Ross Alumni Club of Chicago at the Sears Tower to hear adjunct faculty member David Butz discuss "Radical Trends Shaping the Future of Healthcare." Ross School Chief Operating Officer Harry Granito also attended the event.

KANSAS CITY—**Jeff Adelmann**, MBA '98, and the Ross School Alumni Club of Kansas City hosted an event at Wines by Jennifer in Parkville, Missouri. Fifteen alumni and friends socialized and learned about wines. Among those who attended were, left to right, front row: **Marci Carris**, BBA '78, MBA '83, **Kirk Larson**, MBA '04, and his wife Jodi Larson; back row, **Laura Pace**, MBA '01, **Sam Valenzuela**, MBA '98, **Alan Toyomura**, MBA '97, **Pat Foley**, MBA '92, and Adelmann.

MIAMI—**Gabriel Gerenstein** and **Andy Alan**, both BBA '02, hosted a networking event at Gordon Biersch Restaurant, which drew 25 BBA and MBA alumni. Among those who attended the event sponsored by the Ross School Alumni Club of Miami were, left to right, **Carola Luque**, MBA '02, and her husband to her left, **W.H. (Chip) Ellis**, BBA '79, Gabriel Gerenstein, **Gabriel Freund**, MBA '04, Gustavo Gerenstein and **Greg Billings**, MBA '97.

MUMBAI—Left to right, **Bharat Patel**, MBA '69, **Mocherla K. Raju**, MS '48, and **Ananthakrishna Mocherla**, MBA '83, were among 60 enthusiastic alumni from the Ross School and other U-M schools who attended a cocktail-dinner event at Joss Restaurant in Mumbai, India. After a rousing rendition of the Michigan fight song, **Bharat Desai**, MBA '81, chairman of Syntel and the Ross School 2005 Entrepreneur of the Year, addressed the audience. The program included a short video about the new Ross School building under construction and entertainment by Sharmilla and the Shylites, South Mumbai's leading retro band.

NEW YORK CITY—Left to right, **Jeffrey Boudin**, MBA '82, **John Kim**, BBA '93, **Candace TenBrink**, MBA '97, and **Tim Garrabrant**, MBA '85, and many recent graduates were among more than 75 alumni who attended an event sponsored by the Ross School Alumni Club of New York. Professor Gretchen Spreitzer highlighted recent

research regarding leadership development from the Ross School's Center for Positive Organizational Scholarship. She described two programs she is conducting with the entering class of MBA students. The first is author Jim Loehr's model of full engagement, which asserts that energy, not time, is the key to high performance and personal renewal. The second is the reflected best self leadership development assessment that enables students to understand and leverage their strengths. **Lisa Black**, MBA '87, a member of the Ross School Visiting Committee, talked about the state of the school.

TAMPA—Members of the Ross School Alumni Club of Tampa, Florida, met at Landry's Seafood House. The group included, left to right, **Jonathan Browy**, MBA' 94, **Art Sciarrotta**, MBA '80, and his wife Florence, **Richard Trzcinski**, BBA '74, and **David Everett**, BBA '93. Everett and Sciarrotta hosted the event.

WASHINGTON, D.C.—More than 40 alumni and friends of the Ross School met at Honeywell in Washington, D.C., to hear Martin Zimmerman, Ford Motor Company clinical professor of business administration, talk about "Market Approaches to Climate Change Policy."

Other Alumni Activities

Brazil—Left to right, **Cesar Ciavolih**, MBA '03, Regina Munhoz and **Silvio Munhoz**, MBA '04, were among the Ross School alumni and friends who gathered for a Spanish wine tasting and dinner in San Paulo on July 27. Contact **Alexis Novellino**, MBA '00, at anovelli@umich.edu for more information about alumni activities in Brazil.

HONG KONG—**Bert Getz Jr.**, MBA '95, executive vice president of the Globe Corp. in Deerfield, Illinois, and a member of the Ross School Visiting Committee, hosted a breakfast for Ross alumni and friends in Hong Kong in November. Among those who attended were, left to right, **Ivan Cheung**, BBA '98, **Andy Chan**, BBA '98, **Joe Chang**, BBA '00, **Edward Man**, BBA/MAcc '95, **Harry Man**, MSE '98, Getz, **Sharon Tsui**, BBA '01, **Christopher Yip**, BSc '97, and Kenneth Wong.

SINGAPORE—Linda Lim, professor of strategy (second from right), met in June with Ross School alumni who work in Singapore, including, left to right, **Michael Wachtel**, MA '96, MBA '98, with Citigroup; **Steven Dean**, MBA/MA '87, with Reuters Asia; and **Mathew Cobbett**, MBA '02, with Woodward Consulting Partners. Contact Singapore Club President **Choon-Peng Ng**, MBA '04, at ngchoonpeng@gmail.com for more information about the Singapore club.

