

## ILLINOIS BUSINESS PERSPECTIVES

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### EDITOR'S NOTE

Class notes have moved! Alumni and friends of the College of Business can look for the alumni newsletter — Alumni News & Notes — later this year.

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# ENTREPRENEURSHIP IN EDUCATION AND PRACTICE

- 2 EXPERIENCING THE COMPLEX STEW OF ENTREPRENEURSHIP
- 5 STATE ENTREPRENEURSHIP CENTER OPENS
- 6 EFFECT OF CULTURAL DIFFERENCES ON THE REGULATION OF START-UPS
- 8 CLASSROOM EXPOSURE TO ENTREPRENEURIAL CHALLENGES
- 12 EXPERIENCING ENTREPRENEURSHIP FIRST HAND
- 14 DOES TECHNOLOGY SURVIVE THE FIRM THAT CREATES IT?
- 17 COLLEGE CORPORATE PARTNERS
- 18 THE HEART AND MIND OF THE ENTREPRENEUR
- 21 CED INTERNS LEVERAGE EXPERTISE FOR ENTERPRISEWORKS COMPANIES
- 22 4 FOR 4: BRINGING PRIVATE EQUITY TO THE PUBLIC
- 24 COLLEGE BRIEFS



*“Ultimately, what we’re nurturing is a state of mind.”*

Dinesh Ahluwalia, director of CED

## EXPERIENCING THE COMPLEX STEW OF ENTREPRENEURSHIP

### Hands-on Opportunities for MBA Students

The old adage, “experience is the best teacher,” is particularly apt when talking about entrepreneurship.

Entrepreneurship can be a complex and challenging subject to teach in the classroom. But thanks to several extracurricular programs, MBA students have opportunities to roll up their sleeves and apply what they learn in class to real-life, entrepreneurial projects that run the gamut from getting new software ready for the market to helping with NASA’s reusable space vehicle.

“Entrepreneurship embodies the cross-application of everything you learned in business school,” says second-year MBA student Bret Lannert. “We are learning by doing. If you need to do a task, you figure out how to do it, and develop new skills. We are exposed to things that are too new to be in class materials or textbooks. Experience is one of the best teachers. You see what is really important.”

And while entrepreneurship may not exactly be rocket science, it may have similarities to neuroscience, says Norman Atkins, second-year MBA and neuroscience graduate student.

“Entrepreneurship is a complex stew,” says Atkins. “In this way, it is a lot like neuroscience; the system seems chaotic, but like anything that is chaotic, over time patterns emerge. We learn how to discover and dissect those patterns in neuroscience and in entrepreneurship you do the same. There are sound ways to make business decisions. The path can vary depending on the ingredients you start with.”



*“Entrepreneurship...is a lot like neuroscience; the system seems chaotic, but like anything that is chaotic, over time patterns emerge.”*

Norman Atkins, MBA and neuroscience graduate student

Entrepreneurship education has typically been considered a stepchild in business school curricula, but that is changing. This is, in part, because of the growing realization that entrepreneurs play an enormously powerful role in the world economy. Although they are a relatively small segment of the business sector, entrepreneurs create disproportionately more jobs than their numbers would predict. Their ideas, inventions, and new ways of thinking improve quality of life in other ways as well. Think of Starbucks or Microsoft, for example.

#### Local Organizations, Wealth of Opportunities

In the last few years the University, recognizing that it is an “idea factory,” has stepped up its efforts to license and commercialize more of the discoveries being made on campus. Consequently, for Business students there are far more internship and extracurricular opportunities than ever before. On campus there are at least four organizations through which students can get some practical experience: OSBI Consulting in the College; the Urbana-Champaign campus Office of Technology Management; the Center for Entrepreneurial Development, another College of Business unit; and independent IllinoisVENTURES, LLC.

OSBI Consulting, a student-managed consulting company, is the granddaddy of on-campus entrepreneurship. Established in 1995, OSBI Consulting delivers close to 60 projects per year with Fortune 500 companies such as Caterpillar and Whirlpool, non-profits (including University units), and start-up companies. With five or six students working on each project, that number gives every MBA student a chance for a hands-on experience before graduation. Students have the option of earning academic credit for one project, but many opt to do many more, simply for the experience.

In one case, a team of OSBI students was asked about the licensing and commercializing potential for a software improvement to SQL, known as TCSQL. TCSQL is an algorithm, which, when used as a database management tool, is able to handle both text and objects, something SQL alone could not.

“The inventor wanted to commercialize the technology,” says Rohit Dak, one of the students on the project. “We needed to determine, what was its potential, was there anything like it already on the market, how much could he sell it for?”

After researching the market potential, feasibility, and the technology itself, the student team recommended that the client refine the software to remove some bugs. They were able to demonstrate the relative value of selling the product as it was versus perfecting it. Eight months later the client, having fixed the bugs, sold TCSQL for millions of dollars.

The Office of Technology Management (OTM) has existed in its current configuration for three years. OTM's primary mission is to identify those inventions made by University faculty or other personnel that have the potential to be patented and/or licensed. Beginning about three years ago, MBA students became a key link in the screening evaluation process. Under the direction of a technology manager, student interns conduct a data-driven analysis of each technology that comes in the door, which helps OTM determine the appropriate course of action for the technology. Six paid interns are chosen to participate for a full calendar year. They start in the summer, working full time, and then shift down to 10 hours per week during the school year. Interns almost always have another degree in a field of science or engineering, which gives them a basis for evaluating new technologies.

Laurie Veazie, an OTM intern and second-year MBA student, says she values being able to see the process of evaluation from the very beginning.

“We get to see the whole process from the minute the technology comes in the door,” says Veazie. “Also, I get to work with the other interns. Each of us has a different background, from life science to software and engineering, as well as library information science, so we're learning from each other.”

It is a win-win arrangement, with inventors and the OTM benefiting from the students' expertise and energy. “Students are an integral

*continued on page 4*

part of our office," says Mike Fritz, director of OTM. "They are a key part of the process, and we invest a lot of time and energy to train them."

The Center for Entrepreneurial Development (CED), housed at EnterpriseWorks @ Illinois, the incubator building in the south research park, has only just opened its doors for business, but already has several MBA students working as interns on various projects.

CED Director Dinesh Ahluwalia says the center "wants to expose our students to the management principles of entrepreneurship by working closely with entrepreneurs on specific assignments."

Through CED, students work on short-term projects, primarily for start-up companies at EnterpriseWorks. Firms represent fields such as robotics technology, specialized software, food contamination testing, medical technologies, and aerospace systems, so students get a wide range of experiences. CED projects tackled during the 2003 summer included hazardous chemical detection and composite materials.

CED also has developed a relationship with Prairie Angels, a private group of accredited investors interested in investing in early-stage Midwest companies. Three MBA students assist the screening committee in evaluating business plans and discussing which ones are worth investing in. They get to participate in and observe the entire "deal flow cycle," which is a valuable student experience.

Services provided by CED include assessment reports, business plan reviews, market feasibility studies, and financial modeling. Services are, by design, short-term: between 48 hours and two weeks. Larger companies needing longer term consulting are directed to OSBI Consulting. Students do not receive academic credit for their efforts.

