



THE NECESSARY SPARK

Creating opportunities for entrepreneurs in Middle Tennessee and beyond

Faculty Bob Whaley and Jacob Sagi are the brains behind NASDAQ's new Alpha Indexes.

Theory into Practice

The market impact of Owen's finance faculty



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SARAH TRAHERN GREW UP IN A HOME OF divergent musical tastes. Her father used to sing old country standards to her in the crib, while her mother encouraged her to take classical violin lessons throughout childhood. Trahern admits an appreciation for a wide range of music these days, but it's telling that after 12 years of violin she decided to switch to the banjo in high school. The twang of country music won out, and though she didn't realize it at the time, Nashville was already beckoning.

After graduating from Georgetown University and covering politics for C-SPAN in Washington, D.C., she decided to pursue her interests in music and television in Nashville, where today she is the General Manager and Senior Vice President at Great American Country (GAC), a country music television network. Since her hiring in 2005, GAC has more than doubled its reach to nearly 60 million households.

"Country is unique in that it really is the soundtrack for a lot of America," she says. "There's pretty broad appeal. It's not just niche music anymore."

Trahern, who oversees GAC's strategic planning and day-to-day operations, including programming and production, was named to *Billboard* magazine's list of the top 30 women in music in 2010. She credits Vanderbilt's Executive MBA program for much of her recent professional success.

"It really rounded out my management experience to be exposed to leaders in a variety of fields outside of my own," she says. "Also my experiences in the strategy course—developing numerous analytical plans and having to defend them in front of the class—have been quite valuable in my current position."

If Trahern had to pick one of her proudest moments as a manager, it would be the telethon she helped GAC organize just days after the floods struck Middle Tennessee last May. The commercial-free, three-hour concert featured some of the top acts in country and raised nearly \$2 million for flood victims.

"We're a ratings-driven business," she says, "but sometimes doing the right thing is what's most important."

The Soundtrack for America

Sarah Trahern, EMBA'04, brings music to the masses at Great American Country TV

By **SETH ROBERTSON**



Sarah Trahern, pictured here in the production control room at GAC TV, oversees the network's strategic planning and day-to-day operations.

JOHN RUSSELL



FROM THE DEAN

Friends and colleagues,

This issue of *Vanderbilt Business* centers on two themes: (1) the amazing impact our finance faculty have made in the academic community and the financial markets, and (2) the entrepreneurial spark ignited in so many of our graduates by the Owen experience. It's no coincidence the subjects are featured in the same issue. In fact, they share a common thread.

The photo essay in this issue traces the many accomplishments of our finance faculty, starting with the illustrious work begun by Hans Stoll and continued by others, including Bill Christie, Bob Whaley, Nick Bollen, Jacob Sagi, David Parsley, Alexei Ovtchinnikov and Miguel Palacios. It's a story that encompasses the Financial Markets Research Center's 24 years of excellence, as well as recent achievements like the collaboration between Whaley, Sagi and alumnus Eric Noll (MBA'90) in launching a new, innovative NASDAQ product. It's also a story that is being added to each day by professors like Craig Lewis, who is currently a visiting scholar on loan to the Securities and Exchange Commission. And running throughout are examples of how our finance faculty have influenced the careers of our alumni. Thanks to their classroom experiences, countless graduates have learned not only how the financial markets work but also how to change those markets for the better.

Meanwhile entrepreneurial studies also play a critical role in our curriculum, as illustrated in this issue's feature article. The work of faculty members Germain



JOHN RUSSELL

Böer, Michael Burcham and Bruce Lynskey is legendary, and many of our alumni have learned from them how to take the kernel of an idea and grow it into a prosperous business. A few of these alumni come to mind, including Josué Gomes da Silva (MBA'89), Jack Long (MBA'83), Carin Barth (MBA'86), Brent Turner (MBA'99), Matt Gelfand (MBA'92), Deb Guthrie (MBA'79), Bo Bartholomew (EMBA'05), A.J. Kazimi (MBA'84), Mike Saint (EMBA'98) and Jim Sohr (MBA'90). This entrepreneurial spirit also can be seen in large organizations where alumni like Chuck Vice (MBA'90), Connie Ritter (MBA'80), Dave Kloeppel (MBA'96), Doug Parker (MBA'86), Allan Keel (EMBA'90), John Underwood (MBA'98) and Susan Adzick (EMBA'84) all play major roles. In growing, changing and leading their companies, they are relying on the skills gained at Owen and their own entrepreneurial DNA.

So what is the common thread between the two themes of this *Vanderbilt Business* issue? It's that Owen's faculty share an intellectual curiosity and breed a culture of impact. By asking the questions "What if?" and "Why not?," they are challenging the status quo and making a difference. It's why the really smart applicants look to the substance of what we do and come to Owen. The opportunity to learn from such incredible scholars in a close-knit environment is just one of the many ways in which our school stands apart.

Respectfully yours,

James W. Bradford
Dean, Vanderbilt Owen Graduate
School of Management
Ralph Owen Professor for the
Practice of Management

EDITOR'S MEMO

SPRING 2011

DEAN

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Under My Own Steam

Learning to think like

an entrepreneur

By SETH ROBERTSON

WHEN I WAS YOUNGER AND TRYING TO decide on a career path, I briefly thought of going into business for myself. It was an admirable, if short-lived, dream, but in retrospect I'm a little dismayed that I even considered it. Time has taught me that I just don't have the entrepreneurial itch—or the guts, frankly—to strike out on my own.

Oilman J. Paul Getty once said, "Going to work for a large company is like getting on a train. Are you going 60 miles an hour, or is the train going 60 miles an hour and you're just sitting still?" Me, I'm the type of person who's perfectly content riding the train.

Yet what's more puzzling about my thought process back then isn't that I considered starting my own business but rather the field it was to be in. The seed for the idea started with my grandfather, who ran his own civil engineering firm in Huntsville, Ala. I'd grown up admiring his accomplishments, and it seemed only natural to do something similar with my life. I think he would have liked nothing more than for me to follow in his footsteps, whether by taking over his business or opening an engineering firm of my own.

Of course that was assuming I had the technical skills to embark on such a career—which I didn't. As much as I enjoyed looking over my grandfather's

shoulder at blueprints he was working on, I can't fathom doing the math his job required.

Life, though, has a funny way of coming full circle. All these years later I'm getting to live out my childhood dream, albeit vicariously, through my wife, Victoria, a professional mechanical engineer. This past fall she started her own company, which specializes in sustainable building

design. Having watched her get the business off the ground,

I've come to believe that being a spouse of an entrepreneur is probably the closest thing to actually being an entrepreneur oneself. I've shared in the good times when work is plentiful and sweated the moments when funds are stretched pretty thin.

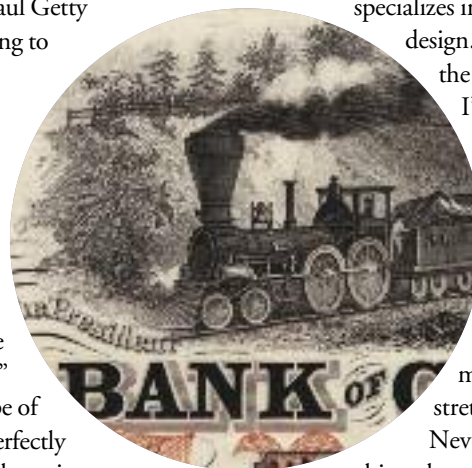
Nevertheless I wouldn't change

a thing about these past few months.

I'm immensely proud of my wife for daring to do something that I'd only dreamed about, and if anything, her enterprising spirit has rubbed off on me. I'm now more mindful of how entrepreneurs think, and in some small part this has carried over to my own job.

As Dean Jim Bradford points out on page 29, large organizations can benefit from this kind of thinking just as much as smaller ones, and therein lies a valuable lesson for everyone, regardless of whether you choose to ride the train, so to speak, or not. The truth is we all have a say in where we're headed and how we get there. We passengers just have to make sure we don't get too comfortable in our seats.

VB



I N S I D E

Finance *Steady Gains* | Health Care *Surgical Operations* | Finance *Landslide Victories*

Versions of these articles (except “Going for It”) originally appeared in the online journal VB Intelligence. To read other research-related articles, visit the newsroom page at owen.vanderbilt.edu.



DEAN DIXON

Bob Whaley



DEAN DIXON

Jacob Sagi

FINANCE

Steady Gains

New NASDAQ indexes guard against market gyrations

NEW RESEARCH BY BOB WHALEY, the Valere Blair Potter Professor of Management, and Jacob Sagi, the Vanderbilt Financial Markets Research Center Associate Professor of Finance, has led to the creation of a recently launched group of NASDAQ indexes. The five NASDAQ OMX Alpha Indexes are designed to help investors measure performance between individual stocks and exchange-traded funds. In practice, this means that the returns of popular holdings such as Apple and Citigroup could be isolated from sharp swings in the market. Traditionally it has been difficult—if not impossible for some—to trade directly on the relative performance of one asset compared to another.

In a new research paper describing how relative performance indexes work, Sagi and Whaley use the example of Apple (AAPL) compared to the S&P 500. In September 2008, AAPL’s share price plummeted by 32 percent, more than three times the amount lost in the broader markets. Seeing such an outsized decline in AAPL’s share price compared to the market overall may have signaled a buying opportunity to some investors. But as the financial crisis worsened, AAPL’s share price fell by another 1.4 percent. During the same time, however, the broader market fell by about 16.6 percent.



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“AAPL outperformed the market as the investor expected,” Sagi and Whaley write. But anyone who had purchased shares of AAPL, while beating the market, would still have suffered a loss.

If an investment tool based on a relative performance index had been available to capture AAPL’s performance against the market, however, it would have yielded a substantial gain.

To try and replicate that same trade using the tools available at the time, an

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investor would have had to buy a long position in AAPL, while shorting, or betting against, a product like an S&P 500 index fund. The central risk in that scenario is that an investor would be exposed to an unlimited loss in the short position. By contrast, a relative performance index would place at risk only the original amount of the investment. Further, the money and time spent rebalancing those trades to account for volatility in both the long and short position would be too

much for most investors to bear.

While the derivative products on the indexes developed by Sagi and Whaley can be used to invest in the relative performance of any pair of securities or exchange-traded funds, NASDAQ OMX has so far launched five offerings tracking “highly liquid” assets with plans to add more in the near future:

- AAPL vs. SPY Index (symbol: AVSPY)
- Gold (GLD) vs. SPY Index (symbol: GVSPY)

- Twenty-plus Year Treasury Bonds (TLT) vs. SPY Index (symbol: TVSPY)
- Citigroup (C) vs. Financial Sector (XLF) Index (symbol: CVXLF)
- Emerging Markets (EEM) Index vs. SPY Index (symbol: EVSPY)

For now, Sagi and Whaley see the relative performance indexes as providing an easy and low-cost way to execute what traditionally has been a cumbersome trade. But as these indexes become more widely used, the authors say, they could introduce entirely “new return/risk management strategies to the investment arsenal.”

For more about Whaley and Sagi, see page 34.

HEALTH CARE

Surgical Operations

Improving health care through operations management

WITH MILLIONS OF NEW PATIENTS COMING into the U.S. health care system over the next decade, the term “operations” is taking on a whole new meaning in America’s hospitals. Starting in the year 2014, as many as 32 million additional people will be covered by health insurance under the federal reform law passed last year. That additional demand comes at a time when medical facilities are struggling to reduce costs, improve safety and provide higher patient satisfaction.

To address these issues in the past, many health care facilities looked to manufacturing and its specialized prod-

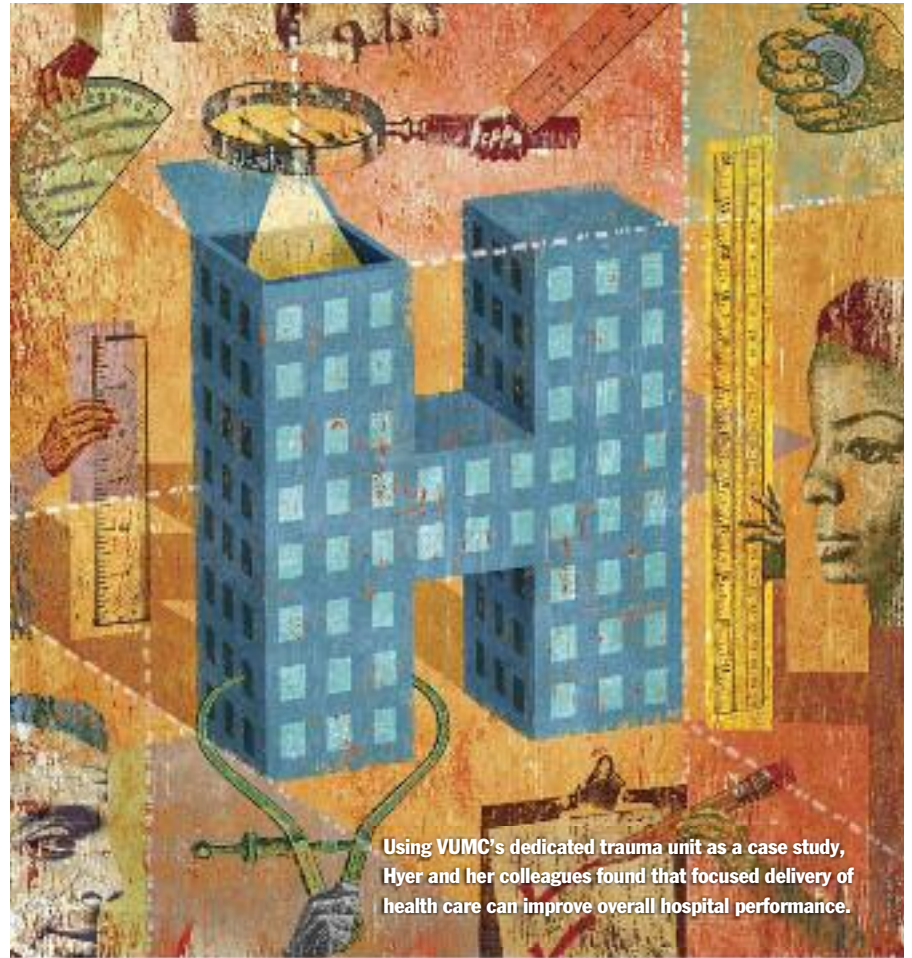


uct lines as a model for how to treat patients most efficiently and effectively. But little research has been done on how well these new “focused delivery” units have worked. To investigate this question, Nancy Lea Hyer, Associate Professor of Operations Management, turned to a dedicated trauma unit at Vanderbilt University Medical Center for answers. The case study was published in the *Journal of Operations Management* in 2009, and last year won that publication’s Best Paper Award.