India

When Ross School alumni in Mumbai rescheduled their Go Blue Send-Off for new students to July 11 because of heavy rains on July 5, they had no idea a larger disaster was in the offing. Terrorist blasts hit Mumbai, India's financial and film-making center and home to 14 million people, at 6:30 p.m. on July 11; the new student reception was slated for 8 o'clock that evening. "All the phone lines were jammed so we didn't have time to cancel. Still quite a few newly admitted students and alumni turned up," reports **Bharat Patel**, MBA '69, retired chairman and managing director of Procter & Gamble India. Contact Patel at patel.bv@pg.com for more information about Ross alumni activities in India.

INDIA—Among participants in the Go Blue Send-Off in Mumbai, left to right, were **Krishna Ramanathan**, MBA '93, **Ranjit Shah**, MBA '81, **Safdar Bandookwala**, BA '98, **Bharat Patel**, MBA '69, and **Ashish Khemka**, BBA '99.

New York

The Ross Alumni Club of New York co-hosted an evening with Charles Gargano, chairman of the Empire State Development Corp., at the Union Club on Manhattan's Upper East Side in June. Gargano, who also is vice chairman of the Port Authority of New York and New Jersey and a board member of the Lower Manhattan Development Corp., talked with the more than 50 alumni and guests about a range of topics, including proposed new sports stadiums within the state, development efforts at the former World Trade Center site and the health of the state of New York's economy. He also discussed potential projects, including the Second Avenue subway and Long Island Railroad links to Grand Central Station and downtown from Brooklyn. **Stephen M. Ross**, BBA '62, chairman and CEO of The Related Companies, introduced Gargano. The Ross Alumni Club co-hosted the event with MBA Corps and Indiana University's Kelley School of Business Alumni Club. Contact **Cecil Shepherd**, MBA '00, at cashephe@umich.edu for more information about the New York club.

NEW YORK—Left to right, **Jeff T. Blau**, BBA '90, president of The Related Companies; **Tim Garrabrant**, MBA '85, board member of the Ross Alumni Club of New York; Charles Gargano; **Stephen M. Ross**, BBA '62, chairman and CEO of The Related Companies; and **Cecil Shepherd**, MBA '00, president of the Ross Alumni Club of New York, take part in a photography session after Gargano's presentation at the Union Club.

Class Notes

Jeffrey E. Jarrett, BBA '62 shown wearing a Michigan shirt, is visiting the Inca Citadel at Machu Picchu, Peru, to contemplate and gather inspiration to continue his professorial duties at the University of Rhode Island. He is publishing the following manuscripts this academic year (all forthcoming): "Forecasting Occupancy Levels: A Problem for Management Forecasters," *Journal of Business and Management;* "The Quality Control Chart for Monitoring Multivariate Autocorrelated Processes," *Computational Statistics and Data Analysis;* "Using Autoregressive Residuals to Monitor Multivariate Processes in the Presence of Serial Correlation," *International Journal of Production Economics;* and "Monitoring Multivariate Processes," *Journal of Applied Statistics.* You can reach Jeffrey at jejarrett@cox.net.

Michael Corber, MBA '70 has retired from the Public Service of Canada after a 35-year career. He worked in several federal departments and agencies, primarily in human resources management. He completed his career as director general of Audit Operations at the Public Service Commission. Michael is married to Beryl Kalman, who contin-

Innovation in the Marketplace and on the Battlefield

John Emmerling, BBA '60, discovered his potential for creative innovation while a University of Michigan student. He began writing humorous greeting card captions for Hallmark, which paid $45 per idea. Emmerling continued on to a successful career in advertising at Young & Rubicam and Richard K. Manoff Inc. before starting his own agency, John Emmerling Inc., in 1976 and Emmerling Communications in 2001.

Today he is an "innovational speaker" and conducts brainstorming sessions with such clients as *The Wall Street Journal* and the GM OnStar Division. He also is the author of *It Only Takes One: How to Create the Right Idea — and Then Make It Happen.*

Armed with props and poster boards for sketching, Emmerling outlined his principles of innovation and lessons learned from his work with the Army War College Foundation for MBA students at a Dean's Seminar this fall.

"Innovation is creativity with a job to do," said Emmerling, who encourages clients to expect innovation from all areas of the organization. His first principle of innovation is to develop a well-defined problem statement — one that is crisp, clear, understandable and 10 words or less. Once the problem statement is defined, teams can "switch on" to begin the idea-making process and "open windows" to explore different perspectives of the problem.

Citing the visualized-idea concepts sketched by Leonardo DaVinci and Thomas Edison, Emmerling emphasized the importance of thinking visually. "Even if you can't draw, do a little doodle or rip an illustration from a magazine — these visuals will help bring your idea to life," Emmerling said. After generating a number of ideas, he suggested reviewing them all and picking the best.