"In entrepreneurship, there's always a next step," says Ahluwalia. "And ultimately, what we're nurturing is a state of mind. After providing our students with experience working with start-ups and entrepreneurs, we think they have a greater probability of success in recognizing a great business opportunity and knowing what to do with it."

IllinoisVENTURES, LLC, is another new kid on the block. Though strongly affiliated with the University, IllinoisVENTURES is a separate company. In addition to providing consulting, this group may provide funding between \$25,000 and \$175,000 to companies that need seed money to get to a point where a larger venture capital firm might invest in them. Rob Schultz, senior director, fully expects to have MBA and other students on hand as interns.

## MBA Students Offer Significant Resource

So why would a company go to students to get help with a new venture?

"It's a synergistic relation between students interested in learning more about entrepreneurship and these start-ups that require additional human capital to move their businesses forward," says Atkins, the MBA and neuroscience student.

Imagine that a small company or even an individual has an idea for a better way to filter viruses from email. Once they develop this technology, what do they do next? They need to see if it is a viable idea, which requires market research and feasibility studies. They need start-up capital. In order to get that capital they need to sell others on their vision, which requires a business plan, a sense of who and where potential investors are. But how do they know how much money they'll need? Financial modeling, a time consuming but essential step, can help with that information, as well as determine future steps to grow the company.

In a small company, no one has the time or even the expertise to tackle all these areas, but MBA students can help with each of the steps. They have gained most of the tools in class, and those they haven't, they learn on the job. They have the time and the energy, two things most valuable to new ventures.

## What Students Learn

"The best evidence of what students learned comes when they get in the workplace," says Paul Magelli, director of OSBI Consulting. "Then they say, 'Oh, I know how to do this, this is just like at OSBI. I know how to manage a project, manage a team, handle a shirker. I know what a deliverable looks like, I know when I'm stumped and that I need to go elsewhere for help.'"

The bottom line is, when people hear the term entrepreneur, they automatically think that means starting a company. But entrepreneurial skills can be applied to other endeavors, in everything from enormous Fortune 500 companies to non-profits and from retail to new technology. Students can apply skills gained in the entrepreneurial environment to any future situation, whether they are assessing a proposal, managing a team, or trying to see into the future.

"I was interested not in starting a company, but in facilitating others by working with a consulting firm, or within a university," says Jeremy Hollis, another second-year MBA student. "Both CED and OSBI gave me great work experience. Lots of what I learned can be applied to other areas, not just start-up companies." ■

—Deb Aronson



## STATE ENTREPRENEURSHIP CENTER OPENS IN RESEARCH PARK

In July, Illinois Governor Rod Blagojevich announced the opening of the Illini Entrepreneurship Center, the second facility in the state's new Entrepreneurship Center Network. The College of Business is one partner in an alliance to deliver a broad range of traditional and enhanced business services to regional entrepreneurs.

The Illini Entrepreneurship Center (Illini EC) is a new, regional hub for coordinating all small business development, entrepreneurship training, and entrepreneurship development activity, building on the existing infrastructure of the Small Business Development Center Network, the Illinois Technology Enterprise Center Network, and the Manufacturing Extension Center Network. The Illini EC will serve current and prospective entrepreneurs in Champaign County and the contiguous region. The first Entrepreneurship Center opened on the Chicago West Side in June 2003. The Illinois Department of Commerce and Economic Opportunity administers the network.

"Entrepreneurial activity has become the most important job growth engine of the national economy. Providing a local culture of support to entrepreneurs in their business ventures is a crucial element to creating good jobs in Illinois and building a more vibrant economy throughout our state," Governor Blagojevich said in July. "I am excited to bring this initiative to the University of Illinois and the entrepreneurs of this region."

The Illini EC does not duplicate existing services; rather, it serves as an umbrella organization to coordinate services and programs currently available and provides targeted accelerated services to those companies that have high growth potential. In conjunction with the Champaign County Alliance, the Illini EC will respond to inquiries from entrepreneurs and companies examining expansion, develop needs assessments and action plans for clients, work on business plans and models, feasibility analyses and funding strategies, administer business planning awards, and maintain a client tracking system.

Dinesh Ahluwalia, director of the Center for Entrepreneurial Development (CED) in the College of Business, is serving as the Interim Director of the Illini EC. At CED he established the Advisory Services Group to bring to entrepreneurial stakeholders a portfolio of service offerings including assessment reports, business plan reviews, market feasibility studies, and financial modeling. The services are provided by student team members primarily from the Illinois MBA Program. Under his leadership, CED also hosts public entrepreneurship events throughout the year and held the first annual "boot camp" for entrepreneurs in September 2003.

Commenting on his role, Ahluwalia said that he looks forward to working with the entrepreneurs and service partners within the network, matching specialized resources with client needs to create customized assistance plans. "This is a tremendous opportunity to make a significant difference in the development of regional start-ups," he noted. "The Illini EC also provides a unique learning experience and exposure for our students to be engaged with the various entrepreneurial resources and service partners within the community."

The College of Business plays a pivotal role in the Illini EC. In addition to Ahluwalia's appointment, a college representative is on the managing board and on the awards committee whose members review completed applications to determine services. College of Business graduate students, primarily from the MBA Program, will provide many of the core services.

The Illini EC Network Partners includes the Champaign County Alliance, the Champaign County Economic Development Corporation, Illini-Tech/IllinoisVENTURES, Parkland College, U of I College of Engineering, EnterpriseWorks, local SBDC and SCORE representatives, and the Community Collaboration for Economic Development.

Illini EC is located at EnterpriseWorks @ Illinois, a world class, state-of-the-art incubator facility for start-up companies situated within the Research Park at the University of Illinois. ■



*Candace Martinez and Steve Michael*

## THE EFFECT OF CULTURAL DIFFERENCES ON THE REGULATION OF ENTREPRENEURIAL START-UPS

As entrepreneurs around the world set up new business ventures, government regulation encouraging or discouraging start-ups plays a critical role in the success or failure of the new enterprises. Through laws, licenses, registration, and rules, governments help or hinder entrepreneurial activity.

### Cultural Differences

Differences in national culture is one possible factor explaining the great differences in the regulatory environment for entrepreneurship from nation to nation. Culture can be thought of as “mental software,” the shared values and patterns of thinking, feeling, and acting that humans learn in order to survive in their social environment. Although formal institutions such as regulations are the product of political or social choice, they emerge through a cultural filter and are often informed and shaped by culture.

### The Research Project

Department of Business Administration Associate Professor Steven Michael, the Schoen Faculty Fellow in Entrepreneurship, and PhD student Candace Agrella Martinez are examining the effects of culture on government regulation of entrepreneurial start-ups. They began by proposing that different cultures are likely to have different regulations and tested their hypotheses by examining a dataset of 53 nations.

Earlier research has established that cultural differences among nations can be reduced to four quantifiable dimensions: power distance (the breadth of the gulf separating less powerful from most powerful members); individualism; uncertainty avoidance; and “masculinity” (defined as the degree to which a society views itself in terms of stereotypically masculine or feminine traits).

In countries in which the power distance is large (for example, the Philippines and Mexico), the perceived power gap between superiors and subordinates is large, and those with less power depend upon the patronage and protection of the more powerful. Countries with a small power distance (such as Israel and Sweden) reflect a more egalitarian view, with limited dependence of subordinates on bosses.