“The following two questions were used to guide our research,” writes Hyer, who collaborated on the project with Dr. John A. Morris Jr., Professor of Surgery and Director of the Division of Trauma and Surgical Critical Care at Vanderbilt University Medical Center, and Professor Urban Wemmerlöv from the University of Wisconsin–Madison. “(1) How does the concept of focus, as it is used in connection with manufacturing plants, transfer to the context of a critical care hospital setting?, and (2) How does focus affect operational, clinical, and financial outcomes?”

Since 1987 the Medical Center has served as Middle Tennessee’s only Level I trauma center—meaning it is equipped to handle the most severely injured patients—within a 150 mile radius. By 1993 executives at the Medical Center authorized the creation of a separate \$5 million, 31-bed facility called the Vanderbilt Trauma Center. The dedicated facility opened in August 1998.

Administrators staffed the Trauma Center with a designated team of doctors, nurses, social workers, even security and cleaning personnel, and outfitted it with X-ray and lab equipment. Physicians work 12-hour shifts instead of the traditional 24-hour rotation, so they are in-house and immedi-



Using VUMC’s dedicated trauma unit as a case study, Hyer and her colleagues found that focused delivery of health care can improve overall hospital performance.

MICHAEL HOGUE, MCT

ately available during their time on duty. And the facility itself was designed with an open-bay concept to accommodate the center’s 14 intensive care unit beds. This layout permits cross-trained staff to assist each other as needed and makes it easy to rapidly reconfigure the unit to respond to changing circumstances, such as a sudden influx of critically injured patients.

Prior to the creation of the Trauma Center, patients were transferred from unit to unit throughout the hospital as their recovery progressed. In directing patient care, trauma physicians traveled all over the hospital seeing patients and interacting with a wide array of staff,

who cared for both trauma and non-trauma patients. In the new critical care facility, the dedicated staff delivers care in a single location and manages patient care through much, if not all, of the patient’s hospital stay. This has allowed the unit to develop and hone a specialized set of treatment protocols.

The Trauma Center also has its own financial director, who tracks physician and staff performance in much the same way a private company would. And to further differentiate themselves as an independent entity in the hospital, nurses and other staff wear distinctive black uniforms.

Did the measures work? To answer

that question, Hyer and her co-authors examined the dedicated center's length-of-stay, mortality rates and financial metrics. To compare before and after performance, researchers used data from 1996–1998, the two years before the separate Trauma Center opened, and from 2000–2002, which allowed for a period of adjustment.

The length of stay for patients treated in the dedicated trauma center declined by an average of 6.5 percent overall, and by 15 percent for those with more severe injuries. However, researchers detected no change in the mortality rate.

On the financial front, trauma care operations showed losses of \$2.2 million and \$1.75 million in 1996 and 1997, respectively. In 1998 the Trauma Center saw a small surplus of \$50,000. By 2000

managers that [Vanderbilt] discharged patients quicker, while charging comparatively less for its services, was both an affirmation that the focused hospital unit worked as intended and a sign that they needed to increase the charge levels and have [the Medical Center] translate these into better contracts with the payers," the authors write.

Looking into some of the reasons for the improved performance on length-of-stay and financial measurements, researchers found ways the staff became more efficient treating patients. For example, before the creation of a separate trauma center, tracheotomies (a common procedure for patients who may be on a ventilator for an extended time) had typically been performed in an operating room, where it took an average of 80 minutes' worth of physician time. In the new Trauma Center, doctors developed a bedside tracheotomy procedure, which takes only 15 minutes of a doctor's time and is just as safe as one performed in a fully equipped operating room. Whether done in an operating room or at the bedside, however, the high reimbursement rates are the same, allowing the Trauma Center to capture the financial gains.

The finding prompted the unit to redouble its efforts to charge procedures more accurately for reimbursement, and most important, not to overlook them as had sometimes been done when patients were shuttled between departments.

But the authors acknowledge that one case study is not enough to suggest a need for broader changes within the health care system. Further, they write

that nothing in their research suggests that the creation of a dedicated unit in itself is "a sufficient condition for success." Rather, such initiatives should be aligned with other changes to factors such as hospital infrastructure, management and culture.

Nevertheless the case does indicate a need to further explore reasons why a dedicated unit can help bolster hospital performance. "Hopefully," the authors write, "future studies will determine with greater precision what factors need to coexist with [focused hospital units] to create better performing health care delivery organizations."

FINANCE

Landslide Victories

Corporations win big with campaign donations

THE 2010 U.S. CONGRESSIONAL ELECTIONS saw an unprecedented boom in campaign spending—\$4 billion in all, with about \$1.12 billion coming in the form of individual contributions to candidates, according to the Center for Responsive Politics. While political pundits continue to debate what impact this money has on election outcomes, new research from the Owen School points to some clear winners: the individuals who donate and the corporations they support.

Using innovative techniques to match geographic areas that are most affected by government policy with "economically relevant" politicians, the husband-and-wife team of Alexei Ovtchinnikov, Assistant Professor of Finance, and Eva Pantaleoni, Researcher at the Vanderbilt Kennedy Center for Research on Human Development, analyzed nearly 5 million campaign dona-



Nancy Lea Hyer

and 2002, however, the independent trauma facility showed surpluses ranging from \$5.5 million to \$7.89 million. Calculated on a per-patient basis, the unit turned an average loss of \$578 per patient into a surplus of \$2,493 per patient. Researchers also found similarly positive results when comparing the unit's performance to benchmark peers.

"The discovery by the trauma unit's

tions between 1991 and 2008.

What they describe in a new research paper is strong evidence that individuals who make political donations—whether at the behest of firms or not—directly benefit companies in their communities.

“The reason we look at individual contributions is because it accounts for about two-thirds of all the money given directly to politicians,” Ovtchinnikov says, noting that only about 10 percent of firms are actively involved in campaign finance. “Individuals are the big players in this game.”

But it’s companies that are reaping the most recognizable benefits. Ovtchinnikov says firms located in areas that most intensely target “economically relevant” politicians see positive changes in return on asset (ROA) and market-to-book ratios. The bottom-line boost that comes from campaign donations is similar to investing in a new research-and-development or capital-expenditure project.

Further, the economic benefit to

firms strengthens when donations come from areas that have high unemployment rates—even if the politicians on the receiving end do not live in that district.

The new study also finds that political contributions flow disproportionately from companies’ home districts to key members of Congressional committees with jurisdiction over their industry. “What you’re seeing is an ability for people to reach politicians with dollars when they can’t reach them with votes,” Ovtchinnikov says.

The net result is that a significant amount of political donations come from narrow geographic clusters. Between 1991 and 2008, for example, three small areas around New York,



Alexei Ovtchinnikov



David Parsley

Chicago and Washington, D.C., accounted for 11.7 percent of all campaign contributions—\$425.9 million—even though they represented less than 2 percent of the population.

While the most recent study examined individual donations, a previous study by Ovtchinnikov and others published last year in *The Journal of Finance* shows a correlation between corporate political donations and higher stock returns.

“Our results ... suggest an extremely high rate of return for firms participating in the political contribution process,” Ovtchinnikov and his co-authors write. “Alternatively, it is possible that politicians find it most beneficial to grant favors to large firms because those are the firms that generate the largest amount of tax revenues and jobs.”

In a similar study, David Parsley, the E. Bronson Ingram Professor in Economics and Finance, has found that corporate lobbying is “positively related” to a firm’s financial performance. In that study—where the top five firms in the U.S. accounted for 42

Ovtchinnikov’s research shows that individuals who make political donations—whether at the behest of firms or not—directly benefit companies in their communities.



percent, or \$160 million, of the total amount spent on lobbying in 2005—Parsley says that portfolios of companies engaged in the most intense lobbying efforts significantly outperformed their benchmark peers.

“Firms in this category earned an excess return of 5.5 percent over the three years following portfolio formation, while the rest of the firms earned essentially a zero excess return,” Parsley and his co-authors write. They do note, however, that the study’s results indicate that the gains were achieved through defensive lobbying, suggesting that simply spending the most on lobbying does not necessarily lead to better financial performance.

For his part, Ovtchinnikov says these studies, by demonstrating that campaign and lobbying expenditures have positive effects on corporate performance, open up intriguing new lines of inquiry for researchers.

“We have shown that firms are benefiting,” he says. “Now we need to begin asking why they benefit.”

For more about Ovtchinnikov and Parsley, see pages 35 and 36.

STRATEGY

Going for It

Fourth-down decisions provide insight into risk taking

TRY ASKING ANY MONDAY MORNING QUARTERBACK about blown fourth-down play calls in the NFL and you are guaranteed passionate opinions. In most fourth-down plays, an NFL team will punt or try for a field goal. But occasionally teams decide to do something that is viewed as risky—attempt a fourth-down conversion, or “go for it.”

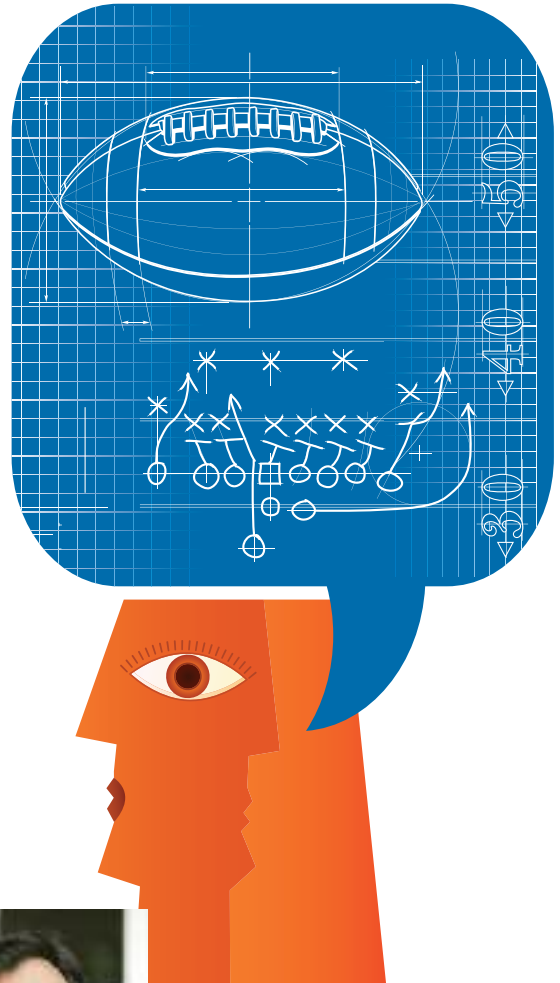
Associate Professor of Management Ranga Ramanujam, David Lehman from the National University of Singapore and other researchers studied 22,603 fourth-down decisions over five NFL seasons to understand when teams were more likely to attempt a seemingly risky fourth-down conversion. The goal is to apply this research to organizations. These findings are reported in a new study in *Organization Science*. The paper is titled “The Dynamics of the Performance-Risk Relationship within a Performance Period: The Moderating Role of Deadline Proximity.”

Ramanujam and his co-authors report that teams that were behind generally were more likely to go for it on fourth down. Also the more points behind they were, the more likely it was they would go for it. This effect became stronger as the game progressed. In other words, a trailing team was more likely to go for it later in the game rather than earlier in the game.

Interestingly this was only the case for teams trailing by a margin of about three touchdowns or less. Teams trailing by wider margins actually became less and less likely to go for it as the game progressed.

“The idea here is that as the deadline approaches, the time available begins to factor into the decision to try something different in response to underperformance,” Ramanujam says.

The results suggest that as the game clock runs down, teams within striking distance of their opponent grow more and



Ranga Ramanujam

Ramanujam and colleagues studied 22,603 fourth-down decisions over five NFL seasons to better understand risk-taking behaviors in business.

more eager to try risky plays that might help them win the game. However, teams outside that striking distance grow increasingly concerned with “saving face” or avoiding a risky move that might backfire and make them look stupid.



“We argue that this same tension between chasing organizational goals and avoiding reputational threats can help us understand risk-taking behaviors in other types of organizations,” Lehman says.

The goal of the study was to understand how risky organizational decisions might be shaped by performance feedback (i.e., the extent to which current performance is above or below the aspired level of performance) and deadline proximity (i.e., time remaining before an important deadline such as an earnings report date).