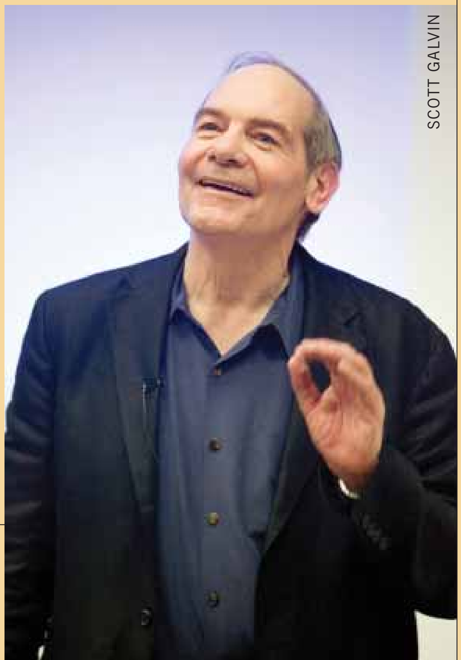
Finally, execute the idea fast and beat the competition. Using Google AdWords as an example, Emmerling explained how "innovation can create value faster when it happens fast." Google quickly invests the money it earns from AdWords in new ideas.

To many the U.S. Army and creative innovation are not synonymous. Emmerling's experience working with the Army War College Foundation proves otherwise. He told the story of Col. Chris Hughes, who faced a potentially dangerous situation in Najaf, Iraq, in 2003, as he led 150 infantry soldiers on a mission to approach the sacred Imam Ali Mosque to communicate with the Grand Ayatollah Ali al-Sistani. Unaware that the Ayatollah had asked Hughes to come, angry Iraqis started advancing on the U.S. soldiers, shaking fists and throwing rocks.

Hughes calmed the Iraqis by thinking fast and taking risks. First, he held his M-16 rifle high overhead with the muzzle pointed at the ground. Next, he ordered his men to "take a knee" and then told the kneeling troops to "smile at them." As the mob's tension began to ebb, Hughes ordered his troops to retreat. "Just turn around and walk away," he commanded. Finally, Hughes stood alone facing the crowd, put his hand over heart, and bowed, showing respect and preventing further conflict.

Hughes told Emmerling that the Army is more innovative today than when he enlisted, and that officers are taught how to think — not what to think. Similar to a troop commander, an innovative business leader must teach his teams how to think, expect innovation from all areas, encourage risk-taking, give permission to fail, practice table-top thinking exercises often and be a cheerleader, Emmerling concluded.

Adrienne Losh



SCOTT GALVIN

John Emmerling encourages doodling to bring ideas to life.

Bullish on Accounting

"Changing demographics, an increased emphasis on corporate financial accountability and younger workers' desire for a healthy balance between work and personal life add up to one thing: It's a great time to be an accountant," says American Institute of Certified Public Accountants (AICPA) leader **Leslie Murphy**, BBA '73.

Demand for accounting services and the profession's image and pay are all up, Murphy told Ross School Master of Accounting students at a Dean's Seminar in September. As chair of the board of directors of the AICPA, Murphy represents 340,000 members throughout the United States.

Accounting has changed since Murphy, now a group managing partner with Plante & Moran, interviewed for her first job more than 33 years ago. "In 1972, there were only a couple of hundred women CPAs in public accounting in the United States," she recalled. "I was the first 22-year-old woman Plante & Moran hired. My passion is to help businesses solve business problems, and that led me to a firm serving small and mid-sized businesses. I started as an auditor, working primarily in real estate and construction. Clients weren't used to working with women. The firm would call clients and ask permission to assign me to their account."

Plante & Moran, the nation's 11th-largest public accounting and management consulting firm, was and remains a people-oriented firm, known for its mentoring and founder Frank Moran's core values. Murphy co-founded the firm's Personal Tightrope Action Committee, which recommended some of the firm's employee-friendly policies. Those policies include assigning buddies to expectant mothers — mentors who are not supervisors, offering flexible schedules for pregnant women and new parents, and providing child care on Saturdays during tax season.

"Life and work must be more integrated," she said. One of the decisions she made early on was to hire someone to buy groceries and to run errands. "Some people thought I was crazy, but I decided I would rather work than grocery shop. It also gave me more time with our kids."

Mary Jo Frank

SCOTT GALVIN

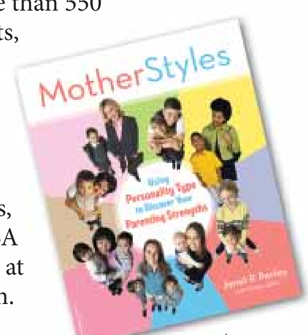
Accounting student Cortney Hilliard, MAcc 07, left, and Leslie Murphy talk at a reception following the Dean's Seminar.

ues to work as a research historian. Their three children are at various stages of completing their education and entering the workforce. You can reach Michael at corber@sympatico.ca.