Uncertainty avoidance represents discomfort with unstructured or ambiguous situations and a preference for certainty. Societies with high uncertainty avoidance strive for high predictability to lessen the anxieties of the unknown. Other societies show more tolerance for uncertainty. Greece has the least tolerance for uncertainty among nations; Singapore, Sweden, and Denmark are nations with a large tolerance for uncertainty.

The individualism dimension measures the place on the continuum from highly individualistic to highly collectivist attitudes of a culture. Highly individualistic societies expect the individual to look after him- or herself and immediate family. Highly collectivist societies expect individuals to act in the interest of a large group in exchange for loyalty and support. The United States has the highest rating for individuality.

The “masculinity” dimension measures, in relative terms, how individuals view culturally determined gender roles in their societies. “High masculinity” societies such as Japan demonstrate a clear dichotomy in social gender roles. “Low masculinity” societies (like Norway and Sweden) show more overlapping of roles and a more “feminine” attitude of nurturing and caring.

Michael and Martinez used these four dimensions to develop hypotheses regarding regulation. A society that views uncertain situations with trepidation and believes that uncertainty should be avoided as much as possible will probably be more comfortable with stricter formal rules and regulations than will a society where an uncertain future is perceived as a challenge. The two researchers also hypothesized that a society that accepts a wide gulf between less and more powerful groups will want formal rules and regulations that can guide its dependent citizens in their daily lives and, thus, will have more regulation of entrepreneurs. They also posited that attitudes toward highly defined gender roles would affect regulation, with societies with highly defined gender roles having more regulation of entrepreneurs. On the other hand, they expected that any society that puts a high value on individualism would have looser regulation of entrepreneurs.



*“The relationship between culture and entrepreneurship can be mediated by regulation, and regulation is more easily changed than culture.”*

The researchers looked at the data for the effects of culture as a whole on the regulation of start-ups. Then they looked at the effects of culture on each of three measures of regulation: the number of procedures that must be followed to start up a new company; the time required to start up a new business; and the cost of obtaining legal status.

#### The Results So Far

Although the results of Michael and Martinez's research did not support all of their hypotheses, culture, as measured by the four dimensions specified, significantly and positively influences the rules and regulations a society puts in place for starting up new businesses. Uncertainty avoidance had a significant effect on the number of procedures a start-up is required to follow in order to obtain legal status. In societies that dislike uncertainty, regulation appears to make entrepreneurship more difficult. Power distance also has a significant effect. The masculinity dimension has a weak effect on the amount of regulation of start-ups. The individualism measure did not produce the expected results, having an insignificant effect on regulation.

Looking at the effects of culture on the amount of time required to obtain legal status for the new firm, Michael and Martinez found that culture was significant, but less so than for the number of procedures. Uncertainty avoidance was the only one of the four dimensions to have a significant positive effect on the time required to start up a new business. The effect of the cultural dimensions on the cost of obtaining legal status to operate a firm (measured as a share of 1999 per capita gross domestic product) had no significant effect on any of the measures of regulation. Contrary to expectations, it does not appear that culture affects the costs involved in setting up a business enterprise in the 53 countries sampled. One possible explanation is that cost is driven more directly by the need of governments for revenue.

#### Implications of the Research

Since entrepreneurs do not, for the most part, have a choice whether to deal with their own cultural and regulatory environment when trying to start a new business, the more useful implications of the study are for governments. Governments around the world are keenly interested in entrepreneurship, and culture does not have to be the determining factor in regulation. When considering liberalizing the regulation of entrepreneurs, governments must weigh the political cost of making changes in regulations that will go against national

culture and the gain from new ventures with their associated new wealth and jobs. Some researchers, as well as the popular press, have argued that certain cultures are more "entrepreneurial" than others. However, the relationship between culture and entrepreneurship can be mediated by regulation, and regulation is more easily changed than culture. Say the authors, "any nation can be entrepreneurial if they adopt different regulations."

#### Looking Ahead

In the next phase of their research, Michael and Martinez will look more closely at the relationship among culture, regulation, and entrepreneurship. They will look at cross-sectional data for approximately 35 nations for which data on entrepreneurial start-ups are available to delve into "whether entrepreneurial nations are born or made," that is, whether the influence of culture on entrepreneurship is a direct one or is mediated by regulation. ■

—Janet Fitch

Steven C. Michael, Schoen Faculty Fellow in Entrepreneurship and an associate professor in the Illinois Department of Business Administration, earned his PhD in business economics from Harvard University. He teaches courses on entrepreneurship, technology, and strategic management.

Candace Agrella Martinez is a PhD student in the Department of Business Administration. A Chicago native, Ms. Martinez earned a BA from Illinois in foreign languages. After graduation she moved to Spain where she taught English for several years. After a period in the Boston area, she returned to Spain, developed an interest in marketing, and worked in that area for a number of years. Six years ago, she returned to the Urbana campus to enter the MBA Program. After earning her MBA, she entered the PhD program, studying in the strategic management group.



## CLASSROOM EXPOSURE TO ENTREPRENEURIAL CHALLENGES

To be successful in the challenging and frequently tumultuous environment of start-ups requires business acumen that can be taught. Illinois is a leader in offering education and training in entrepreneurial enterprises throughout the curriculum. The experiences and lessons taken from the classroom may help graduates achieve entrepreneurial success.



*Tiffany White*

### Learning from the Challenges of a Traditional Start-up

One way to teach students some entrepreneurial basics is by having them develop a realistic project of their own. Tiffany White, assistant professor of business administration, incorporated an entrepreneurial small business project into her class syllabus for Buyer Behavior. Students were asked to create a restaurant that could survive the competitive Champaign-Urbana market.

Student teams had to research the dining options in the downtown/campus town area and then design a new dining concept that would be viable. Gathering data, estimating costs including labor, supplies, and space rental, and drafting a proposal were the next steps. The teams gave written and oral presentations that identified, described, and justified the location and the type of restaurant they chose.

Said Dana Zultowski, a senior in finance and marketing, "the hardest part of starting your own businesses is coming up with a truly great idea." The variety of student proposals ranged from tapas bars to fondue establishments to theme restaurants, including one with a Renaissance theme and a restaurant with professional dance instructors. Once each group had an idea, they had to come up with a realistic business plan.

At the end of the project, the students had to, according to White, "pitch something that was reasonable...pitch it like they would to a venture capitalist." She brought in outside judges to assist in evaluating the projects. One judge was Kristine Smith, owner of Montgomery's restaurant in Monticello and a visiting assistant director in the College's MBA Career Services office. Smith felt that overall the students did "a terrific job on their restaurant market analysis projects, especially in light of the fact that they were not restaurateurs and had never worked in the industry."

According to White, the biggest challenge for students was finding a way to make their creative endeavor work with the financial part of the project. Jennifer Majewski, a senior in business administration, noted that "many of my peers hope to be entrepreneurs someday. I think this project helped them realize that no matter how zealous they may be ... [starting a business] is a very difficult endeavor." Zultowski commented that the main thing she learned from the project was that "everyone has great ideas, but it is only by thinking your ideas through and placing them in the environmental context that a great idea can become a reality ... and a success."