“We know that deadlines play an important role in organizational life. Part of what we’re trying to understand is how deadlines affect the well-known relationship between underperformance and risk taking,” Ramanujam says. “In other words, when are organizations more likely to deviate from routines? This is an important question for understanding a variety of important organizational outcomes such as innovation, change and fraud.”

Ramanujam, though, is quick to acknowledge that “although many managers have a natural talent for finding a football analogy for every business situation, football games are very different from the operations of business organizations. However, they are sufficiently similar in some key respects to make these findings potentially relevant to business organizations.”

For instance, fourth-down decisions typically are organizational decisions in that they are based on the inputs of various people on and off the field and are based on performance relative to a target and in reference to a deadline.

Ramanujam also notes that unlike prior studies that analyzed whether fourth-down conversions are as risky as they are made out to be, this study was

about understanding when teams were more likely to go for it.

“What is especially relevant to our study is that teams treat this as a non-routine choice,” Ramanujam says. “In more than 80 percent of fourth-down plays, the teams punted the ball.”

FINANCE

Smart Money

Making higher education more affordable for disadvantaged students

GENERATIONS OF MBA GRADUATES HAVE mastered pricing models designed to evaluate companies based on capital assets like equipment, land and raw materials. But as the world economy shifts to one that increasingly places a premium on brainpower instead of horsepower, there are few, if any, reliable methods for analyzing the financial value of human capital.

To help bridge that gap, Vanderbilt’s Financial Markets Research Center brought together researchers last October to look at the value and risk of human capital and how it affects a firm’s business and financial strategy. For the event’s organizer, Miguel Palacios, Assistant Professor of Finance, the pursuit of this new model is more than just an interesting theoretical exercise—it’s personal.

The Colombia native is co-founder of Lumni Inc., a Miami-based company that has developed investment products to help send promising students to school who otherwise would be shut out of higher education by soaring costs.

Operating in four countries, including the U.S., Lumni was cited by *Businessweek* in 2009 as one of America’s most promising social ventures. More recently *The Economist* highlighted the company in a piece about innovative new microfinance ventures designed to help students pay for higher education.

With co-founder and fellow Colombian Felipe Vergara, a former McKinsey consultant, Lumni has financed education opportunities for 1,800 students using more than \$10 million. The company raises money from investors such as the Inter-American Development Bank, foundations, universities and wealthy donors. Students commit to paying a fixed percentage of their income—never more than 15 percent—into a Lumni-created fund typically for five years after

graduation. In turn, that fund pays out proceeds to investors.

As *The Boston Globe* has described it, “These contracts, proponents say, would allow more kids to finish college. They would free graduates from crushing debt. And they could liberate youngsters to pursue socially valuable but low-paying work such as teaching.”

But it is not just save-the-world types who would benefit. Palacios and others point out that this model would also help fund the next generation of doctors and lawyers as a way to spread investor risk through a broad pool of students.

“The best analogy is insurance,” Palacios says. “Not everybody crashes. If you pool everybody together, you are in a much better position.”

The analogy may end there, however, for unlike insurance there is no set of



Miguel Palacios



IMAGEZOO, VEER

Lumni, a company that Palacios co-founded, has developed investment products to help more kids finish college and avoid crushing debt.

accepted standards for quantitatively measuring risk or reward when it comes to education. How, for example, does the value of human capital change when a person adds a medical degree versus a bachelor's in philosophy?

"This is the largest asset that most people have," says Palacios, who estimates that human capital accounts for about 90 percent of aggregate wealth.

Palacios says human capital poses a particular challenge for researchers because, while it represents the single largest asset class in the world's economy, one cannot directly observe its

value or dynamics. "We merely observe wages, human capital's dividends," Palacios wrote in a 2009 paper. "Thus, we need a framework to determine human capital's value."

Researchers continue to look for a breakthrough model in the field, and so far Palacios' work indicates that human capital is less prone to economic shocks than equities, bringing a new level of empirical rigor to academic colleagues and potential investors alike.

Yet there are other, more practical concerns for the student-investment concept beyond technical valuation, namely how

to guard against a student putting off a career because there is no pressure to repay loans. To address this, Lumni draws on psychologists to help screen its applicant pools and designs the student contracts in such a way as to deter abuse of the system.

There is also a risk that potentially high earners—medical school students, for example—would avoid signing up because they could end up paying out more to Lumni's investors than they would to a private student loan company. In such a case, the company offers better terms such as a lower percentage of income to be repaid.

Lumni is not the first company to attempt this invest-in-students model; its conceptual roots stretch back to the 1940s and 1950s when economist Milton Friedman first proposed the idea. More recently the companies MyRichUncle, a U.S. student financing company that is now out of business, and German-based CareerConcept, launched versions of the idea. MyRichUncle began experimenting with these types of student contracts in 2001. CareerConcept, however, has seen success since it began offering student investment funds in 2002. It has sent thousands of students to school across more than 20 countries, mostly in Europe, through eight funds totaling 40 million euros.

For now, Lumni is trying to establish itself in the Americas, with a goal of financing 1 million students over the next 12 years. Vergara told *Businessweek*, "My vision is to create a revolution in investing in human capital to show it's possible to receive an education despite low income." But companies like Lumni can only execute on that vision if they have the analytical tools being developed by Palacios and others to correctly value the contracts they sign. **VB**

For more about Palacios, see page 36.

The Journey No One Chooses

Navigating the blind turns of cancer treatment

By GARY SCUDDER

This article and the accompanying sidebars discuss cancer from the perspective of two patients—Professor Gary Scudder and alumnus Michael Oylar—and a caregiver, student Sarah Burfitt. All three express gratitude for the help and encouragement they have received from Owen’s close-knit community, and they hope their stories provide solace for others facing similar journeys.

IMAGINE GOING TO SEE YOUR DERMATOLOGIST and leaving her office knowing you have several swollen lymph nodes. That is exactly what happened to me in early August 2009. I was told “run, don’t walk” to my primary care physician, which I did—the dermatologist’s office even called to make sure I had followed their directions. My physician quickly ordered a CT scan, and it verified that my numerous swollen lymph nodes were likely a sign of some form of lymphoma. It actually took 20 more days until we had the final diagnosis: aggressive stage IV mantle cell non-Hodgkin’s lymphoma.

When any cancer is diagnosed, the words “stage IV” and “aggressive” are not what you want to hear and serve to raise anxiety levels to new highs. Immediately my mind jumped to scary questions like “How long do I have to live?” “Is this kind of cancer curable?” and so on. These questions and fears became an everyday part of my life for the next nine months.

At the beginning of September, my wife, Marti, and I met with our hematologist/oncologist at Vanderbilt University

Medical Center for the first time. He spent almost two hours explaining my particular disease and his treatment plan: six 21-day cycles of intense chemotherapy. In addition, at the end of these six treatments, I would be having a stem cell transplant, which would renew my immune system with cancer-free stem cells. My chemo regime showed great promise in clinical trials—which, incidentally, weren’t completed at the National Institutes for Health until last month.

During my first month of treatment, it was necessary to identify possible stem cell donors. If I was in total remission, I would be able to use my own stem cells, but if not, a matched donor would be necessary. Transplant recipients have a fatality rate of 15 percent or more, so this was a very anxious time for us. Both of my sisters were tested to see if either was a match and could be a donor. We were overjoyed when the call came that my younger sister was a perfect match! This was the first really encouraging piece of news on our journey.

Thankfully I was spared the extensive side effects of chemo during my treatments. I believe one of the major reasons why was prayer. Yes, I had to deal with low blood counts, increased risk of infection, fatigue and other issues. I also ended up in the hospital twice during my stem cell transplant, going in both times late at night for high fevers. But overall I had little nausea, and my symptoms were not as bad as they could have been.

My first post-chemo scans were not until Nov. 23, or 11 weeks after the start of my treatment. We teach Owen



JOE HOWELL



Professor Gary Scudder, who was diagnosed with aggressive stage IV mantle cell non-Hodgkin's lymphoma in August 2009, has been cancer-free for more than a year.

Many areas of my JOURNEY were filled with BLIND turns. I received FAVORABLE news at each turn, but that is not guaranteed.

students in our operations courses about managing waiting times and reducing anxiety, but I must admit it was very difficult to wait a week for the results. I felt like I had started a class, so to speak, when I was diagnosed back in August and there had been no feedback on my progress until those tests. It was as if all the weight was on the final exam.

On Nov. 30 we received news that most of my scans were clear, but there was one final result needed before I could be declared “squeaky clean.” My nurse practitioner had told me not to expect anything until the next day, but during her drive home she received the great news that my final scan was clean and called me from her car.

Having determined that I was in total remission, we proceeded with the stem cell collection and transplant. I was thankful that I was able to use my

own cells and not those of my sister. The transplant occurred in March after two more rounds of chemo and a final, more intense round to kill my existing immune system. This last one was the hardest to tolerate, but we knew it was necessary for my future health.

As I write this, I have been in remission for more than a year, but doctors do not use the term “cured” for this disease. I am instead “cancer-free” and taking little medicine—a miraculous outcome given where I started in August 2009. I finally came back to Owen full time at the start of the 2010–11 school year, after missing an entire year for my treatments.

Every type of cancer is treated with its own protocol, but the journey for every patient and caregiver has similar highs, and especially lows. The hardest part for me was waiting for and receiv-



Scudder with wife, Marti, at home

ing the initial diagnosis. Another low came when the doctor told me about the treatment. I had gone into the meeting with expectations of spending one day every three or four weeks receiving chemo (very typical for lymphoma patients), not four days in the hospital

In the Rearview Mirror

By Michael Oyler

Upon graduating from Owen last May, my main concern for the next year was to get my career on track after two years of school. This all changed in July when I found a lump on my right thigh. Over the next few weeks as I shuffled around for a variety of tests, I never thought that the worst case scenario would unfold. Then on Aug. 9 I was officially diagnosed with synovial sarcoma, one of the rarest forms of cancer.

As a healthy and active 28-year-old, I couldn't help but wonder how this

happened to me. Instead of sitting around and asking that question over and over again, I knew I had to get my mind and body prepared to face a grueling treatment regime. I started my first of six chemotherapy treatments over Labor Day weekend, and I finished my last cycle just before Christmas. Spending five days at a time in the hospital was difficult, but definitely made easier by having an amazing network of family, friends, and coworkers at The Home Depot.

Although I am technically a third of the way done with treatment (radia-

tion therapy and surgery are next), I feel like I am further along now that chemo is in the rearview mirror. So far I have responded incredibly to the treatment, and I am confident this will result in long-term remission. When the one-year anniversary of my Owen graduation rolls around, I hope to be cancer-free and living a normal life, now knowing I can overcome any obstacle.

Owen alumnus Michael Oyler, MBA'10, is an executive with the Home Depot in Atlanta.

every three weeks. It also took a major change of mindset to adjust to the length of the treatment. There is no such thing as instant gratification when you get chemo—you can't pay for a next-day cure!

How did I cope throughout the process? It took a lot of support of family, friends, our church, colleagues and the medical community. In particular, my wife and I relied on our Christian faith and took solace in the stories of the many folks who had taken this journey before us.

We want to thank everyone for the outpouring of love we have received. Many of you visited me while I was in the hospital, sent notes through Caring-Bridge, mailed cards, gave me rides to my semiweekly appointments, and brought us wonderful meals. We were well cared for by the Owen community,

I felt like I had started a class when I was diagnosed and there had been no feedback on my progress until those [post-chemo scans].

It was as if all the weight was on the final exam. — Gary Scudder

including current and past students, faculty and staff. Alums visited from as far away as California and Montana. Another alum sent me a hat to cover my bald head. (Speaking of bald heads, it has been interesting to observe how many men starting chemo are really concerned about losing their hair!)

In addition, I would be remiss not to express our overwhelming gratitude to the Vanderbilt nursing staff on 11 North, and my nurses and doctors in the hematology and stem cell transplant clinic. My care was exceptional!

Finally a special thanks is due to Dean Jim Bradford for his continuous support during this trying season of our lives. He kept me updated on major

initiatives during the year, so when I returned to the faculty full time in June 2010, I was still knowledgeable about various aspects of the school.

A fellow mantle cell “journeyer” once wrote to me about blind turns in the cancer treatment process—we know the turns are coming but have no foreknowledge of what is around the corner. Hebrews 11:1 says, “Now faith is being sure of what we hope for and certain of what we do not see.” The first set of scans, the results of the stem cell donor testing, my semiweekly blood tests, my reactions to my treatments—many areas of our journey were filled with these blind turns. We received favorable news at each turn, but that is not guaranteed.

Trials like this change one's perspectives on what is important in life. People become more important, daily tasks

much less so. Trials are used to strengthen us for future trials and enable us to assist others who are suffering. My wife and I are already reaching out to several others making this journey (including Michael and Sarah, who wrote the accompanying sidebars). Please continue to keep us in your thoughts and prayers in the coming months as we pray for a durable remission—one that lasts five, 10 or even 20 years!

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Gary Scudder is the Justin Potter Professor of Operations Management and the Faculty Director of International Programs.