Paul E. Weaver, MBA '72
joined the board of directors of AMN Healthcare Services in July 2006. He also was appointed a member of AMN's audit committee and corporate governance committee. Previously, Paul was global partner of PricewaterhouseCoopers and chairman of the firm's global technology practice group. He currently serves on the boards of Gateway Inc., the Ellis Island/Statue of Liberty Foundation and the corporate advisory board of the Ross School.

Janet Puschaver Penley, MBA '77
combines her business and parenting background to develop something akin to management development for mothers.

Her new book, *MotherStyles: Using Personality Type to Discover Your Parenting Strengths* (Da Capo, 2006), helps mothers identify the strengths of their natural mothering style. Using the Myers-Briggs® framework of personality type, Janet equips mothers with the self-knowledge they need to create a successful work/family balance, manage their personal energy and be more effective with children of different personality types. Janet's book is the culmination of 18 years of study, hundreds of interviews and more than 550 workshops with parents, life coaches, therapists and HR professionals. Janet recently moved from Chicago to San Antonio with her husband of 29 years, **Stephen S. Penley**, MBA '77. She can be reached at www.motherstyles.com.



James Schuetz, MBA '78
was appointed Midwest regional managing director for Deloitte Consulting. He joined Deloitte Consulting in 1978 and has in-depth knowledge and experience in supply chain and financial man-

agement. Jim's clients are primarily large consumer-goods manufacturers and retailers. He resides in Elmhurst, Illinois, with his wife Linda. They have three children, two in college and one a recent graduate.

Daniel L. Treacy and **Allison Treacy McFerren Sanders,** both **MBA '80** were last featured in the winter 1979 issue of *Dividend* in an article about parent-daughter pairs in the MBA program. Daniel worked for Minoru Yamasaki and Associates architectural firm, then opened Prevost Treacy and Partners, moved to Smith Hinchman & Grylls and one other firm before retiring in 2004. His daughter Allison was a commercial banker for Comerica Bank, beginning a career in investor relations at Comerica and now at Worthington Industries, a premier steel processor and fabricator headquartered in Columbus, Ohio. Allison's son, Lincoln McFerren, received degrees in mechanical and aeronautical engineering from the University of Michigan and his MBA from Arizona State University. He is working for Rogers Corp. in Phoenix. You can reach Daniel at pegtreacy@sbcglobal.net and Allison at asanders@worthingtonindustries.com.

Vinay Gupta, MBA '85
is CEO of Ann Arbor-based Janeeva Inc. Launched in 2004, Janeeva Assurance™ software helps enterprises manage their outsourced provider relationships in an organized way to realize the full value from outsourcing and reduce the risk and complexity of managing outsourcing relationships. In November 2006, Janeeva acquired Vantage Technologies. Vinay will remain CEO of the combined companies. You can reach him at vinay.gupta@janeeva.com.

Douglas R. Taeckens, MBA '85
was named president of Jokari/US Inc. in Carrollton, Texas, a recognized leader in the consumer housewares industry. Doug's 20-year career is distinguished by an outstanding record of management performance at the presidential and COO levels in the consumer products industry. Most recently, he was president and COO of the Evercare Co. His work has spanned five continents and 22 countries. Doug also is a certified

Bringing Businesses Back from the Brink

David L. Treadwell, BBA '76, is a master at restructuring companies in distress. Speaking to students at a Dean's Seminar in November, Treadwell shared some of the lessons he has learned, first in the real estate business and then under the tutelage of the late Heinz Prechter, an entrepreneur. Treadwell served as CEO of Prechter Holdings, which included specialty-vehicle supplier ASC Inc. as well as publishing and real estate groups. When Prechter died suddenly in July 2001, Treadwell sold Prechter's 12 businesses in nine months, per the family's request.

Later, as CEO of Oxford Automotive, he led the $1 billion Tier 1 automotive supplier through a successful restructuring process.

Then, in July 2005, several months after EaglePicher Inc. filed for reorganization under Chapter 11, the firm named Treadwell president of its Hillsdale Division. Treadwell became COO of EaglePicher Inc. in November 2005 and CEO of the newly formed EaglePicher Corp. in August 2006.

Today, EaglePicher is a $600 million diversified holding company comprised of Hillsdale Automotive and six other businesses: Wolverine Advanced Materials, EP Minerals, EaglePicher Technologies, EaglePicher Medical Power, EaglePicher Pharmaceutical Services and EP Boron. Headquartered in Inkster, Michigan, the company has 4,000 employees and operates more than 30 plants in the United States, Canada, Mexico and Germany.

"People are always the biggest issue. If I do everything else wrong, and I get the right people, it's okay," said Treadwell, who talks with each of his division managers once a week in addition to studying monthly reports and developing six-month action plans and five-year strategies.

"There are two traps you can fall into — focusing totally on the long-range strategy or paying too much attention to details and ignoring strategy," Treadwell explained. To maintain balance, leaders must talk to customers and keep on top of what is happening in the industry.