*David Sinow*

## A sampling of COURSES IN ENTREPRENEURSHIP

### **B Admin 344: Buyer Behavior**

Studies the factors affecting customer behavior in household and organizational markets and their relevance for marketing management planning and analysis; provides an overview of explanations of consumption differences anchored in socioeconomic, demographic, cultural, and psychological processes; and surveys buyer decision-making processes and their implications for marketing strategy.

### **B Admin 345: Small Business Consulting**

Through guided experience, students identify and offer advice to local small business firms; exposes students, serving as consultants, to the wide variety of problems facing the smaller firm as well as enables them to apply current business methods to real problems. Students work in teams.

### **Finance 324: Financing the Emerging Business**

Study of the business environment, alternative methods of organization and financing, use of financial statements as a management tool, valuation methods, and approaches to ethical dilemmas from the perspective of an owner-manager.

### **Fin 490: Private Equity and Entrepreneurial Finance**

Study of the nature of the private equity market, the principal participants in this market, and the financial strategies that they employ. Topics covered include: How private equity funds are raised, structured, and financed; contracting in private equity markets; valuation of private equity interests; sources of capital for private companies; strategies for value creation; and exit strategies.

## Guest Speakers Embody the Successful Entrepreneur

Dennis Beard, George Krueger, and David Sinow, who all teach sections of Financing the Emerging Business, combined classroom work and an evening speaker series, giving students an opportunity to hear about aspects of business that classroom work alone might overlook. The evening sessions, first developed by Beard and Krueger, both adjunct faculty members in finance, brought business professionals – small business owners, lawyers, bankers, accountants – into the classroom to talk about their personal experiences. For instance, a small business owner spoke about some of the problems he encountered when setting up his business and a venture capitalist discussed types of emerging businesses and the characteristics she looks for when funding a venture.

"For me, every speaker told something new and unique that I had not thought of earlier," said Sahail Shariff, a graduate student in engineering. Ryan Moen, a senior in finance with entrepreneurial aspirations, noted that the class helped him determine "which type of [ideas] would suit my business and how to finance my endeavors."

The recent speaker list included Harry Bond, CEO of Monical's Pizza, and James Liautaud, founder of Jimmy John's, a national chain of sandwich shops. The students learned from the personal experiences of others and had an opportunity to question an entrepreneur in a small-group setting. Sinow incorporated what the speakers say into what is taught in the classroom and hopes that both reinforce the idea that "the most important element of business is the human capital."

*continued on page 10*

## Real Life, Real Situations

In Jeffrey M. Kurtz's Small Business Consulting class, emphasis was placed on working with clients in real businesses and non-profits. Kurtz, an adjunct lecturer in business administration, noted that his class "gives students a unique opportunity to apply their classroom skills and tools in a real world setting while still in school." Along with the regular class sessions and typical textbook readings, the students also worked as small business consultants.

Everything from the formation of the teams to the business meetings was structured to give the students some idea of what they will experience after graduation. For instance, Kurtz didn't assign students to teams or allow them to pick teams for themselves. Instead, he required that any student interested in becoming a team leader, or "manager," submit an application and interview for the position. After the team leaders were chosen, each reviewed the resumes submitted by fellow classmates. The leaders were given a salary budget to "bid" on their classmates, a technique that gave the students some idea of what to expect once they leave college and become part of the work force. According to Kurtz, picking teams in this fashion allowed students to gain a new, business perspective. "One of my favorite comments from the team leaders is, 'Gee, all the resumes look the same!'" stated Kurtz. "I usually say, 'I know. Think about the resume you send out. Would it attract your attention or would it look like all the rest of the resumes?' That usually is the first epiphany for the students during the semester."

Within the consulting projects, an emphasis was again placed on making the experience realistic. Once the students were assigned to their clients, they had to meet frequently both within their groups and with their clients in order to discuss the engagement proposals. Kurtz called this the most difficult phase of the entire project because the students found that it called on knowledge and skills they have developed as students, but it also required interpersonal skills that have not yet been developed in a business environment. Throughout the class, the students had to look and behave in a professional manner and make their client presentations polished and insightful.



*World War II-era LST-325*

Photo by Bill Garlow

These strategies, as well as a personal effort by Kurtz and four of his students, were put to good use when they volunteered to work with a non-profit organization that hopes to turn a decommissioned World War II LST-325 into a museum. An LST (Landing Ship, Tank) is an amphibious vessel designed to land battle-ready tanks, troops, and supplies directly onto enemy shores. "I'd been following the ship's story and wondering how I could get involved," Kurtz said. The College of Business team worked during the semester with staff from the LST Ship Memorial and continued their efforts with the ship's owners to develop a national marketing plan, working with Kurtz and using what they learned in class. During the 2003 summer, the LST-325 traveled along the Mississippi and Ohio rivers, giving tours as part of a fundraising effort organized by Kurtz's students.

## Direct Application

Occasionally College of Business courses whet the entrepreneurial appetites of students who are beginning to seriously consider forming their own businesses. Some budding entrepreneurs, however, register for classes with an idea for a future endeavor already in hand.

Michael Weisbach's class on Private Equity and Entrepreneurial Finance focused on how private equity funds are raised, sources of capital for private companies, and the best possible way to exit a

*Weisbach's class was... "probably one of the best I have ever taken in graduate school."*

venture, among other topics. Offered to MBA students, the class was an opportunity to study a crucial part of the financial world that is of particular interest to those going into business for themselves. Weisbach, a professor of finance, noted in the course syllabus that, "Despite recent decline in capital commitments, the organized private equity market remains, and will continue to be, a major component of the capital markets."

Two class projects provided the opportunity for students to demonstrate what they had learned. The first project was presenting a deal to a partnership and explaining why the partnership should fund their plan. The second involved negotiating between an entrepreneur and a venture capitalist. Weisbach focused the class on communication skills and strategies because, he noted, in the real world, a large part of an entrepreneur's success will be determined by how he communicates with his colleagues. Private equity practitioners, including David Donnini, of GTCR Golder, Rauner, guest lectured this spring and helped evaluate the projects.

One of Weisbach's students, Frank Shi, an electrical engineering graduate student, had a particular interest in the class. Shi came into class with a business plan because he recently started an entrepreneurial venture with fellow University of Illinois students Kuolih Chang, also an electrical engineering graduate student, and Veronica Lai, an MBA student. "We were thinking about pulling together the innovations for a business plan," Shi said. "Mike helped a lot on the concept formation, B-plan writing, and networking with outside VC's (venture capitalists)." Shi, Chang, and Lai hope to market a business developing "high-speed optoelectronic devices for advanced lighting or fiber-optical communication applications." Shi and his team are still working on getting venture capitalist funding for this technology, but he acknowledged the help that Weisbach's class provided, saying the class was "probably one of the best I have ever taken in graduate school."