Caring for the Caregiver

By Sarah Burfitt

As a nurse, I never fully appreciated the toll an illness takes on the caregiver. My journey began in August 2009 while helping my boyfriend deal with unrelenting dizziness. In 72 hours our world turned upside down when an MRI showed that a 3.5-centimeter medulloblastoma, a cancerous brain tumor, was causing dangerous pressure to build inside his head. It needed to be removed the next day. After a brilliant surgery by Dr. Reid Thompson at Vanderbilt University Medical Center, we had little time to catch our breath before six weeks of radiation needed to begin. After that, he was to have a year of chemotherapy.

It all seemed very achievable, but sadly he lost his battle with cancer in February.

As I look back on the past 18 months, it is miraculous that we were able to keep going. I recall lots of waiting and constant fear—waiting for the results of the latest MRI, fear that the new symptom may be the worst. My days filled quickly with trips to his home between classes to be sure that he had taken his medicines, eaten or was just simply OK. As a caregiver and full-time student, I realized a new level of exhaustion that was worse than any finals week I had previously encountered.

As with many patients, the blessing for my boyfriend was that he never fully remembered the surgery or the horrible post-radiation nausea. But as the caregiver, you never forget. I have learned many valuable lessons during this journey, but the most important lesson was to never forget how essential, or overwhelmed, the caregiver is during the tough battle with cancer.

Sarah Burfitt, MSN'07, is an MBA candidate for 2011.

Three Stories about the Owen School's Positive Social Impact around the Globe

By JENNIFER JOHNSTON

Weaving a Path to a Better Life

AFTER MANY HOURS OF TRAVEL DOWN a long dirt road, Paul Dent, MBA'10, arrived at a secluded ranch scattered with rustic, wooden outbuildings. It may sound like the beginnings of a Western novel, but the setting, in fact, was one of the poorest regions of Cambodia. Instead of cattle roping or sheepherding, the occupants were busily working at looms, manufacturing beautiful silk scarves.

Last summer Dent rolled up his sleeves and applied his freshly minted marketing skills by helping the founders of the Stung Treng Women's Development Center (SWDC) expand their vision of providing employment, training and education to women in the region. Proceeds from the silk scarves,

which are woven by the women and sold in regional gift shops and at www.blue-silk.org under the Mekong Blue brand, benefit the center.

"My goal was to help them create a plan for sustainability with the hope of decreasing their reliance on outside funding in the near future," says Dent, whose work was directed and funded by the Allen Foundation, which for years has been actively supporting the SWDC in its goal to achieve sustainability. Dent's result was a 20-page marketing report detailing some of his findings.

"This was a great exercise in thinking back to the basics of marketing," he says.



Weavers at the SWDC in Cambodia

"We were working from a very basic marketing level, asking how we get people interested in hands-on, real-time opportunities with a small business that is making a difference in so many lives."

Dent was struck by the poverty and isolation of the embattled Stung Treng region in the country's northeast corner, where a majority of the residents are sustenance farmers. Such enterprise as that taking place at the women's center might have resulted in persecution from the oppressive Khmer Rouge regime that occupied Cambodia just a few decades earlier.

"This center was developed to provide a source of income, training and livelihood for the women. Unfortunately they might otherwise turn to the sex trade, which is pretty prevalent there," he says. "This gives them a fair trade, a way to learn a valuable skill and also provides housing, health and other services they need, as well as education for their children."

Dent was engaged in the work in



Paul Dent, pictured with Mekong Blue scarves at St. David's Episcopal Church, spent last summer in Cambodia assisting the Stung Treng Women's Development Center with its business plan.

Cambodia by the Rev. Ann Walling of Franklin, Tenn., whose family founded the Allen Foundation. In 2009 Walling established a highly successful Internet presence for the sale of Mekong Blue scarves with the support of St. David's Episcopal Church in Nashville. The Owen School entered the picture shortly after when Walling contracted with Amy Seigenthaler Pierce, President of Seigenthaler Public Relations, to boost public relations efforts for Mekong Blue. Pierce is the wife of Tim Pierce, a Director within the Vanderbilt Executive Development Institute, who put out the word that Walling was seeking to hire an Owen graduate to assist the SWDC.

Once in Cambodia, Dent focused on the potential of expanding the company's presence locally, particularly in Phnom Penh, the home of Mekong Blue's flagship store. He suggested making the scarves available in more stores and actively interacting with managers and owners of shops to generate interest in selling the scarves. A shop clerk he identified also offered to help with distribution efforts.

With increasing numbers of tourists visiting the capital and nearby shrines, such as the Angkor Wat temples in Siem Reap, Dent felt the touching story of Mekong Blue would resonate with travelers. He encouraged founders Nguon Chantha and Kim Dara Chan, who built much of the SWDC complex with their own hands, to reach out to travel agents and guides who might bring tourists to the stores or to the production facility.

Dent detailed numerous other suggestions in his report and left Cambodia with a sense that he was able to make an immediate contribution. "It was a great opportunity," he says, "to put some of the things I learned at Owen into practice right away."



Jim Bryson, pictured here at 20/20 Research in Nashville, started the Joseph School to provide leadership training to orphans in Haiti.

Leadership amid the Ruins

The moment in 1994 when Jim Bryson, MBA'85, and his wife, Carol, pulled away from a state-run orphanage in Russia with three adopted children in their laps was both joyful and sad. They had become parents at last, but 20 more orphans stood watching from the steps as they pulled away.

"We wished we could take them all," he says.

During the next 15 years, as the family grew to four children, Bryson continued to build 20/20 Research, the qualitative research firm he had founded in 1986, with offices in Nashville, Miami and Charlotte, N.C. He even served four years as a state senator and was his party's nominee for Tennessee governor in 2006. But

he never forgot the orphans left behind.

On Jan. 12, 2010, as a 7.0 magnitude earthquake pummeled the island of Haiti, Bryson found himself profoundly moved by the plight of its people. A visit to Haiti four months later provided images he could not shake, especially the number of young teenage orphans who ended up on the street with no education and nowhere to go. Bryson saw a nation in desperate need of rebuilding and leadership.

"I began to put these two problems together: There's a real orphan crisis and there are not enough leaders in the country, and that's when I had a vision for a concept where we'd build a school for older orphans," he says. A return visit last summer cemented an

ambitious plan—to transform a national crisis into a leadership opportunity by founding a boarding school for secondary education.

According to his vision, the Joseph School, as it has become known, will offer academics, leadership training and service training. The school is named for the biblical figure in Genesis who was separated from his family because of his brothers' deception, rose to a leadership role in the pharaoh's government, and later saved his family and his country from famine through his vision and adept leadership.

The school will partner with an educational institution to choose curriculum and devise admissions testing procedures for talented students. Included in that curriculum will be Haitian cultural arts and history. "We will also have classes in English and French because immersion is crucial to these students being able to function in

government and the wider world," Bryson adds. "However, we will not abandon their native Creole as it is the language of the Haitian people."

The Joseph School received an initial \$20,000 startup grant from the Retail Orphan Initiative, a charitable foundation that aims to raise awareness and provide solutions for orphans worldwide. The school's interim director, who has experience building a school in another third-world country, has begun researching and identifying best educational practices for Haiti.

Bryson says attorneys have volunteered legal help to get the necessary paperwork in order for the next steps, including identifying a site and beginning construction. "The concept of helping orphans get an education and take on leadership roles resonates with people," he says. "I'm finding there's a lot of interest in the business community. Business leaders know the value of leadership."

Bryson hopes the school will ultimately help empower the people of Haiti to rebuild their nation while addressing other pressing social problems. "We want to help give them the resources to equip them to solve their own problems," he says.

For more information, go to www.thejosephschool.org.

A Lesson in Sustainability

In 2006, 11 Vanderbilt MBA students used C.K. Prahalad's book *The Fortune at the Bottom of the Pyramid* as the basis to form an organization dedicated to addressing global poverty through education, collaboration and action. Since then, the group known as Project Pyramid has grown steadily thanks in large part to the support of Cal Turner Jr., BA'62, retired Chair and CEO of Dollar General Corp.

Today there is a Project Pyramid course at Owen taught by Bart Victor, the Cal Turner Professor of Moral Leadership, that is open to students across the university. One component of this course is a spring break trip where learned principles and practices are put into action to tackle problems of poverty.

Previous spring break projects focused on developing nations in Asia, such as Bangladesh, but in 2010 the group decided to build upon Vanderbilt's already strong connections in Guatemala, where the university has a significant number of health, development and archaeological projects.

More than 25 students returned to



A Port-au-Prince neighborhood in ruins after the 2010 earthquake

SAMUEL FRANK

Guatemala in March 2011, dividing into several faculty-led teams focused on issues from microfinance lending to creating marketing plans for nonprofits. Among these teams was a group of Owen students working with Clinical Professor of Management Jim Schorr to investigate microlending opportunities for housing in Guatemala City. The Nashville-based Shalom Foundation had been building houses in the Las Conchas community on the outskirts of the city for several years but was seeking help to find ways to finance an expansion of the program.

In Las Conchas, 800 families live on dirt floors in makeshift homes strung together with sheets of corrugated metal. Schorr's group learned that with a \$4,000 loan a family could build a more substantial home on the same land. A community assessment conducted by some of the students in 2010 revealed that many families could afford such a

home with financing help. The students then set out to find a community-minded microlender. After several meetings the Las Conchas team received strong interest from Genesis Empresarial, Guatemala's leading microfinance institution. This year another group of Project Pyramid students returned to further this initial progress.

The students have learned that the key is to empower local communities. MBA candidate for 2012 Samuel Frank, a project leader who also has traveled and worked with nonprofits in Bolivia, says many such organizations face similar challenges.

"These nonprofit groups are led by passionate people doing incredible



Makeshift houses in Las Conchas

work," Frank says. "The challenge is finding a way to expand these education, health and social programs in a way that is sustainably funded and doesn't breed dependence. It is relatively easy to do something for someone. It is much more challenging to develop those skills and expertise locally so progress continues long after you leave."

Ted Fischer, Professor of Anthropology and Director of the Center for Latin American Studies (CLAS), helped the team identify projects and work out the complicated logistics for the trip. CLAS coordinates a number of projects in Guatemala in conjunction with the Monroe Carell Jr. Children's Hospital at Vanderbilt, the School of Medicine, the School of Engineering and the Vanderbilt Institute for Global Health.

"The Project Pyramid program is unique in providing business and other professional students the opportunity to gain valuable hands-on international experience while giving back to the communities in which they work," Fischer says. "All of the Project Pyramid programs are oriented toward sustainability. This is truly doing well in scholarly pursuits while doing good." **VB**

JOE HOWELL



Samuel Frank, an MBA candidate for 2012, is working through Project Pyramid to explore microlending opportunities for housing in Guatemala.

Big on Japan

Global Business Association trip makes a lasting impression

By KELLY LEO

Editor's Note: *The thoughts and concerns of the Owen community are with our alumni and students affected by the earthquake and tsunami that devastated much of Japan in March.*

THE GLOBAL BUSINESS ASSOCIATION (GBA) and Japanese Business Club (JBC) joined efforts last October to send 34 students, Dean Jim Bradford and David Parsley, the E. Bronson Ingram Professor in Economics and Finance, on an excursion through Japan as part of the GBA's third annual fall break trip. The purpose of these trips is to educate the Owen community about global business through internationally focused academic and cultural activities. In our case, we learned about Japan's economy, primary industries, culture and business customs.

Taking 36 people through four cities over an eight-day period can be a daunting task, but my fellow organizers and I were up for the challenge. Amrita Dutta-Gupta, BA'03, Dwyla Beard and I helped coordi-

nate the trip for the GBA. The JBC organizers were Toshinao Endo, Hiromasa Shimomoto and Hideaki Suga. All six of us are in the MBA Class of 2011.

"One of the most educational and fun aspects of organizing the Japan trip was working with the Japanese Business Club," says Dutta-Gupta, who serves as President of the GBA. "Through the planning process, which included weekly meetings and innumerable emails over six months, we were able to form stronger friendships, which will endure beyond our experience at Owen."

TRAVELOGUE

Preparations

Prior to the trip, all participants were provided an overview of the business and cul-



The GBA group with alumnus Tadaaki Yamaguchi at JFE Steel in Tokyo

HIROMASA SHIMOMOTO

tural customs of Japan. Heiki Miki, MBA'96, Section Manager of Line Pipe Export at JFE Steel and a member of Owen's Alumni Board, educated participants about common language terms and proper business etiquette.

Day 1: Tokyo

The first company we visited was Microsoft, where we learned about the customization and localization of its products for the Japanese market. In the afternoon we traveled to JFE Steel. Tadaaki Yamaguchi, MBA'02, provided us with direct exposure to the entire steel manufacturing process, including raw materials procurement, the creation of pig iron in a 2,192-degree blast furnace, and the final rolling of high-performance steel sheets.

Day 2: Tokyo

We toured several Tokyo sites, including the Meiji Jingu shrine, the Imperial Palace, the Asakusa Kannon temple and the Nakamise shopping arcade. That evening we participated in an *izakaya* party. An *izakaya* is a drinking establishment that offers a variety of small dishes, which are shared by all at the table.

Day 3: Kyoto

We traveled to Kyoto via bullet train (*Shinkansen*), which can go upwards of 187 mph. Upon arrival we visited the Kinkaku-ji and Kiyomizu-dera temples. We also viewed a kimono fashion show at the Nishijin Textile Center, which had beautiful silk textiles on display. In the evening a few of us experienced traditional Japanese entertainment performed by geisha (called *maiko* in Kyoto), ate delicious local cuisine and played drinking games while in the *maiko's* company.