When managing multiple companies, Treadwell said, it is important that all the businesses have a positive cash flow. "You can't take money out of one to subsidize the other. Each business has to stand on its own. You also can't pick a favorite child and ignore the other businesses just because one business is 'hot' or more interesting at the time."

Mary Jo Frank

PAUL JARONSKI

Left to right: Kirk Derr, MBA '08, Kaiser Han, MBA '07, and David Treadwell, BBA '76, continue their conversation at a reception following the Dean's Seminar.

CLASS NOTES

Opportunity through Entrepreneurship

How do you integrate people who have been left out of the free-enterprise system into the ownership fabric of a global community? To **Steve Mariotti**, BBA '75, MBA '77, the answer is entrepreneurship.

Mariotti, founder and president of the National Foundation for Teaching Entrepreneurship (NFTE), which helps low-income youths acquire the skills to start new enterprises, is convinced that entrepreneurship can promote global prosperity, cross-cultural understanding and democratic values.

Mariotti spoke at the Ross School Domestic Corps internship program's '06 Showcase: Real People, Real Issues, Real Solutions, held at the Rackham Amphitheatre in October. The day-long event focused on entrepreneurship in the nonprofit sector and recognized the achievements of student interns and sponsors of Domestic Corps projects in culturally diverse, economically distressed locations across the United States.

"I believe synergy results from creating wealth in communities," said Mariotti. "I think there is a greater connection between people based on their interest in markets and small business than on religion or ethnic background."

Since its founding in 1987, NFTE has expanded to 13 countries and educated 180,000 aspiring entrepreneurs. "Global markets are an important source of energy to create democracy worldwide," he said. "I don't think you can have isolated corners of the world that are democracies and markets. It's extremely important that we have an intellectual base and promote the idea of individual liberty and the power of people to own businesses everywhere."

Mariotti recounted his own entrepreneurial odyssey, beginning as a Ford Motor Co. treasury analyst, then as an owner of an import-export business in New York and finally as a teacher of high-risk children at Bedford-Stuyvesant High School in Brooklyn. After conventional teaching methods failed, Mariotti discovered that even the worst students listened when he talked about importing shoes.

Mariotti left teaching to establish NFTE with the vision that every child in the world would learn to start a small business. Today, the nonprofit works with young people in China, India, El Salvador, South Africa, Israel and throughout Europe.

To start a social enterprise, Mariotti said, it is vital to have a unique, measurable idea that directly impacts a social problem — "something you can say in a sentence and people are stunned by it." Before launching an enterprise, however, he recommended that social entrepreneurs invest in accounting and legal expertise. "Get your funding first," Mariotti urged. "There is a tendency for the founder to do piecemeal financing, which is what I did." In retrospect, he would have raised capital and then devoted his full attention to developing well-researched pilot programs. The real secret to growing a successful organization with a global impact, Mariotti concluded, is simplicity. "If it's not simple, you can't adapt it to different cultures or explain it." M

Claudia Capos

Mariotti shares his vision at Domestic Corps '06 Showcase.

Six Sigma Black Belt. You can reach him at dtaeckens@comcast.net.

Eric Ridenour, MBA '86
COO of the Chrysler Group, received the Distinguished Alumnus of the Year Award from the University of Michigan-Dearborn in spring 2006. After graduating from UM-Dearborn's College of Engineering and Computer Science (CECS) in 1980, he started his professional career with General Motors Corp. in 1981 and joined the Chrysler Corp. in 1986. He has been a member of the board of management of DaimlerChrysler AG and COO of the Chrysler Group since 2005. A member of the CECS visiting committee, Ridenour serves as an internal corporate sponsor for both UM-Dearborn and Ann Arbor through his involvement with the DaimlerChrysler Corporation Fund. He has helped CECS obtain major financial support for initiatives such as the school's Institute for Advanced Vehicle Systems, the Henry Patton Center for Engineering Education and Practice, and scholarships for women and minority students. Eric is a resident of Birmingham, Michigan.

Phil Martens, MBA '87
joined ArvinMeritor, the Troy, Michigan-based supplier of chassis and exhaust

systems, on September 1, 2006, as head of the company's Light Vehicle Systems business group. Prior to that he was president and COO of Plastech Engineered Products Inc., president of North American product creation at Ford Motor Co. and managing director of planning, design and product development for Mazda Motor Corp. He received his BSME from Virginia Tech and his PhD in engineering from Lawrence Technological University in Southfield, Michigan.

Subodh Karnik, MBA '90
was named president and CEO of ATA Airlines effective January 1, 2006. Subodh joined ATA in May 2005 and played a significant role in the airline's revival from Chapter 11 reorganization. Prior to joining ATA, Subodh had 15 years of airline experience in a wide range of leadership roles at four airlines. Most recently he was senior VP of marketing planning at Delta Air Lines. Subodh, his wife Bethann and their two children reside in Indianapolis. He can be reached at subodh.karnik@umich.edu.