*David Donnini*

#### Teaching Towards the Future

Tackling an entrepreneurial simulation in the classroom, hearing from successful entrepreneurs, and serving as a consultant to a start-up small business are all learning strategies used by College of Business faculty. By giving students a chance to be an entrepreneur while still in the classroom, Illinois provides a safe environment in which to learn how to take a risk. ■

—Ashleigh Johnson



## SUMMER AT THE MAYO CLINIC: EXPERIENCING ENTREPRENEURSHIP FIRST HAND

The University of Illinois MBA Program offers its students a number of opportunities to learn about entrepreneurship both inside and outside the classroom. I was fortunate to have spent my internship working on a venture that further enhanced my exposure to entrepreneurial endeavors.

When people hear the name Mayo Clinic, they most often associate it with a world-class medical center and outstanding patient care. So what would a former plant biologist studying for an MBA be doing working at the Mayo Clinic on a summer internship focusing on entrepreneurship? Besides being ranked as one of the top hospitals in the world, the Mayo Clinic is also a preeminent research institution. When you combine the best clinicians and leading medical researchers, great ideas are produced every day. Those ideas lead to the development of cutting-edge medical technologies that offer opportunities for commercialization, and thus entrepreneurship.

It was because of these technology commercialization opportunities that I traveled north to Rochester, Minnesota, to spend ten weeks working with the Mayo Clinic's technology commercialization team. My internship assignment was to create a business plan and investor presentation to help the staff raise financing and start a new company around an innovative technology for the orthopedic market. The technology, a new synthetic polymer, would be used in the treatment of patients undergoing spinal fusions for degenerative disc disease or with vertebral fractures resulting from osteoporosis. This is an exciting advancement in the orthopedic spine field that could allow for new, minimally invasive surgical procedures because the compound can be injected. A significant number of people who have previously had to suffer from back pain with no good treatment option could be helped by this new technology.

When I first arrived at Mayo Clinic, I spent the initial part of my internship working on understanding the technology that would be the basis of the start-up venture and its place in the market. To begin

working on the development of the business plan, it was important for me to first understand the technology and its potential. While I had no background in the orthopedic market, I was able to use my past experiences to help begin the process of developing a business around this new technology.

One of the programs in the Illinois MBA that helps students gain exposure to various fields and learn to research companies and technologies is OSBI Consulting. I worked on two consulting projects with OSBI that provided me with the skills and experience necessary to undertake the market research portion of my Mayo Clinic project. During my first year in the MBA Program, I did a market assessment and developed commercialization options for a drug-delivery technology. As it turned out, some of the same technologies that I researched for our OSBI client were part of the research I was doing for my internship. OSBI projects not only provide understanding of a specific field, they also allow students to learn more general research and consulting skills that can be applied to almost any venture.

OSBI teams, while primarily made up of MBA students, also can have team members from any department on the Illinois campus, including Library and Information Sciences (LIS). LIS students gather research and provide help in locating information resources. Learning the best and most efficient ways to find information about markets and companies from LIS team members proved valuable in my Mayo internship. I was able to use my knowledge of various information resources a number of times in order to gather information for the business plan I was creating. Once again, I could see how my OSBI projects gave me a chance to apply the things learned in the classroom to real-world situations, giving me a bridge between the classroom and my internship.

The Center for Entrepreneurial Development (CED) at the College of Business is another hands-on opportunity in entrepreneurship that was critical in preparing me for my internship. CED focuses on

*“My internship was another terrific chance to experience entrepreneurship first hand.”*

fostering entrepreneurship in the campus community and in central Illinois. MBA students can attend presentations by entrepreneurs, participate in business plan reviews, and help entrepreneurs through an advisory services group.

I was one of three students who worked with Prairie Angels, a group of angel investors in Chicago, to help a screening committee review business plans. MBA students from Northwestern, the University of Chicago, and the University of Illinois worked closely with members of the committee to provide reviews that aided in the selection of business plans that had been submitted to Prairie Angels. This opportunity to read and evaluate business plans written by entrepreneurs was invaluable. The chance to interact with the angel investors and gain an understanding of what was important in a business plan allowed me to create a better business plan during my internship.

During the summer, I had the opportunity to work with clinicians and researchers from a variety of Mayo Clinic departments. The team environment of Mayo Clinic and the technology commercialization group seemed familiar because that is the same environment we have in the Illinois MBA. The large amount of group work required in the curriculum helps MBA students develop communication and interpersonal skills necessary for successful teamwork. We have opportunities to be team leaders and to conduct meetings, both experiences that prepared me to work in the collaborative environment at Mayo. The diversity of backgrounds in the Illinois MBA also is a great benefit. The opportunity to interact with people from different cultural and educational backgrounds facilitates learning how to communicate effectively in a team of individuals with diverse backgrounds.

The learning experience from my internship won't stop now that I have left the Mayo Clinic and returned to Illinois. Not only was I able to apply the things I had learned during the first year of the MBA program to enhance my internship, but I will also be able to apply the experiences I gained during my ten weeks at the Mayo Clinic to my second-year classes. My exposure to venture capital, negotiations, and a number of other areas will be great experiences to share in the classroom.

Because of my OSBI and CED experiences and my exposure to the entrepreneurial mindset, I was able to jump into developing a business plan for the new orthopedic technology at the Mayo Clinic. I didn't need to learn about what elements are essential for a solid business plan or how to find pertinent information and analyze it. The Illinois MBA Program and other College of Business units gave me a great foundation that helped prepare me for my internship. Working at the Mayo Clinic was another terrific chance to experience entrepreneurship first hand. ■

—Jeremy Hollis

### ***Making It Possible***

Jeremy Hollis' internship at the Mayo Clinic was funded by a grant from the Ewing Marion Kauffman Foundation. Challenged by the volume of medical disclosures each year, Mayo Clinic staff worked with Paul Magelli, director of OSBI Consulting, to prepare an internship proposal to the Kauffman Foundation that resulted in a \$50,000 grant. Hollis is the first of several Illinois MBA interns who will work there.

### ***Additional Projects Fill the Summer***

Jeremy Hollis also worked on a project that is part of the Mayo Clinic's xenotransplant research program. The research program could lead to pig hearts as an alternative source of organs for heart and kidney transplants. He researched and wrote a report on the xenotransplant market and competitors that will help the Mayo team evaluate the commercialization options for this technology. Hollis also did short-term research projects for licensing managers in other technology areas.



## DOES TECHNOLOGY SURVIVE THE FIRM THAT CREATES IT?



*Glenn Hoetker*



*Rajshree Agarwal*

In 1999, flat panel display manufacturer OIS Optical Information Systems closed its doors. Despite millions of dollars of investment and a portfolio of innovative technologies, it had been unable to achieve commercial success. Surprisingly, although OIS failed, its technology lived on. As OIS's former director of advanced technologies wrote in a letter to the editors of Information Display magazine, "OIS technology continues to make waves. Since the shutdown eleven more US patents and three more European patents have been issued to OIS." Many of these patents covered processes that were becoming mainstream technology.

Rajshree Agarwal and Glenn Hoetker, both faculty in the Strategy group in the Department of Business Administration, wondered if OIS was an exception or if the innovations routinely outlived the companies that produced them. The stakes are large because 10 percent of all companies in an industry fail in an average year. The failure rate is even higher for young, entrepreneurial firms, often the source of the most innovative technology. Does the failure of these companies mean that the venture capital invested in them was totally wasted? The recent boom and bust of dot-com companies gives the research particular relevance. Did the dot-coms that failed leave behind anything besides a surplus of used foosball tables?