Kelly Leo with Dean Bradford and Keith Whitman in Hakone

Day 4: Kyoto, Osaka, Kobe and Hiroshima

While half the group stayed in Kyoto or ventured to nearby Osaka and Kobe, the other half took the bullet train to Hiroshima. I opted for the latter, and it was one of the most powerful experiences of my life. We toured the city with two atomic bomb survivors who have learned English in their old age to tell their stories of what happened on Aug. 6, 1945, and in the months that followed. This spurred a thought-provoking discussion about World War II among our group.

Following Hiroshima, we ferried to an island called Miyajima to see the Itsukushima shrine and its famous *torii*, or gate. One of the unique things about the island is that its wild deer are accustomed to people and wander around the tourist sites. At one point we literally walked side by side with a baby fawn and its mother. The experience was quite serene—the perfect epilogue to Hiroshima.

Day 5: Kyoto, Kameyama and Hakone

This was the busiest day of the trip. Before departing Kyoto we visited Gekkeikan, the largest sake producer in the world, and learned about its manufac-



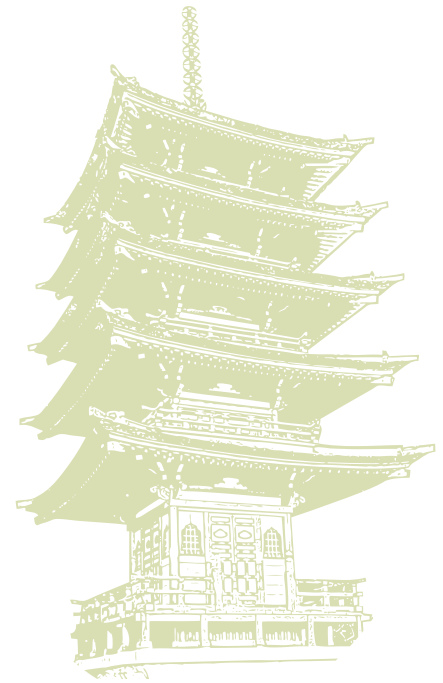
The Genbaku Dome, now part of the Hiroshima Peace Memorial, was one of the few buildings left standing after the atomic explosion in 1945.

turing process. Elizabeth Childs, an MBA candidate for 2011, says, “The highlight for me was being able to stand on top of a silo holding 111,000 gallons of sake. That was incredible!”

In the afternoon we headed to the Sharp Electronics factory in Kameyama, where impressive LCD, 3-D and Quatron technology was on display. Sharp also impressed us with its CSR (corporate social responsibility), highlighting the use of solar panels to provide energy to both the factory and the adjacent town.

We finished the day in Hakone, where the highlights were participating in a traditional *enkai* (Japanese-style banquet), visiting an *onsen* (natural hot springs) and singing karaoke with Dean Bradford!

From left, MBA candidates Stephanie Kaye Ramirez, Amrita Dutta-Gupta, Kimberly “KJ” Johns and Cindy Yeo at the Tsukiji Market in Tokyo



ALBERTCILL, ISTOCKPHOTO

Day 6: Gotemba and Tokyo

Leaving Hakone, we visited Terumo, a prestigious medical device company in Gotemba. The company’s facilities serve not only as corporate headquarters but also as a research-and-development and training center, which includes a mock hospital. Shigeru Aono, MBA’05, who is Manager of the Oncology Business Unit at Novartis Pharma K.K., joined the group for a tour of this impressive facility.

After a long day of travel, most of the group spent the evening navigating the Tokyo subway system to find last-minute souvenirs or catch a glimpse of the night skyline from the Toyko Tower. I opted for a neon-filled stroll with my husband, Keith Whitman, BS’03, a fellow MBA candidate for 2011. We walked through the Akihabara neighborhood, popularly known as “Electric Town,” where most of Tokyo’s young go to play video games or shop for the newest electronics.

Day 7: Tokyo

Bright and early at 4:45 a.m., the group traveled via taxi to the Tsukiji Market, one of the largest fish markets in the

STEPHANIE KAYE RAMIREZ

world, where we witnessed a live tuna auction. Flash-frozen tuna from the prior day were sold for \$5,000–\$30,000 each and distributed to local restaurants and markets worldwide.

Smelling like fish, we then headed to Kirin Beverage Co., where Yuichi Yamada, MBA'07, and Tomoaki Asanuma, MBA'07, provided an in-depth presentation about the soft drink, bottled water, juice and tea market in Japan, where Kirin is the market leader. Their presentation would have made Owen's marketing and strategy faculty quite proud.

We finished the day by traveling to Nissan's headquarters, where we received an overview of its new electric car, the LEAF, and a private showing of all the vehicles on the floor. Later that evening, Dean Bradford hosted an alumni dinner with help from Kazuaki Osumi, MBA'05. All of the trip participants and alumni in the area were invited. The 15 alumni who attended said they longed to visit Nashville and Owen again. We hope they can make it back soon!

Day 8: Tokyo

On our final day, we visited SECOM, a pioneer in Japan's security services market. Hideki Hirazawa, MBA'00, Director of the IT/Health Care Division at SECOM, and his team discussed what they are doing in the health care space and spoke about the various health care challenges in Japan. It was quite a relevant and fascinating presentation given the current debate over health care reform in the United States. After leaving SECOM, we then toured the Tokyo Stock Exchange, where we learned about its modernization, trading trends, main players and derivatives market.



An evening with the *maiko* in Kyoto

We are extremely grateful for the insight, assistance, dedication and translating abilities of the three aforementioned JBC organizers (Endo, Shimomoto and Suga) who worked tirelessly throughout the eight days to ensure an educational, welcoming and never-to-be-forgotten experience.

Additionally, this trip would not have been possible without the efforts of our alumni. "They were extremely excited about our visit to Japan," Dwyla Beard says, "and they supported us by opening the doors of their companies for our visits. Although Vanderbilt is located in the U.S., the Japanese alumni reminded me that Owen alumni are exhibiting leadership all over the world."

Arigato gozaimasu, Japan!

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KELLY LEO, BS'03, is an MBA candidate for 2011 and the Vice President of Owen Bridges within the Global Business Association. Owen Bridges helps international students acclimate to Owen and the Nashville community through one-on-one mentorships and group activities. **VB**



From left, MBA candidates Toshinao Endo, Hideaki Suga and Hiromasa Shimomoto at the Tokyo Stock Exchange



The Necessary SPARK

Creating opportunities for entrepreneurs
in Middle Tennessee and beyond

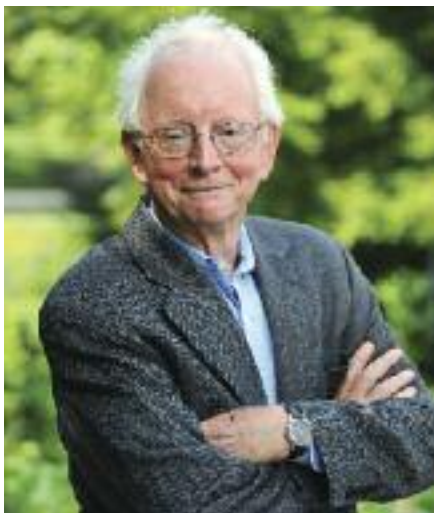
By AARON DALTON

In chemistry, if you want to get a reaction, you have to find a way to bring the right molecules together and have them bump into each other with sufficient force. Sometimes you need a catalyst to get things started.

It turns out that the process of encouraging entrepreneurship is remarkably similar, according to Germain Böer, Professor of Accounting and Director of the Owen Entrepreneurship Center. “One of the best ways to stimulate a lot of entrepreneurial activity is to create occasions for entrepreneurs to bump into one another,” says Böer.

These days entrepreneurs in Middle Tennessee have lots of opportunities to rub elbows, thanks to Vanderbilt and its collaborations with two local organizations: the Nashville Capital Network (NCN) and the Nashville Entrepreneur Center (NEC). NCN supports entrepreneurs and startup companies by providing feedback on business plans and assistance with raising capital. NEC, on the other hand, is a 501(c)(3) public-private partnership that gives its members access to training classes, mentoring resources and networking events.

In addition to the school’s own classroom offerings and funding opportunities, Owen students can get a taste for entrepreneurship by participating in internship programs at both organizations. These internships give them direct exposure to the process of refining a business plan, securing financing and getting a new venture off the ground. Meanwhile the organizations (and entrepreneurs they serve) benefit from the intelligence and



Germain Böer

enthusiasm that the students bring to analyzing business plans and improving presentations or pitch materials. In sum, it is a winning formula for everyone involved, and at the center of the equation is the Owen School, providing just the right catalyst to spark business growth in Middle Tennessee and beyond.

NCN: Matching Entrepreneurs with Angels

Getting a business off the ground is always a challenge, particularly for first-time entrepreneurs without the network or connections to raise capital. That is where NCN comes into play. Started as a joint initiative between private investors and the Owen School, NCN maintains close ties with Vanderbilt. Its Executive Director Sid Chambless, BA’96, MBA’03, and Director Chase Perry, MBA’08, are both Owen alumni. Dean Jim Bradford and Professor Böer sit on its board of directors.

NCN has an interesting hybrid structure. The organization is structured as a taxable nonprofit but also manages two venture capital funds: NCN Angel Fund and a TNInvestco Tennessee Angel Fund. The first fund pools the resources of angel investors who also invest individually in NCN-supported companies. The second fund represents the proceeds from \$20 million in tax credits that NCN accessed through Tennessee’s competitive TNInvestco program, which seeks to foster entrepreneurial “innovation clusters” across the state by awarding tax credits to a select group of venture capital funds. In addition to the economic development benefits, the state also shares any profits from TNInvestco investments.

To ensure that worthy entrepreneurs have access to an enthusiastic network of angel investors, NCN must provide those

angel investors with high-quality, well-vetted investment opportunities. Interning as NCN associates, Owen students work with entrepreneurs to refine their presentations and clean up their business plans. The interns also participate in meetings where experienced local advisers give the entrepreneurs feedback on their ideas. Meanwhile, on the other side of the deal, the students provide deal context and analysis to help angel investors assess the quality of a potential investment. Since its founding in 2003, NCN has helped 23 early-stage companies secure financing,



Alumni Chase Perry (left) and Sid Chambless direct the Nashville Capital Network, which supports entrepreneurs by providing feedback on business plans and assistance with raising capital.

with NCN angel investors providing more than \$20 million in funding.

Chambless credits Professor Böer and Dean Bradford with forging a strong partnership between NCN and Vanderbilt. “For Owen students who may want to start their own businesses, an NCN internship provides a great opportunity to learn all about the process of capitalizing and growing a business,” Chambless says. “The real benefit for students is to be in the room with entrepreneurs as they pitch to investors, to see the kinds of questions that investors ask. I really think this program is one of a kind in the way it enables business school students to work on live

SUSAN URMAY

JOHN RUSSELL

venture capital funds and influence the deployment of those funds while simultaneously working with entrepreneurs in the community.”

NEC: Students in the StartUp Studio

Founded in fall 2009, NEC has met with more than 150 companies and helped 13 of them raise \$3 million in angel financing. Four of those companies have since officially launched their businesses.

“That’s a pretty good hit rate,” says NEC President and CEO Michael Burcham, who has firsthand entrepreneurial experience himself. Burcham founded three separate venture-backed health care companies before taking on the leadership role at NEC. Burcham also serves as Clinical Professor of Entrepreneurship at Owen, teaching classes about health care innovation and launching ventures.

From formal internships and independent study programs to extracurricular volunteer projects, Owen students are involved at NEC in numerous ways. As part of its mission to promote entrepreneurship and economic growth in Middle Tennessee, NEC evaluates new business ideas and offers a series of popular classes and coaching sessions on basic topics, including starting a business, raising capital and building a leadership team. Students assist with these services by organizing classes, delivering training, assessing business plans and offering feedback.

Burcham says there are typically several Owen students working at any one time with the entrepreneurs in NEC’s StartUp Studio incubator space. This temporary work arrangement gives the highest-paying members a business address, access to meeting rooms and classrooms, and face-to-face time with mentors. Students



Michael Burcham

DEAN DIXON

THE ENTREPRENEURIAL SPIRIT

Dean Jim Bradford believes an Owen education is about not only learning the fundamentals of running a business but also using that knowledge to bring goods or services to the marketplace in a unique way. “The entrepreneurial mindset provides a meaningful framework for identifying and addressing market needs,” Bradford says.

Informal polls of incoming Owen students suggest that more than 30 percent of them want to start and build their own companies to perpetuate the business ideas and opportunities they identify. Bradford, though, points out that plenty of students who enter business school planning to go straight into corporate jobs will discover some entrepreneurial passion along the way. That is why Owen gives every student a chance to gain some entrepreneurial experience, particularly through the school’s participation in business case competitions.

“The skills honed in these competitions are the same skills that entrepreneurs need to sell their ideas to investors while seeking capital,” Bradford says.

It also turns out those skills are just as valuable to large established corporations as they are to startups. Bradford says Owen students are well served to embrace the entrepreneurial opportunities presented them, regardless of their chosen career paths.

“When I talk to senior executives at *Fortune* 100 companies like Exxon Mobil, Bank of America or Apple,” he says, “they tell me how much they admire the entrepreneurial spirit, how they try to generate and encourage entrepreneurial activity inside their companies.”

also help organize and run NEC’s technology microfund, which invested in seven new technology startups in 2010, including a company founded by Mark Harris, BS’03, PhD’09, an MBA candidate for 2011.