Seiji Takagi, MBA '93
had been working in Japan's Ministry of Economy, Trade and Industry before coming to the University and returned there after graduation. At the end of 2005, he moved to the Cabinet Secretariat to handle part of the Japanese administrative reform. He returned to the Ministry of Economy, Trade and Industry in 2006 and is now the director for Diet Relations, interacting daily with Japanese Diet members and their staff to gain support for Ministry policies. Seiji lives in Tokyo with his wife Akiko and children Taishi and Hikaru. You can reach him at takagi-seiji@meti.go.jp.

Michael Barrett, MBA '96
was appointed CEO of GE Money China in September. "Michael will be responsible for developing and executing our GE financial services strategy in China, including leading the business development opportunities and managing our existing business relationships with strategic partners in retail banking and consumer financing," said Yoshiaki Fujimori, president and CEO of GE Money Asia. After completing his MBA in 1996, he joined GE Capital Retailer Financial Services. In 2000, he became VP of

Privacy Issues in the Information Age

Will McGarrity, BBA '06, received the Best Student Paper Award at the National Conference of the Academy of Legal Studies in Business for "Unsafe in Any Hands? Privacy Challenges in the Information Age" in August.

In his paper, McGarrity, a Harvard Law School student, evaluates the philosophical, legal and social interpretations of privacy and their shortcomings in addressing the privacy dilemmas posed by information technology. The paper also explores ways in which the inadequacies of the status quo can be changed to protect privacy.

McGarrity became interested in the topic when Google's e-mail service, Gmail, was condemned by several privacy interest groups. "I felt much of the criticism was unjustified, but it led me to a broader question, that of what exactly it is society values in privacy and how companies can better answer the challenges posed by the spread of information," he recalls.

"All companies need to address privacy issues voluntarily and proactively. Waiting for refinements in the legal system can be costly to both a company's bottom line and the public's perceptions of the firm."

Companies should consider privacy in terms of protecting individuals' control over their own information, says McGarrity. "Despite the current inadequacy of the law in this area, companies can look to the intent of past legislation to guide their efforts. Novel measures, such as appointing a chief privacy officer, also may help address privacy issues. Finally, by building data systems that recognize private information and protect it accordingly, businesses can better secure personal information."

McGarrity and **Sunita Mohanty**, BBA '06, were co-winners of the Ross School's Arthur Southwick Award for the best student research paper. Their papers were written as part of the BBA Senior Seminar course taught by George J. Siedel, the Williamson Family Professor of Business Administration.

Will McGarrity

Sunita Mohanty

In her paper titled "Venture Capital: Possibilities at the Bottom of the Pyramid," Mohanty, an investment banking analyst at Lehman Brothers in Chicago, examines current trends of private equity and venture capital markets in China and India and how VC firms can effectively combine social and financial goals in those markets by integrating strategies highlighted in Professor C.K. Prahalad's book *The Fortune at the Bottom of the Pyramid.* She also evaluates the impact of VC firms and presents case studies of several innovative venture funds operating in China and India.

The assignment allowed Mohanty, whose family is from India, to combine an interest in finance and developing markets in China and India with her personal background.

Mohanty concludes: "Private equity activity is increasing throughout the developing world as investors are finding better opportunities relative to the saturated markets of developed economies. Instability and uncertainty thus far have impeded successful VC investment in India and China. The unfamiliar environment of these countries, dominated by poverty, necessitates the ability for firms to correctly adapt to the local conditions of these markets."

Mary Jo Frank

Marketing and Sales for GE Global Consumer Finance Europe. In 2002, he joined the GE Consumer Finance business in Australia as the business development leader responsible for acquisitions. In 2004, he became COO for the GE Consumer Finance team in China. You can reach Michael at Michael.Barrett@ge.com.

Indrajit Jay Sinha, PhD ’96
is the Washburn Research Fellow and associate professor of marketing at the Fox School of Business at Temple University in Philadelphia. In December 2006, Jay and his colleague, Thomas Foscht, published *Reverse Psychology Marketing: The Death of Traditional Marketing and the Rise of the New Pull Game* (Palgrave MacMillan). The book provides new and interesting insights into the changing nature of marketing and branding strategies that are important to all firms. You can find more information at www.jsinha.com and can reach Jay at jsinha@temple.edu.

Ryan Bowers, MBA ’99
has joined McGraw Wentworth as marketing manager. She is responsible for strategic marketing communications and business development initiatives, including brand management, customer relationship marketing and public relations. McGraw Wentworth, based in Troy, Michigan, is one of Michigan’s largest group-benefit consulting and brokerage firms and serves mid-sized organizations headquartered in southeast Michigan. You can reach Ryan at rbowers@mcgrawwentworth.com.