The optimistic view is that the employees of the failed company move to other firms in the industry, carrying their knowledge with them and continuing to build upon it. Competitors that had tracked a company's technological progress while it was alive will continue to build on what they observed. The pessimistic view is that, although individual employees move, innovation was the result of concerted efforts by an entire team of employees. Separated from that team, and working in firms with different technological priorities, employees cannot build on the knowledge they gained from their previous employer. Furthermore, once a company vanishes from the scene, the lessons that were gained by watching it are discounted and quickly become obsolete.

# “A firm’s death is clearly not always fatal to its technology.”

Hoetker had spent five years researching the flat-panel display industry, while Agarwal was well versed in the hard-disk drive industry, so they focused their efforts there. In both industries, constant innovation creates many start-ups, and strong competition leads to many failures.

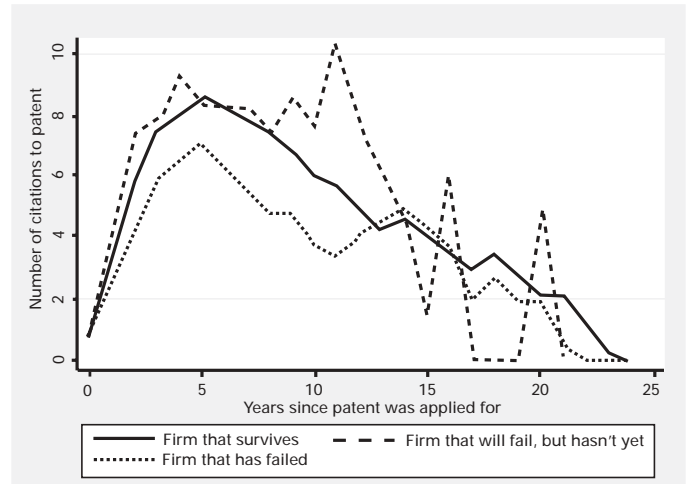
Tracking the impact of knowledge is difficult, but patent citations provide a means to do so. The inventor who applies for a patent is required to cite all prior work on which the new technology drew. If a patent receives many such citations, it is an indication that the patent had a major impact on the development of technology in an industry. Agarwal and Hoetker gathered data on citations to patents of companies that failed between 1977 and 1999 and compared this data with that from patents belonging to companies that did not fail during the same period.

## Preliminary findings

Although the project is in its early stages, Hoetker and Agarwal have already reached some intriguing conclusions. Using data on the hard-disk industry, they found that citations to a patent tend to start slowly, build to a peak five years after the patent was applied for, and then tail off slowly (Figure 1). Interestingly, when they took advantage of historical hindsight to compare the patents of companies that survived with those that would eventually fail (but hadn't yet), the number of citations was almost the same. This suggests that sub-standard technology was not the cause of the failures, a finding that is consistent with earlier work Agarwal had done on the importance of market pioneering knowledge in the success of high-technology companies [1].

Once a company died, however, citations to its patents dropped precipitously. Figure 2 compares the average number of citations of a patent for a firm that failed five years after applying for it with what would be expected if the firm had lived. This was true even when citations the company made to its own patents while alive (so-called self-citations) are ignored. Firm death clearly matters. However,

*continued on page 16*



[1] Pioneering Advantages In High-Technology Markets: The Synergistic Effect Of Technological And Marketing Capabilities with Raj Echambadi, April Franco, and M.B. Sarkar. Unpublished working paper.

citations to the patents of failed companies remained significantly above zero. In some cases, patents of failed firms remain highly influential. For example, Prairietech was only active in the disk-drive industry for five years, but its patent for a "Disk drive apparatus using dynamic loading/unloading" was cited 106 times in the eight years between death and 1999. A firm's death is clearly not always fatal to its technology.

It is interesting to look at what factors determined how precipitously citations to a firm's patents declined after its death. For example, the influence of a non-US firm's patents drops especially sharply after the firm fails. Agarwal and Hoetker theorize that, having never had much presence in the US business scene, these companies dropped from the industry's consciousness particularly quickly after their failure.

The older the company is when it fails, the larger the subsequent drop-off of citations to its patents. The same is true of companies that based a large number of their new patents on their own earlier ones. Both facts suggest that the more a technology is embedded in a firm's distinctive technical culture and routines, the harder it is to build on that technology when that environment is no longer available.

Patents that combined knowledge from many technical fields were cited as often as others while the patenting company was alive, but they experienced a more extreme drop in citations after they failed. Hoetker and Agarwal hypothesize that the difficulty of combining many fields is partially mitigated when competitors can observe how the patenting firm approaches the task. When that example is gone, however, the task becomes much more complex. Furthermore, it is difficult to recreate the multi-disciplinary team needed to advance the technology.

## Implications and further research

Several implications are already clear. In many cases, the technology created by a firm continues to make a meaningful contribution to an industry's technical innovations even after the firm fails. This suggests that it would be wrong to judge investments by local, state, and federal governments in innovative companies — whether through tax breaks or direct funding — only on the commercial success of the firm receiving the funding. There will often be social and economic benefits from the technology the firm generated over its life.

Agarwal and Hoetker's research also suggests that a company's know-how may retain considerable value even after the company fails commercially. How should other firms try to capture that value? Is hiring key technical employees important? What role do higher-level managerial employees play? Does combining the hiring of employees with the purchase of intellectual property such as patents and trade secrets give the best results?

Answering these questions would assist venture capitalists, who could package the knowledge assets of a firm to maximize their value to others, thus increasing the portion of their investment they could recover through sale of those assets. Other firms in the industry, especially new, entrepreneurial entrants, would benefit by being able to scavenge the failed firm's technology. ■

—Janet Fitch

**Rajshree Agarwal**, an associate professor in the Department of Business Administration, holds a PhD from the State University of New York at Buffalo and taught at the University of Central Florida before coming to Illinois in 2001. Her research interests focus on innovation and technological change. Her recent projects examine knowledge transfer through employee entrepreneurship, experience-based advantages in new product markets, and the influence of dynamic knowledge-based capabilities on firm performance. Agarwal teaches business policy and strategy to both undergraduate and MBA students.

**Glenn Hoetker**, an assistant professor of Business Administration, is a 2001 PhD from the University of Michigan. He joined the Illinois faculty the same year. With a background that includes degrees in Japanese studies and mathematics, library and information science, and applied economics, as well as his PhD in international business and corporate strategy, Hoetker has a wide range of research interests. These include the management of technology and innovation, inter-organizational networks, the economy and institutions of Japan, and economic institutions and contracting. His teaching interests include corporate strategy and the management of technology and innovation.



# CORPORATE PARTNERS 2003

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## THE HEART AND MIND OF THE ENTREPRENEUR

What drives an entrepreneur? Students frequently ask this question, half expecting the answer to be the potential financial payoff. The more likely motivator is passion: passion for creating and growing a business and for finding creative solutions to manage risks and develop successful ventures. The passion is also for transforming — through a series of potentially intuitive processes — ideas into a tangible product, service, or business that society values.