“A lot of these students either want to work in a startup company or have some interest in moving into investment banking or venture capital,” Burcham says. “By working with NEC, the students gain valuable experience that can give them a competitive advantage when they graduate.”

Learning Entrepreneurship in the Classroom—and Beyond

“Our goal in teaching entrepreneurship is to create wealth in the region,” Germain Böer says. “We want to help lots of startups and ultimately create a lot of very successful companies.” In the Vanderbilt MBA program, a lot of this learning takes place inside the classroom in courses such

as Launching the Venture, Business Plan Development, Product Design & Innovation, and Accounting & Finance for Entrepreneurs.

Many Owen students, however, learn just as much if not more about entrepreneurship through the aforementioned internships with NCN and NEC. The school also offers its own Summer Enterprise Development internship program. Instead of taking a typical internship in a corporate environment, students can apply to receive a stipend of \$15,000 to work on their own startup ventures during the summer between the first and second years of their studies.

Henry Oehmig, an MBA candidate for 2011, was one of three Owen students to receive a stipend last summer. He entered the process with a business plan for an environmentally friendly charcoal lighter fluid made from recycled restaurant grease. Oehmig had been thinking about

building a business around a green lighter fluid product for a couple of years, but the Walmart Better Living Business Plan Challenge provided the impetus to build a true business plan around the idea. The annual competition encourages students to invent sustainable products or develop sustainable business solutions and present them to a panel of Walmart executives, suppliers and environmental organizations. The plan developed by Oehmig, fellow 2011 classmate Ian Prunty and three other Owen students won the regional level of the 2010 competition and made it to the national semifinals at Walmart's headquarters.

After the competition, the other students peeled off to pursue their own summer plans, but Oehmig felt the lighter fluid idea had potential, so he revised the business plan and prepared to make his pitch to the panel of Owen professors, alumni and local businesspeople, including investment bankers and marketing analysts, who were awarding the summer stipends.

"The application process was a great learning experience," Oehmig says. "Going through the process of pitching our businesses and trying to convince potential investors gave all the applicants a taste of what it is really like to try to raise money when starting a business. There was a lot of camaraderie among all the students who were pitching business plans, and I really enjoyed hearing the other pitches."

A couple of days later Oehmig was thrilled to learn that he had been awarded one of the stipends. "If you have a business idea that really excites you, there's no better situation than to be given \$15,000 in seed capital without having to give up any ownership stake in the company," he says. "As a student, it's



Henry Oehmig, an MBA candidate for 2011, used his summer stipend to develop a business plan for an environmentally friendly charcoal lighter fluid.

terrific because it really gives you a chance to practice entrepreneurship with a safety net in place. If the business does not work out as you'd hoped, you can still go back to your second year of business school with valuable skills and experience, plus a great story to tell recruiters."

Of course having that safety net did not mean that Oehmig rested on his laurels. To the contrary, Oehmig dove wholeheartedly into making his business a success. He ended up plowing all of the stipend into the venture and then even supplemented it with his own personal funds. During the course of the summer, his vision for the business evolved. Where Oehmig had originally planned on setting up his own manufacturing facility to create the lighter fluid, his talks with biodiesel marketers and manufacturers convinced him that he could launch his venture more quickly and more cost-effectively by outsourcing manufacturing to third-party manufacturers.

His biggest change in direction, however, came when Germain Böer introduced Oehmig to Nashville-based consultant Rick Neitz, who suggested that Oehmig consider licensing the intellectual property behind the product rather than attempting to produce and market the product on his own. For Oehmig, who had a provisional patent on a green lighter fluid formula, the licensing idea had several attractions: He could launch his product faster with less upfront capital and earn revenue from sales royalties. When Oehmig saw that Clorox, which dominates the lighter fluid market through its Kingsford brand, was soliciting ideas for an eco-friendly lighter fluid, he made the decision to pursue the licensing route.

The bulk of the stipend money went toward hiring a professional chemical development lab that could formulate a biodiesel product that closely matched Clorox's environmental and performance considerations. Although the product formulation was originally supposed to take only six weeks, it ended up lasting more than four months, teaching Oehmig a valuable lesson that product development can take longer than anticipated.

With the product in hand at the end of November, Oehmig has since been in serious discussions with representatives of Clorox and the senior management of other manufacturers. He recognizes that the success of his company will ultimately hinge on whether he can land a licensing deal. "If it doesn't work out, I'm definitely interested in working with venture capital or private equity firms on investing in early-stage companies," says Oehmig, who recently interned with Nashville-based venture firm Mountain Group Capital. "I also think I would really enjoy working for a startup company, but a venture capital job might give me a bit more stability while also providing an avenue to stay plugged into the world of entrepreneurship."

A Great Place to Be an Entrepreneur

As recently as 2009, Christopher Rand, MBA'04, was working in Vanderbilt's Office of Technology Transfer and Enterprise Development (OTTED), helping the university create and invest in companies based on its faculty's intellectual property. Today Rand is a Partner at TriStar Technology Ventures, an early-stage venture capital fund that focuses on health care innovation including biotech, pharmaceuticals, personalized medicine,

advantage of the strategic value that our group can bring, particularly the connections of someone as well-known and respected as Dr. Jacobson."

Rand and his partners may no longer work at Vanderbilt, but they are still more than willing to invest in great ideas that come from Vanderbilt researchers. One of TriStar's other portfolio companies is Pathfinder Therapeutics, a company that has developed a trademarked image-guided device called Explorer to

It's actually pretty easy to get in front of C-level people at almost any company in Nashville. In fact, I believe that the entrepreneurial environment in Nashville now rivals almost any place in the country. —Chris Rand

medical devices, health care information technology, and health care services. Both of Rand's partners have Vanderbilt connections too: Dr. Harry Jacobson, former Vice Chancellor for Health Affairs, and Brian Laden, former Assistant Director in Vanderbilt's OTTED.

Like NCN's Tennessee Angel Fund, TriStar is a recipient of TNInvestco funds. During the past year TriStar has used the proceeds from its sale of TNInvestco tax credits to invest in five health care companies. Four of them were already local and one—VenX—relocated to Nashville from Florida to receive funding from TriStar. (TNInvestco rules mandate that companies receiving TNInvestco funds must have their headquarters and at least 60 percent of their staff based in Tennessee within one year of receiving funding.)

"We have seen a great number of opportunities from companies outside the state that are willing to relocate to Middle Tennessee," Rand says. "Not just in order to receive our investment, but also to take

help physicians deliver ablation therapy within soft-tissue organs. The technology behind Pathfinder came from the lab of Robert L. Galloway Jr., Professor of Biomedical Engineering at Vanderbilt. In the company's early stages, Rand

worked with Pathfinder's current Chief Operating Officer Jim Stefansic, MS'96, PhD'00, who happened to earn his doctorate working in Galloway's lab.

Rand also represents the close ties between Vanderbilt, Nashville's venture capital community, and groups like NCN and NEC. While working at the university, Rand joined NCN's board as a Vanderbilt representative and collaborated with Sid Chambless to get promising Vanderbilt-based entrepreneurial concepts in front of NCN investors. Now Rand looks at NCN's deal flow more from the perspective of a potential co-investor. In his spare time he also serves on NEC's finance committee and tries to be a resource for that organization's members.

Rand would like to encourage more involvement between Owen students and Vanderbilt researchers looking to commercialize their ideas and build business plans. He acknowledges, though, that the students already have plenty of entrepreneurial opportunities—not only through Owen's efforts to promote entrepreneurship, but also thanks to the exciting business climate that has taken shape in Middle Tennessee in recent years.

Before attending Vanderbilt, Rand worked in Atlanta during the dot-com boom, and that experience has afforded him insight into Nashville's stature as a business hub. "Atlanta had a pretty entrepreneurial environment back then, but I think Nashville is still a much easier business climate to maneuver in," Rand says. "It's smaller, more open and more welcoming. It's actually pretty easy to get in front of C-level people at almost any company in Nashville. In fact, I believe that the entrepreneurial environment in Nashville now rivals almost any place in the country. With TNInvestco, NEC, NCN, the angel investor community ... and other programs at the state level, Nashville and Tennessee overall are simply great places to be an entrepreneur." **VB**



Alumnus Christopher Rand is a Partner at TriStar Technology Ventures, an early-stage venture capital fund that focuses on health care innovation.



Theory into Practice

The market impact of Owen's finance faculty

By ROB SIMBECK

Market impact. It is part of the very fiber of Owen's finance department. Members of the school's finance faculty are not only contributing to the industry's intellectual underpinnings and analytical tools but also training students who, as Vanderbilt alumni, are putting theory into practice worldwide. We look here at some of the key players who are helping shape the face of modern financial management.



HANS STOLL and TOM HO

JOE HOWELL

AT THE CENTER OF RESEARCH

The sweep of history represented by the finance faculty is nowhere more dramatically represented than in the Financial Markets Research Center (FMRC). Founded in 1987 to foster research in financial markets, instruments and institutions, it has long promoted interaction among executives, researchers and the Owen faculty, particularly through its renowned annual conference. Hans Stoll, the Anne Marie and Thomas B. Walker Jr. Professor of Finance and Director of the FMRC, calls the center “our window on the real world and our connection to what’s going on and the issues that face policymakers and financial executives.”

Stoll is known for developing put-call parity and for seminal work in market microstructure, which has become a major subfield within finance. He is also credited with providing analysis that demystified the role of futures in the crash of 1987, leading to a more balanced approach to regulation amid calls for drastic mea-

sures. The breadth and depth of his work have earned him one of the industry’s most stellar reputations—he has been elected President of both the American Finance Association and the Western Finance Association—and the markets still bear the stamp of his contributions.

Tom Ho, who has worked with Stoll since they co-authored papers at the Wharton School in the late '70s, serves as the FMRC Research Professor of Finance. Through voluminous research, papers and books, Ho has been key to introducing rigorous mathematical modeling to securities. His work with the Thomas Ho Company, providing analysis and consulting to financial institutions, is an example of the integration between Vanderbilt finance research and the business world. It also demonstrates how the FMRC is bringing together all the elements of financial education, research, practice and policymaking.

PHOTO ILLUSTRATION, MIKE SMELTZER, ISTOCKPHOTO

ACADEMIC FIREPOWER

The huge impact Owen has had on the world of finance grows larger this year with the introduction of NASDAQ OMX Group's Alpha Indexes. Developed by Bob Whaley, the Valere Blair Potter Professor of Management, and Jacob Sagi, the Vanderbilt Financial Markets Research Center Associate Professor of Finance, the indexes help investors isolate the performance of individual stocks or commodities from broader shifts in exchange-related funds. This will, according to Sagi, "allow investors to understand correlations better and allow for interesting hedging opportunities."

The idea for the indexes started when alumnus Eric Noll, MBA'90, who serves as NASDAQ OMX Group's Executive Vice President of Transaction Services, turned to what he calls the "academic firepower" of Whaley and Sagi for help in developing new NASDAQ products. Noll was looking for something of the caliber of the Market Volatility Index (VIX), or "Fear Index," created by Whaley for the Chicago Board Options Exchange in the early '90s. The VIX, which quantifies the market's expectation of short-term volatility, has become a highly influential measure; a futures contract based on it has traded publicly since 2004. Sagi, an expert on asset pricing and decision theory with wide-ranging research and practical interests, has conducted research with Whaley on relative performance indexes.

The NASDAQ OMX Group is offering derivatives of the indexes that will allow investors—primarily institutional at first—to bet on or guard against fluctuations in the worth of securities or funds. The products are designed to help investors hedge against the kind of market swings exemplified by last year's "flash crash." The collaboration between Vanderbilt and NASDAQ is, Sagi says, "the kind of thing that demonstrates how you can take research-based knowledge and apply it in a way that helps people and brings value to the market."

For more about Whaley and Sagi's research, see page 6.