Laura Cooke, MBA ’00
is business manager of the capital campaign for the co-ed, college-prep Wellington School in Columbus, Ohio. “I am currently managing a $23 million expansion project for the school, working part time and staying busy with our son Chris and our three girls — Christine and Caroline, twins age 4, and Emma, age 1-1/2,” says Laura. You can reach her at cooke@wellington.org.

Tim Ludwig, MBA ’00
left a career in real estate earlier this year to focus on developing an online community for parents and caregivers that provides tools, advice and ideas for family friendly excursions (www.parentography.com). “I’m still in San Diego,” says Tim, “and my wife Noelle and I are enjoying the time we get to spend together with our daughter Ella since I’m working from home right now.” You can reach Tim at tim.ludwig@gmail.com.

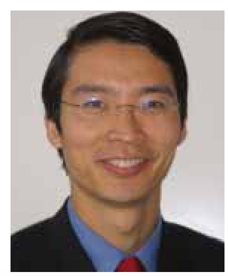
Weiguo Patrick Fan, PhD ’02
was promoted to associate professor in the department of accounting and information systems in the Pamplin College of Business at Virginia Tech University in June 2006. He won the school’s Warren L. Holtzman Outstanding Educator Award in 2006 and the Certificate of Teaching Excellence Award for 2005–2006. Patrick lives in Blacksburg with his wife Jing and their two sons, Brandon and Jonathan. You can reach him at wfan@vt.edu.

Ed Gibney, MBA ’02
accepted a job in June 2006 as a special adviser with the FBI. He is working in the Washington, D.C., headquarters with the FBI’s Office of International Operations, which is responsible for more than 70 legal attaché offices operated by the FBI around the world. “As a special adviser, I am one of 11 business school graduates brought into the FBI over the last two years to work as internal consultants helping to improve business practices and streamline operations. It’s an interesting and challenging opportunity,” says Ed. His wife Tanya is working on her PhD in Canterbury, England. You can reach Ed at egibney@yahoo.com.

Al Leandre, MBA ’02
After graduation, Al moved his wife Lisa and children Verida, Alexandra, Pierre and Yvette back to Maryland, where they had lived before coming to the University. He then founded Vyalex Management Solutions, a management consulting firm that proposes high-tech solutions for clients’ problems. Vyalex’s major client is the Naval Air Systems Command. The firm also services civilian government agencies and private sector clients. Vyalex now is moving into the international development field. In July 2006, it sponsored a Tech Expo conference in Port-au-Prince, Haiti, and is opening an office there. You can reach Al at aleandre@vyalex.com.

Robert Oliver, MBA ’02
principal of Oliver Financial Planning in Ann Arbor, has earned the Chartered Financial Analyst (CFA) designation. Rob has worked in the financial industry since 1997. He began his financial career at Donaldson, Lufkin and Jenrette in Manhattan and started Oliver Financial Planning after returning to Ann Arbor in 2005. Recipients of the CFA charter have successfully completed a graduate-level, self-study curriculum and series of three exams taken sequentially over at least two years. The three six-hour exams cover ethical and professional standards, securities analysis and valuation, financial statement analysis, quantitative methods, economics, corporate finance, portfolio management and performance measurement. You can reach Rob at rob@oliver-financialplanning.com.

Winston Wenyan Ma, MBA ’03
recently published *Investing in China: New Opportunities in a Transforming Stock Market* (Risk Books, 2006), which provides state-of-the-art coverage on the investment vehicles newly available to foreign investors in China. Winston recently was recruited by Barclays Capital in New York as an associate director. He will head equity-linked financing and equity derivatives for corporate finance, risk management and mergers and acquisitions. Prior to that he was a VP marketing specialist at JPMorgan Equity Capital Markets. His book has been widely quoted in many financial newspapers, magazines and journals. For more info, visit http://www.umderivatives.com/investinginchina.htm. You can reach Winston at winstonwma@gmail.com.



Mike Newman, MBA ’03
is ReCellular’s VP of sales, marketing and customer service. ReCellular is the world’s foremost collector, reseller and recycler of retired wireless phones and accessories. It was named to “The Green 50,” a prestigious list of 50 cutting-edge entrepreneurial companies, in the November 2006 issue of *Inc.* magazine. ReCellular was noted for its commitment to environmental integrity and innovative business strategy. Prior to joining ReCellular, Mike served as national political representative for the Sierra Club. He serves on the board of the Michigan League of Conservation Voters and is a distance runner. Mike’s father, **Charles Newman**, BS ’63, MS ’64, is the founder, CEO and president of ReCellular. You can reach Mike at mnewman@recellular.com.

Daniel Salinas, MBA ’04
is a solution marketing executive in user platform solutions for IBM Global Services. He is responsible for developing, configuring and marketing packages that improve end-user computing for large-enterprise clients globally. He and his wife Melissa (undergrad and law degrees from the U-M) live in Farmington Hills, Michigan, and certainly will be busy. On August 29, 2006, Melissa delivered quadruplets, Matthew, Natalia, Samuel and Sofia, at the Banner Good Samaritan Medical Center in Phoenix, which is nationally recognized for its care of high-risk mothers. Congratulations may be sent to Dan and Melissa at dsalinas@umich.edu.