Many College of Business alumni are entrepreneurs. The three men highlighted on these pages are all founders or co-founders of technology ventures, but they could equally well be from any of the spectrum of industries and interests found among the College's alumni entrepreneurs. They articulate the essence of their passion for the ventures they started, revealing their concerns and excitement at the prospects of charting a course in business.

Dan Kardatzke of Frey Technologies, a software startup, is like a sprinter off the starting block, exuding passion for dealing with the challenges of introducing a new technology while assuming risk that is truly personal. Todd Miller of The Revere Group, a growing mid-size technology consulting firm, is like the runner turning an important corner. His passion has brought him to the point where he must manage a growing team and steer his venture through a pivotal point in its development. Michael Krasny, chairman emeritus of CDW Corporation, has the perspective of a champion distance runner. His enthusiasm for starting anew is kindled by the passion that fueled his past success.

Speaking from their hearts, these alumni provide three unique glimpses into entrepreneurial ventures at different stages of organizational evolution. Together, they provide valuable perspective on entrepreneurial leadership.



**Daniel Kardatzke**

*Dan Kardatzke is cofounder of Frey Technologies, LLC, an entertainment software development corporation currently marketing SageTV, an intelligent television recording application for the PC. He is a graduate of the College of Business (Finance '96). Frey Technologies is online at [www.freytechnologies.com](http://www.freytechnologies.com).*

Right now we're at the "wow" stage. We're trying to bootstrap this and up to this point, we've self-funded our business except for one private investor. We're in discussion with partners to license our technology into their systems. The consumer market continues to sell, and we'll have to hire somebody for consumer technical support while we focus more on the commercial licensing market. We've only scratched the surface of this market, and we're looking for partners who have a track record in place to license or sell it. Our goal is to keep the company small, yet have partners around the US and around the world. We don't ever want to build up a 100-person company.

We tried getting venture capital and everyone we talked to said we were too early for VC money. You've got to show 12-24 months of growth and sales to even talk to them. We tried some angel investors and they said they invest in people they know who come from their industry. So we're an example of entrepreneurs trying to bootstrap a company and grow it with a personal stake. We've had to start from square one — we knew it was a risk, but we had a strong desire to do it. We took it as a challenge.

*“You always need to be able to change your vision for the future.”*

— Michael Krasny

Our biggest challenge is getting our licensing relationships put into place so that our software can begin to be integrated into other solutions. A big concern is, if sales don't come in, what we are going to do in the next couple of months? The web traffic goes up every day, the downloads go up every day, the hits to our server go up every day, and our sales have gone up over the past couple of months, so we're on the right path. Still, we worry about what could happen if the word of mouth doesn't continue to carry us the way it has been. We don't have a lot of cash to do blown-out marketing. We're relying on word of mouth and our partners right now, along with co-marketing opportunities, to get us to that next level.

I'm not thinking much beyond the next six months, except financially to make sure that our licensing model will work and to what level we're going to need technical support. My immediate goal is keeping the business alive and keeping a positive cash flow. There are also personal considerations. Because my wife is supporting our family, I have to consider the future of our business from a personal standpoint. If the company's not creating a positive cash flow, then we've got personal issues to deal with. Those things intertwine. I have to keep a sense of humor, too, so I don't get overly stressed out. It's important for us to keep level heads and not make rash decisions based solely on our personal needs. We want to build a business and we want to build a living. We have all those things in the back of our heads when we make decisions about our next steps.



**Todd Miller**

*Todd Miller is founder, president, and COO of The Revere Group, a technology consulting firm that designs innovative business processes and applications for clients worldwide. He is a graduate of the College of Business (Bus Admin '81) and spoke on entrepreneurship at the Executive MBA Enterprise Day in Chicago last fall. The Revere Group is online at [www.reveregroup.com](http://www.reveregroup.com).*

We've often looked back to consider pivotal points, defining events that drove major changes in our organization (revenue, number of employees) and made us grow up and be a real company. One of those milestones occurred when we were just over \$10 million in revenue and employed 50-75 people. We suddenly realized that the time for having such an entrepreneurial and open culture was over, and that we needed to institute an infrastructure, processes, and systems that would allow our business to harness our company's assets and grow to the next level.

The venture capitalists that we've talked to since that time told us that often \$10 million in revenue is a plateau that many companies struggle to exceed. Certainly it was a struggle for us. We had opened multiple offices and suddenly we needed a communications infrastructure so that our employees could share critical information in order to serve our clients better. We needed to put a sophisticated benefits package in place for our employees, and we needed to develop better financial management. It was time for us to be proactive about business decisions, not just react to situations.

*continued on page 20*

Once we put the necessary management systems, policies, and procedures in place, we were better able to forecast our business and adjust where to invest marketing dollars and make new hires.

I understand the point that venture capitalists were making. There is a critical juncture when a company needs to move up to that next level. Because there's so much investment and energy required at that time, you really have to fine-tune your marketing structure and target your services with laser focus.

As our company has evolved, our organizational structure and our culture have also evolved. Certainly as an entrepreneurial startup, our culture was characterized by decisions that were made on the fly — a shoot-from-the-hip mentality. We had a very open culture and our employees had a much higher than normal risk tolerance. Then, when we exceeded \$10 million in revenue, we needed to establish an organizational structure and culture for our company. Employees needed to develop an identity with the company — not only the company as a whole, but also with the department or practice area in which they were involved. They started to ask questions like, 'What are the values of this company?' and 'Do I fit in?' They needed that identity, and we needed that identity to be aligned with the company's core values. That's the time at which we defined our core values at Revere, and it's interesting that they have not changed in eight years. I don't know whether that's a positive or negative, honestly, but the fact remains that, although they have been challenged, they have not changed.

Looking forward, the biggest question we have right now is, 'Are we on offense or are we on defense?' Do we hunker down or do we plan for growth so that when the market rebounds, we can grab market share? What bet should we make? There's no easy answer.



**Michael Krasny**

*Michael Krasny is founder and chairman emeritus of CDW Corporation, a Fortune 500 corporation offering customized technological solutions for business, government, and educational institutions with annual revenues over \$4 billion. He is a graduate of the College of Business (Finance '75) and gave the V. Dale Cozad Lecture in Entrepreneurship on campus last fall. CDW is online at [www.cdw.com](http://www.cdw.com).*

Growing a business has a lot to do with paying attention, not to hundreds, but to thousands of small details. You have to be an innovator. No matter what you are doing, if you are just doing the

same thing somebody else does, you have no competitive advantage. Your business also has to change and evolve because if you don't, somebody else will come along with a better mousetrap.

It was ten years before CDW actually got any sense of orderliness to the company. Automation is an absolute must in any business, and CDW was no exception. By adding time-savers like sealed COD tag printers, which meant that nobody had to hand write tags anymore, we cut the tagging process from a minute to five seconds. The 55 seconds we gained, we used somewhere else in the organization. We just kept opening up what I call the "bandwidth." Today, our revenue per co-worker is about \$1.6 million, which puts us in the Top 50 of Fortune 500 companies for productivity. Automation can increase people's bandwidth and give them more energy and more time to be productive.

You always need to be able to change your vision for the future. We have a lot of philosophies at CDW, and one of them is, "What's right yesterday may not be right today, and what's right today may not be right tomorrow, and what's right tomorrow may not yet be right today."