BOB WHALEY and JACOB SAGI

JOHN RUSSELL

WELLSPRING OF KNOWLEDGE

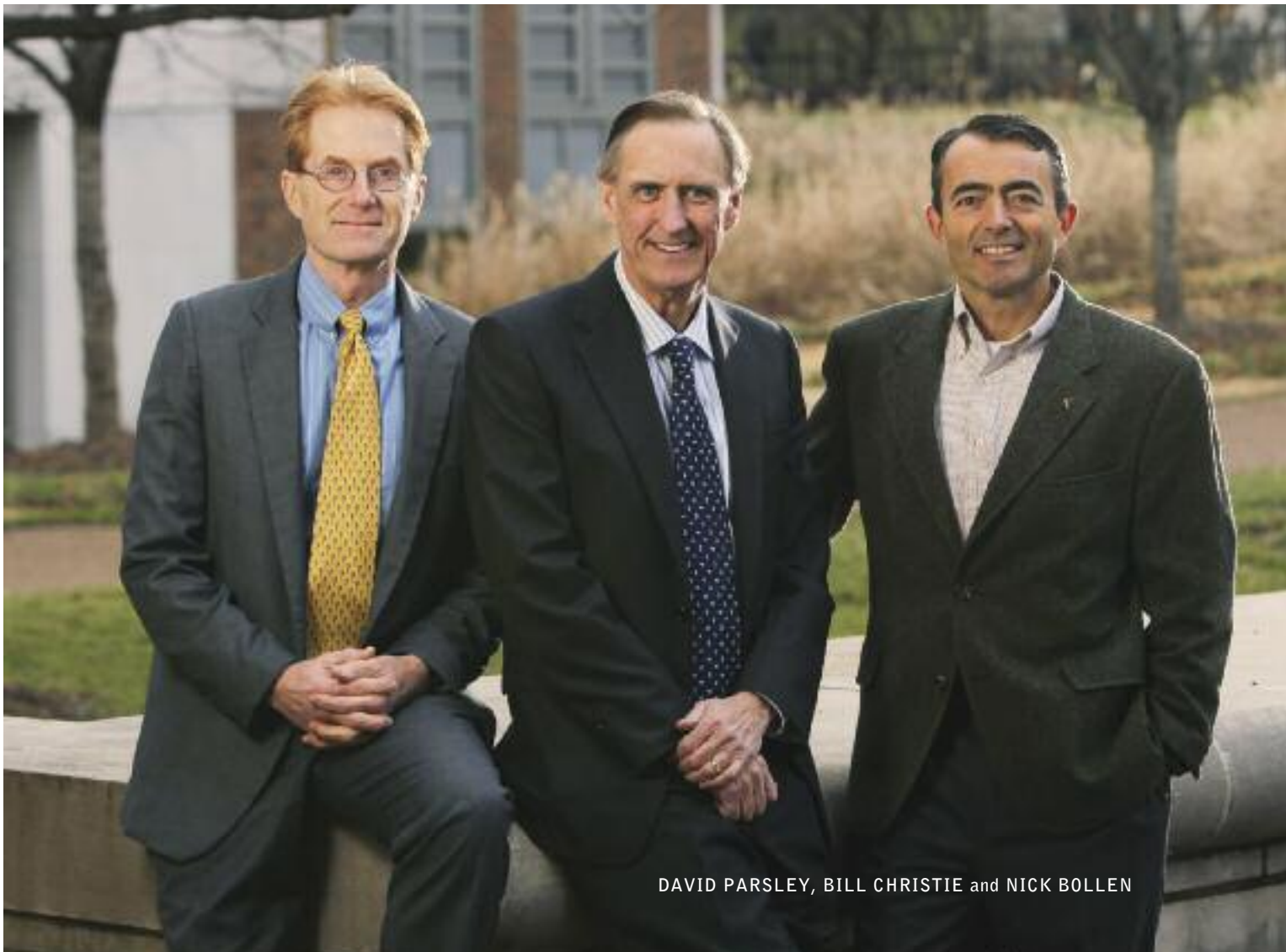
As veterans on the finance faculty, Professors Bill Christie, Nick Bollen and David Parsley represent a wellspring of theoretical and applied knowledge, transmitting real-world experience and academic rigor to the classroom. Their accomplishments are among the school's most noteworthy.

Christie, the Frances Hampton Currey Professor of Finance, analyzed NASDAQ pricing in the '90s and found that market makers were implicitly colluding to maintain artificially high trading profits at the expense of investors. His research led to sweeping reform of the NASDAQ market, the introduction of the SEC Order Handling Rules and a billion-dollar settlement. Christie also served as Dean of the Owen School from 2000 to 2004.

Bollen, the E. Bronson Ingram Professor in Finance, authored a cutting-edge 2008 study of hedge fund liquidity that quantified the risks to investors facing the restriction or suspension of with-

drawals from hedge funds during market turmoil. The subsequent financial crisis bore out his conclusions, as many funds closed and others were revealed to be fraudulent. His most recent research focuses on predicting which funds are at a higher risk of fraud by examining their statistical footprints for peculiarities best explained by misreporting.

Parsley, the E. Bronson Ingram Professor in Economics and Finance, has shown through his research into political connections and lobbying that the portfolios of firms with higher lobbying intensities and expenses outperform those of firms without such connections. He also has discovered that politically connected firms appear to be less sensitive to market pressures to increase the quality of financial information given to minority shareholders. His current work includes seeking explanations for the globally declining impact of exchange rates on prices.



DAVID PARSLEY, BILL CHRISTIE and NICK BOLLEN



MIGUEL PALACIOS and ALEXEI OVTCHINNIKOV

JOE HOWELL

EMERGING IDEAS

The Owen finance faculty's reputation continues to grow thanks to newer members like Alexei Ovtchinnikov and Miguel Palacios, both Assistant Professors of Finance. Ovtchinnikov has done widely cited work on corporate political contributions, showing in a large-scale study published in *The Journal of Finance* that there is a positive and significant relationship between such donations and both stock returns and return on equity. His follow-up study examined the nature and effectiveness of individual contributions, particularly to politicians with oversight of industries having economic impact on contributors. Ovtchinnikov is now looking at the flip side of the coin, studying the way government policy affects corporate decision-making.

Palacios' work on human capital, its quantification and its effect on other assets' prices, is decidedly and excitingly off the beaten path. One question he raises is what effect the retirement

of baby boomers, who will no longer have future earnings as an asset, will have on the value of stocks. Another is the possibility of a financial instrument tied to future earnings, and whether such an instrument "might make people willing to take more risks in stocks and other investments, changing their price and return," he says. He and a business partner have explored the practical aspects of his questions for the last nine years, founding a company called Lumni Inc., which pays for the education of young adults—many who could not afford college otherwise—in exchange for a small stake in their future earnings. His book *Investing in Human Capital: A Capital Markets Approach to Student Funding* was published by Cambridge University Press in 2007.

For more about Ovtchinnikov's and Palacios' research, see pages 9 and 12.

STEERING A NEW COURSE

Australian-born Kate Barraclough jumped at the chance to take a more active role in oversight of the school's Master of Finance (MSF) program. As its Director, she says, "I see myself as taking an already excellent product and raising its profile by engaging and coordinating its stakeholders—faculty, alumni, employers and current and future students. My aim is to build a great program, recognized as one of the best in the country."

Her background is yet another example of the way in which research, teaching and real-world experience come together within the Owen faculty. A former manager at KPMG Canberra and financial consultant to the Australian government, she has research interests that include asset pricing, derivatives and bond markets. Under her guidance, MSF has introduced a new course on financial modeling (which she teaches), formed a board of advisers made up of distinguished alumni and friends of the school, and created an internship program for the MS Finance Class of 2012. The latter was an initiative proposed by alumnus Bruce Heyman, BA'79, MBA'80, who is Managing Director and Partner at Goldman Sachs in Chicago and a member of Owen's Board of Visitors.

Barraclough is working to encourage cohesion within the MSF group with a number of MSF-only classes. "A key part of my role is mentoring our students, encouraging and supporting them while they are at Owen," she says. "Seeing them grow through their experiences at Owen is extremely rewarding for me."



KATE BARRACLOUGH

WALL STREET PRESENCE

It would be difficult to overstate the Vanderbilt presence in the world of business and finance. Thousands of graduates carry the lessons learned here into boardrooms, exchanges and regulatory offices worldwide. One notable example is Sean Rogers, BA'87, MBA'95, a key figure in one of the two largest financial institutions on Wall Street.

Rogers serves as Managing Director at Bank of America, overseeing communications technology. He works closely with senior management at companies like Nokia, Ericsson and Motorola, advising them on an array of financial matters, including capital formation and structure, corporate finance, mergers and acquisitions, joint ventures and IPOs. It is a job that requires wide-ranging knowledge applied to complex but specific situations in real time, and he cites his increasing appreciation of the "softer skills" he learned at Owen.

"It's learning how to study," he says, "how to work in teams, how to communicate with your counterparts. As you become more senior in investment banking, what makes someone good or bad comes down to qualitative skills. You're more concerned with building relationships, with understanding issues. You become results-oriented."

More and more, those relationships transcend borders and backgrounds. "That's why both the student mix and the interdisciplinary possibilities at Owen, like those with the Vanderbilt University Medical Center, are so valuable," he says. He also cites the class size and the close relationships he was able to develop with both students and professors. He has long since been returning the favor, bringing his business expertise to Owen as a member of its Board of Visitors—something that is particularly important in that Bank of America has become the single biggest recruiter of Owen grads.

SEAN ROGERS, BA'87, MBA'95



A portrait of Vikas Dwivedi, MBA '00, a man with short dark hair, wearing a dark suit, white shirt, and red tie. He is smiling and standing in front of a large window with a view of a city skyline. The background is slightly blurred.

VIKAS DWIVEDI, MBA '00

JOE HOWELL

TOOLS OF THE TRADE

Vikas Dwivedi, MBA'00, says his career has become "all energy, all the time." After stints at Shell Oil, Enron, Prudential Equity Group and Morgan Stanley, and a rating as No. 1 stock picker in electric utilities in 2004, he is bringing his experience in energy and commodity trading, private equity, project development, operations and engineering to bear on his own firms. He is a Principal at BTU Capital Management, a Houston-based hedge fund focused squarely on energy, and Quantum Energy Partners, a \$5 billion private equity firm.

"It's focused on natural gas," he says of BTU, "and our trades will allocate capital directly into futures and options on the commodity itself." He came to Owen as an engineer and an energy trader, but says, "I didn't have any real sense for the broader cap-

ital markets and the bigger world. Seeing how those markets work and how they impact each other and impact energy was very helpful. It gave me a much bigger perspective on how stuff is really put together. And not having a financial background, it was a really good rounding experience to learn accounting and a little more on corporate valuation."

In addressing students and recent graduates, he encourages creativity and daring. "Never assume everything's been solved," he says. "There are always other markets and other problems if you can help solve or even identify them. I'd also recommend a bit of irreverence for the way markets work. They're not perfect. See if you can insert yourself into something that's not quite right, which is always an opportunity."

Headlines from Around the World

The Wall Street Journal

Nov. 1: NASDAQ OMX Group Inc. is introducing new indexes from **Bob Whaley**, the Valere Blair Potter Professor of Management and creator of the VIX volatility index, and **Jacob Sagi**, the Vanderbilt Financial Markets Research Center Associate Professor of Finance. The new indexes will track popular stocks' performance against the broader market. A Feb. 9 follow-up article mentions the approval of the Alpha Indexes by the Securities and Exchange Commission.

Nov. 4: U.S. business schools, faced with a decline in applications from overseas, are stepping up international recruiting efforts to preserve what they say is an essential component of an institution's credibility. **John Roeder**, Director of Admissions, is quoted.

Nov. 8: By assigning a price tag that sums up medical, economic and other burdens, researchers are hoping to influence policymakers who weigh spending on these concerns against other priorities. **Mark Cohen**, the Justin Potter Professor of American Competitive Enterprise and Business and Professor of Law, one of the experts studying the issue, is quoted.



Nov. 29: The popularity of the VIX index, which has become a widely watched barometer of investor fear since the financial crisis, is generating a host of spinoffs, copycats and derivatives. It is adding up to big business for VIX's owner, the Chicago Board Options Exchange, as well as partners and competitors. **Bob Whaley** is quoted.

Jan. 14: Hedge funds are crowding into more of the same trades these days, amplifying market swings during crises and unnerving investors. The pack behavior undermines the image of hedge fund chiefs as savvy money managers who sniff out investment opportunities that others don't see—thereby justifying the hefty fees they charge clients. It also suggests that hedge funds are having a harder time coming up with money-making ideas in rocky markets. **Nick Bollen**, the E. Bronson Ingram Professor in Finance, is quoted.

Feb. 21: The recession has made many companies leery about hiring specialized employees who may not be able to adapt to volatile market changes. That's why experts say it's important to routinely re-evaluate your skill set. **Tim Gardner**, Associate Professor of Management, is quoted.

March 17: Marketing researchers and psychologists say that using “regular” people to model products, as the online shoe seller Zappos does, can be especially effective in certain cases. **Steve Posavac**, the E. Bronson Ingram Professor of Marketing, is quoted.

Financial Times

Nov. 19: Ponzi schemes and other hedge fund frauds could be more easily identified, suggests recent research by **Nick Bollen**.

Jan. 31: Vanderbilt Owen Graduate School of Management ranked 25th in the U.S. and 51st worldwide, according to the 2011 Global MBA survey published today by *Financial Times*. Compared to 2010, Owen moved up five spots in its U.S. ranking and six spots in its global ranking. In addition, Owen ranked high among schools worldwide in two key measures: job placement and faculty research (both No. 31 globally).

Bloomberg Businessweek

Nov. 5: The job market for 2010 MBA graduates made a slow but steady recovery this year, beginning to rebound from one of the worst MBA hiring seasons in recent history. **Read McNamara**, MA'76, Executive Director of the Career Management Center, is quoted.

Nov. 8: Should businesses crack down on workers who visit recreational websites, such as Facebook and Twitter, on company time? **Bruce Barry**, the Brownlee O. Currey Jr. Professor of Management, authored the “Con” opinion.

Jan. 21: The Graduate Management Admission Council announced a contest in July that would award \$50,000 to the best idea for how to improve management education. **Dawn Iacobucci**, the E. Bronson Ingram Professor in Marketing, won second place.

Forbes

Nov. 30: **Larry Van Horn**, Associate Professor of Management and Faculty Director of the Health Care Program, introduces his new blog for *Forbes*, titled “Second Opinion.” In subsequent entries Van Horn writes about Americans’ unwillingness to cut Medicare, the impact a certain provision in the health care reform bill will have on the insur-

ance industry, why thoughtful people will never agree on health care reform, and prescription drug ads.

U.S. News & World Report

March 15: **Vanderbilt Owen Graduate School of Management** climbed eight spots to No. 28 in the latest *U.S. News & World Report* business school rankings. Owen ranks No. 19 among private U.S. graduate business schools, and is one of seven programs in the top 30 to focus only on full-time graduate management education.