Eric Forster, MBA ’06
has been with ReCellular since its founding in 1991. He is responsible for all domestic and international sales and procurement of wireless handsets, including customer service and new business development in both domestic and international markets. Eric was instrumental in increasing revenues from $700,000 at inception to $14 million in the first three years. The company now has nearly $40 million in annual revenues. He currently is leading a team to develop new products and services that will extend the marketplace the company serves today. You can reach Eric at eforster@recellular.com.

Keith Dixon Jensen

BBA ’47

died on January 5. After spending the first six years of his life in Sandusky, Michigan, he spent the remainder of his life in Jackson and Ann Arbor. He married Kathryn J. Hieronymus on June 26, 1948. An Eagle Scout and avid photographer, while at the University he enrolled in the Naval ROTC and was commissioned at age 20 as a U.S. ensign at the end of his junior year. He was attached to the *USS Zane,* a destroyer mine sweeper, and served in the Central Pacific from 1943 to 1945. His shipboard roommate was famed author Herman Wouk, and the ship served as an inspiration for Wouk’s *The Caine Mutiny,* in which the character of Lt. Willie Keith is based in part on Keith’s life and experiences on the ship.

After the war, he returned to complete his BBA and then went to work for Electric Wholesale and Supply Company, Jensen Bridge and Supply Company, Sanilac Steel Company, West Park Development and Nuclear Assurance Corporation in Atlanta, as well as many other ventures. Keith was a member of the Rotary Club since 1947, a board member and president of the Jackson Boy Scout Council from 1947 to 1975, president of the Jensen Foundation and trustee of the Michigan Council of Foundations.

In his retirement he enjoyed visiting his children and grandchildren in California, British Columbia and Michigan. He was a benefactor of the Ross School, the Clements Library, the Bentley Historical Library, the Kelsey Museum and other University endeavors. Keith is survived by his wife Kathryn; sons James, Keith, Peter and Tom; daughter Patricia; and five grandchildren. His brother, A. Paul Jensen, lives in Madison, Wisconsin.

John Wenzel Zimmer

MBA ’60

born on June 9, 1934, in Niles, Michigan, died on September 12, 2006, in Grand Rapids, Michigan, from melanoma. John received his BA from Duke University, and prior to entering the U-M joined up with friend Tom Curtis and traveled to Europe. “He and Tom slept in every vineyard in Europe,” said wife Sally. After graduation, John did business development and sales work in media, printing

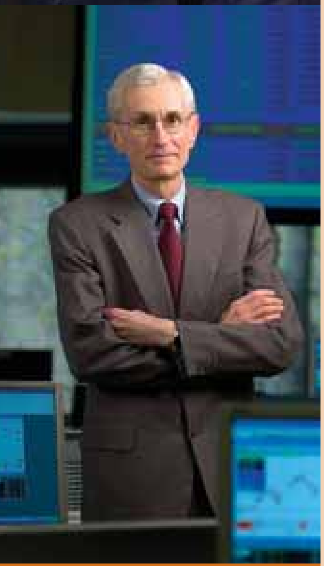
and publishing, starting at the *Los Angeles Times,* then the *Chicago Sun Times* and several other companies, ultimately founding his own company in New Mexico. In college he started the *Graphic Resorter* in Petoskey, Michigan, which is still published. He moved to Grand Rapids in 1994.

John was a tremendous lover of fine wine, tennis, great literature and Walloon Lake, near Petoskey, where the family still has a summer home. “He was a voracious student of life,” said Sally. “Ernest Hemingway grew up on Walloon Lake, and John became a Hemingway scholar. But he also enjoyed sports and traveling. During the one year he spent at Purdue before transferring to Duke, he was ranked the No. 1 tennis player in his age group. We traveled extensively and sailed on both the *Queen Elizabeth II* and the *Queen Mary II.*” John and Sally had celebrated their 46th anniversary in June. In addition to Sally, John is survived by their son David, daughter Sarah, and brothers Ted and Charles and their families.

George L. “Chuck” Farr

BBA ’63, MBA ’64

chairman of Muirhead Holdings, a private equity firm in Greenwich, Connecticut, former vice chairman of American Express and director of the shareholders committee during his 27-year career with McKinsey and Company, died November 5 at age 65. Chuck served on the Ross School Visiting Committee and Corporate Advisory Board. Born in Portsmouth, Virginia, and raised in Detroit, he is survived by his wife Pamela, sons Randal, Eric and Brian, daughters Jessica and Tamara and nine grandchildren.

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Degree 1 & Year(s)

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DIVIDEND CLASS NOTES

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