OTHER

The Globe and Mail

Dec. 13: *The Executive and the Elephant: A Leader’s Guide to Building Inner Excellence* by **Dick Daft**, the Brownlee O. Currey Jr. Professor of Management, has been selected by *The Globe and Mail* as one of its top 10 business books of 2010.

Motley Fool

Jan. 4: Companies with dissatisfied customers will eventually fail. Research by **Bruce Cooil**, the Dean Samuel B. Richmond and Evelyn R. Richmond Professor of Management, into the relationship between customer satisfaction and stock prices is mentioned.

MSNBC

Feb. 7: Assuming the score is remotely close, expect the losing team to go for it on fourth down as time runs out in the Super Bowl on Sunday. New research conducted by **Ranga Ramanujam**, Associate Professor of Management, and David Lehman of the University of Singapore is mentioned.

Fortune

Feb. 17: Assistant Professor of Management **Tim Vogus** has been named one of the 40 best B-school professors under the age of 40.

AMERICAS MBA PROGRAM LAUNCHED

As reported in the Nashville Post on March 17

Vanderbilt Owen Graduate School of Management is partnering with three widely respected graduate business schools in Brazil, Canada and Mexico to offer an innovative new Master of Business Administration program for international executives starting in August 2011. Called the Americas MBA for Executives, the two-year degree program provides 60 students with the opportunity to study management issues in each of the four largest economies in the Americas.

The other three participating schools are:

- FIA Business School, Fundação Instituto De Administração, in São Paulo
- Simon Fraser University, Beedie School of Business, in Vancouver, British Columbia
- ITAM, Instituto Tecnológico Autónomo de México, in Mexico City.

The program grew out of recognition that global businesses are increasingly aligning their operations around all of the Americas, not just particular regions such as Central, North and South. It also responds to a growing need among companies and students for business instruction focused more deeply around issues specific to the Americas markets.

To learn more, visit the programs page at owen.vanderbilt.edu.

“CLAS”

Home on the Range *Kim Parlett, MBA'04* | Street Smarts *George Sibble, BE'06, MBA'08*

HOME ON THE RANGE

'04

KIM PARLETT

THERE WAS NO SINGLE “AHA” moment that convinced Kim Parlett, MBA'04, to leave her job at a marketing firm and embrace a more rustic

way of life. Rather, she says, it was a series of realizations during a 2009 horse-packing trip through Yellowstone Park that helped her make up her mind.

“I was continually struck by the beauty around me,” Parlett says. “It reminded me just how small my problems really were. You go for a hike under the big sky, and everything gets put into perspective.”

Today that big sky country is playing a big role in her career. As Manager of Lone Mountain Ranch, a Montana ranch specializing in family vacations, Parlett is responsible for helping guests enjoy the best that nature has to offer, including Nordic and downhill skiing, fly-fishing, horseback riding and tours of nearby Yellowstone.

“Out here they say you eat the scenery. That’s your salary,” she says. “You may not make a lot of money, but the real payment comes from being able to live in such an amazing place.”

While the setting for her new job is undoubtedly different from that of her corporate experience, which included stints at both General Motors Corp. and Miller Brewing Co., Parlett says there are



Kim Parlett with husband, Mark, and dogs in Montana

a surprising number of similarities when it comes to the business itself. “Budgeting, forecasting, marketing and operations are a lot of what I do at Lone Mountain Ranch,” she says. “The frameworks you apply are the same whether you’re at a *Fortune* 500 company or a small mom-and-pop shop.”

Parlett credits Vanderbilt with helping her understand those frameworks more fully. In fact, her experience at Owen

opened her eyes in much the same way that her Yellowstone trip did. “Before business school I felt like I was just a small piece of the pie at my company,” she says. “Vanderbilt sparked my interest in being more involved in all aspects of business.”

“It really helped me see the bigger picture.”

—SETH ROBERTSON

S A C T S ”

| Thank You *to our International Alumni* | CityOwen Recap

"CLASS ACTS"

"CLASS ACTS"

Thank You to Our International Alumni

From Peru to Germany to India, Owen alumni around the world have supported the Admissions team's efforts at B-school fairs. These alumni have played an important role in rallying support from other Owen graduates, relaying market-specific information that might improve recruiting strategy, hosting applicant gatherings, and representing the program at fairs. The Admissions team would like to thank the following alumni for their participation and support.

China

Xiyuan (Cici) Chen, MSF'09
Cong (Lincoln) Lin, MBA'09
Yan Ma, MSF'10
Stella Tao, exchange student, 2009
Liangliang (Leo) Xu, MBA'10
Zhiyi (Nina) Zhang, MSF'09

India

Shivam Bihani, MBA'09
Ajay Gupta, MBA'03
Kyle Roe, MBA'09

Germany

Astrid Huebner, MBA'09
Stefan Stefanov, MBA'97

Japan

Shigeru Aono, MBA'05
Yasuhiro Arao, MBA'09
Hiro Hyakumoto, MBA'10
Masanori Morimoto, MBA'07
Kazuaki Osumi, MBA'05
Tatsuya Otsubo, MBA'09
Hidekazu Sugo, MBA'10
Satoshi Watanabe, MBA'07



Hiro Hyakumoto volunteering at a fair in Japan

Peru

Marlene Marengo Silva,
MBA'08

South Korea

Jae Seok Kim, MBA'06

Russia

Yuri Mamchur, MBA candidate
for 2011

CityOwen Recap

The CityOwen program is led by alumni around the country and provides value through networking opportunities, updates on the school and featured faculty or staff presentations. The program also helps strengthen the relationship between the Owen School and local communities in areas such as recruitment.

Birmingham

Jan. 26

Margaret and Jim Brunstad, both MBM'75, hosted a CityOwen Birmingham event at their home. Associate Professor of Management Larry Van Horn spoke about health care. Dean Jim Bradford was in attendance.



From left, Larry Van Horn, Jim Bradford and Margaret and Jim Brunstad at the Birmingham event

California

Jan. 13

CityOwen California held a joint event with the San Francisco Chapter of the Vanderbilt Alumni Association at the Fort Mason Center. Mark Abkowitz, Professor of Civil and Environmental Engineering, gave a speech titled "Can't We Do More to Prevent Disasters from Happening?"

BS'92, MBA'98, and Ike Lawrence Epstein, BA'89, JD'92, hosted the gathering.

Chicago

Oct. 20

CityOwen Chicago held an event at Tavern at the Park. Hans Stoll, the Anne Marie and Thomas B. Walker Jr. Professor of Finance, spoke about the finance industry.

Nashville

Feb. 2

Sandy and Jay Sangervasi, MBA'81, hosted a joint CityOwen Nashville and Nashville After Owen event at their home. Dean Bradford was in attendance.

Dallas/Fort Worth

Nov. 18

Linda, BA'78, and Tom Barton, MBA'77, hosted a CityOwen Dallas/Fort Worth event at their home. Bob Whaley, the Valere Blair Potter Professor of Management, spoke about the finance industry.

New York

Oct. 12

CityOwen New York hosted an event at the Union League Club. Professor Hans Stoll spoke about the finance industry.

Feb. 15

CityOwen New York hosted an event at the 21 Club. Nick English, CEO of Bremont, a British company that makes limited-edition handmade watches, spoke about his entrepreneurial experience. Dean Bradford was in attendance.

Las Vegas

March 15

CityOwen Las Vegas held a joint event with the Las Vegas Chapter of the Vanderbilt Alumni Association at the Stirling Club. Anna, BS'91, and Craig Savage,

If you are interested in starting a CityOwen group where you live, please contact Alumni Relations at (615) 322-7409.

"CLASS ACTS"

STREET SMARTS

A NEW MOBILE APPLICATION called SmartFuel allows drivers to search for live gas prices along any route in the United States, find the cheapest price and save an average of \$5 with every fill-up. SmartFuel provides this information by gathering credit card purchase data that is continuously updated.

That is just one of the features that sets it apart from other mobile apps, says George Sibble, BE'06, MBA'08, President and CEO of Iridium Development, the company responsible for SmartFuel. Sibble estimates users will save \$250 a year with the app, which is available for both the iPhone and Android. In case the user has any doubt about the savings, SmartFuel also conveniently keeps track of how many times it has paid for itself.

Sibble started Iridium, a holding company that creates subsidiary business around mobile apps, in 2009 under the auspices of the Nashville Entrepreneur Center, whose President and CEO



George Sibble at the pump

is Michael Burcham, Clinical Professor of Entrepreneurship at Owen. (For more about Burcham and the center, see page 29.)

Sibble says new apps are in high demand but creating them can be expensive. The process involves not just coming up with ideas but thinking through what is called "use case." For example, the creators of SmartFuel realized it made more sense for a user

standing by a gas pump to enter gallons purchased rather than mileage. "I want something used, and I want it to be efficient," Sibble says.

"I see solutions all around. Whenever I see a problem, I also see that it can be solved through an application," he adds. "I just want to get it up and out there."

—JENNIFER JOHNSTON

JOE HOWELL

"CLASS ACTS"

BOTTOM LINE

continued from page 52

partnership was the product of three key factors:

(1) The Aegis management team remained completely open and engaged in the process.

(2) The nimble advice from faculty advisers, including Furse and Michael Burcham, Clinical Professor of Entrepreneurship, was indispensable and constant.

(3) The students on the team effectively leveraged their unique strengths.

“Each of us was willing to step outside our comfort zone to learn something. When we didn’t agree, we talked about it,” says Anthony, Director of Research and Development for the Global Infant Category of Mead Johnson Nutrition.

Other students on the team were Andres Visbal, Materials Supervisor at Newell Rubbermaid; Justin Calhoun, Financial Adviser at Merrill Lynch; Sarvant Singh, Program Manager at Cummins Inc.; and Steve Wingard, BE’85, Manager of the Wireless Solutions Group at Intergraph Corp.—all members of the Class of 2009. Anthony says that Wingard offered strong writing and artistic skills, Singh brought a talent for financials, and Visbal and Calhoun helped analyze business development opportunities. Meanwhile Anthony himself focused on developing the key presentation points.

One of the distinctive features of the Vanderbilt Executive MBA is that students are carefully organized according to expertise into “C-teams,” which are designed to

emulate an organizational executive team of C-level officers. Anthony says the experience provided him with the opportunity to learn sound business principles and apply them right away. “Managing challenges and growing with them is a much greater experience than just book learning,” he says.

The process also proved to be invaluable for Aegis. Since graduation, the students and Aegis executives have stayed in contact, and many of the students’ long-term recommendations are still on the table and will be implemented as resources allow.

“It would have cost tens of thousands of dollars to put together an analysis like this and to have the resources of five very bright individuals,” Fisher says. **VB**

Third time is the charm

Support Vanderbilt with a tax-free gift from your IRA

Looking for the most tax-effective way to make a gift to Vanderbilt? Congress recently extended a law for the third time that allows people 70½ or older to make tax-free charitable gifts up to \$100,000 directly from their IRAs through the end of 2011.

Learn more by contacting Linda Ray Miller in Vanderbilt’s Office of Planned Giving at (615) 343-3113, (888) 758-1999 or plannedgiving@vanderbilt.edu.

A Shot in the Arm

Executive MBA team gives a boost to Aegis Sciences Corp.

By JENNIFER JOHNSTON

NO PAIN, NO GAIN.

That was the core message of a strategic plan developed by a team of Vanderbilt Executive MBA students in 2009 for Aegis Sciences Corp. The students' plan, part of a yearlong class project, made several recommendations for the Nashville-based company, which specializes in toxicology analysis and consulting services for sports teams, medical examiners, crime labs and others.

When senior management at Aegis put those recommendations into action, the outcomes more than exceeded expectations, says Frank Moser, Vice President of Business Development. In spite of the recent economic downturn, Aegis expanded from 150 to 400 employees in less than two years, and total revenue grew from \$20 million in 2008 to \$51 million in 2010. Meanwhile the plan continues to guide decision making at Aegis to this day.

Dr. David Black, Associate Clinical Professor of Pathology, started Aegis after successfully setting up a drug-testing lab at Vanderbilt in the late 1980s—a response to an increased need for monitoring steroids and other drugs in athletics. Aegis soon moved into forensics toxicology, going private in 1990. The company was in the midst of revising its business plan when it was approached by the Owen students, who were searching for a client to work with in their Strategy Project course.

While firmly committed to putting science first and sticking to its core philosophies, Aegis was also ready to expand. “The impetus was that we’d grown pretty well and were looking to



Jeff Fisher (left) and Frank Moser, pictured here at the Aegis Sciences Corp. lab, have helped implement the recommendations made by the Executive MBA team.

continue that growth in current markets but also look at adjacent markets,” Moser says. “We had so many opportunities, and we really wanted a framework.”

Jeff Fisher, BA’77, Vice President of Finance, had just joined the company when the Owen students got involved. He says the process brought Aegis’ executive team closer together. “It was good for all of us to share thoughts and ideas and begin to look outside the box,” he says.

As part of the plan, the student group developed an acronym around “LABS,” focusing on logistics, adjacencies, building

and sustaining. The recommendation to put more resources into pain management turned out to be recession-proof. “People in pain are still going to get treatment,” Fisher says.

The team’s project took top honors in the strategy course that year. “By any measure, the report was outstanding,” says Adjunct Professor of Management David Furse, who taught the course. “They just really hit it out of the park.”

According to project leader Josh Anthony, EMBA’09, the success of the

Continued on page 51

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Student trip offers a gateway to
Japanese business and culture.

To find out more, see page 22.