After the 20-year marathon of building CDW, of working long and hard days, I found that I was tired. Although it would have been easy for me to keep my corner office and just glide along, I realized it was time for new leadership. The company now employs nearly 3,000 co-workers and my ability to relate to each of them just wasn't the same as it was in the beginning, so I went to the board and told them I thought we should fire our CEO — me.

Comedian George Burns once said, "I'd rather be a failure at something I enjoy than a success at something I hate." He was talking about passion. My passion was for building systems, being able to produce as much volume as we could in an orderly way, and to create opportunities for people to grow within the company. I got through the tough days because I believed in what I was doing. It was just in my blood.

I'm an entrepreneur. I developed a company from the ground up and built it into a successful venture. I'm not somebody who wants to develop a management team of professionals. Today, I am chairman emeritus, an active board member, and a significant shareholder in CDW. Yet, in some ways, I'm in a position very similar to the one I was in 20 years ago, when I was trying to decide what to do with myself. I sometimes tease that I may come back to CDW and apply for a job as a technician. After all, CDW is one of the best places to work in the US, so why wouldn't I want to be there? ■

—Tracy McCabe



*Jay Varkey*



*Emery Mingxia Shi*

## CED INTERNS LEVERAGE EXPERTISE TO ADVANTAGE ENTERPRISEWORKS COMPANIES

During the summer of 2003, we had a unique opportunity to collaborate with entrepreneurs and innovators who are working to commercialize their proprietary technology. As interns with the Center for Entrepreneurial Development (CED), we worked on a variety of projects to benefit small companies housed in EnterpriseWorks, a facility in the University of Illinois Research Park.

EnterpriseWorks is a beehive of entrepreneurial activities! The new building houses people who dare to dream and who dare to act on those dreams. Fifteen start-up companies that originated from University of Illinois research operate from EnterpriseWorks, developing a range of products — from emission detectors for mercury to self-healing composite materials for space applications.

The most exhilarating part of our experience was the day-to-day (or should we say hour-to-hour!) creative interaction with the people behind these businesses. Most of them are pioneers in their fields, taking a risk to realize their entrepreneurial dreams. This was inspiration enough for us to vigorously pursue market feasibility studies and market assessments for the various applications and products being developed. As part of the CED Advisory Services Group, we researched and wrote market feasibility studies for Caviton Inc. and CU Aerospace LLC and a market assessment report for Illinois Ventures LLC.

A project that was challenging and educational at the same time was the creation of the CED business portal, to be released later this year. The portal provides a one-stop website with access to the best available online sources of information on establishing a business. Topics include raising capital, creating business plans, marketing, and legal issues.

In completing our internship assignments, we drew heavily on our academic as well as professional backgrounds — physics, law, and finance (Jay) and accountancy and management consulting (Emery). We had the opportunity to work with students from other departments on campus, which helped us better understand the technologies being commercialized at EnterpriseWorks.

Our first year of study in the Illinois MBA Program added marketing, finance, and strategy tools to our existing repertoire of skills. The program's core curriculum and our participation in OSBI Consulting projects equipped us to analyze the EnterpriseWorks technologies, their applications, and the products from the proper business perspective.

As CED Associates, we also met many successful entrepreneurs, including Bob Buford, a leading real-estate entrepreneur in Chicago, and Steve Miller, a College of Business alumnus, founder of Origin Ventures LLC, and a co-founder of Prairie Angels. At a special forum in Chicago, we also met with Padmashree Warrior, CTO of Motorola Corporation, and Larry Roches, CEO of DBS Communications.

Dinesh Ahluwalia, director of CED, guided us throughout our internship experience — advising, motivating, and encouraging us, all at the same time. His contributions to our learning process were substantial.

For us, working at CED this past summer was exciting and educational. The services that we provided to our clients were valuable to them and the process was enriching and satisfying to us. ■

— Jay Varkey and Emery Mingxia Shi

*Michael Weisbach with Chancellor Nancy Cantor (left) and Joan Golder (right) at his investiture.*



## Q&A with Michael Weisbach: **BRINGING PRIVATE EQUITY TO THE PUBLIC**

### 1 What is the private equity industry, and how is it structured?

The private equity industry consists of a number of partnerships that make active investments in companies that fund new businesses or buy out existing ones. These partnerships raise money from their limited partners, which are mostly large institutions. The invested funds are returned to the limited partners when their investment is "exited," usually through an IPO or an acquisition by a third party.

The industry structure is extraordinarily clever in that it benefits all of its constituents, sometimes very handsomely. The genius of the industry setup allows money from, for example, pension plans of workers who may know nothing about finance or business to be funneled into new and profitable business ventures. In the end, everyone wins: the entrepreneurs who get funding for their businesses, the workers who get good returns on their invested pension dollars, and the venture capitalists who coordinate and structure the deal.

This industry has grown dramatically over the last 20 years or so. In the early 1980s, the largest fund was the Golder, Thoma fund, with \$60 million under management. Today, there are many funds that regularly raise over \$1 billion.

Many of the most prominent companies in the US today started as ideas that creative entrepreneurs sold to private equity groups. Such companies include Federal Express, Compaq Computer, and Netscape, all of which were funded by prominent venture capitalists.

### 2 How has private equity contributed to revitalizing the US economy? How do young, private companies contribute to the economic success of the US?

The private equity industry has been very important to this nation's economic development. If you compare US companies to those in other developed nations, one major difference is that, in the US, the list of the most important companies is different today than it was a generation ago. Entrepreneurs who are still young have seen their companies develop, mature, and spin off new industries.

In contrast, in Japan or Europe, the companies that were dominant 20 years ago remain dominant today. The result is often economic stagnation and inertia. Turnover of leading companies is generally healthy because as companies age, they often become less efficient. If there are no dynamic new companies on the country's horizon, the national political and banking systems may not allow older industries to fail, and the country's economy will be dominated by inefficient, static corporations. As a result of this tendency, many nations' economies still rely on aging industrial giants that were vital a generation ago, while the US economy is constantly being rejuvenated by young, vibrant companies.

### 3 What are the major challenges facing the private equity industry today?

The private equity industry is currently going through a difficult period. It raised a great deal of money in the late 1990s, money that was invested in the Internet and telecom industries, and those enterprises have fared badly. The private equity firms that invested heavily in those industries were hurt badly when the bubble burst.

As a result of the economic downturn, many people now are reluctant to invest in high-risk, start-up businesses. Yet, ironically, many funds have a considerable amount of capital on hand that has been pledged to them by their limited partners. If they do not invest this money fairly soon, they will lose the opportunity to do so. Within a few years, the partnerships will either have to invest the money somewhere or return it to their limited partners. It will be interesting to see what happens, because although the private equity partnerships don't want to see their committed money go uninvested, they don't want to make bad investments either.

My personal prediction is that we will see a couple of really successful investments in a new industry. I have no idea what that industry will be, but when it emerges, it is likely that there will be a wave of private equity firms rushing to fund businesses in that industry.

## 4 You direct the Office for the Study of Private Equity and Entrepreneurial Finance. How is the office working to address these challenges?

When we established the Office for the Study of Private Equity and Entrepreneurial Finance, we decided that we should have a three-pronged approach, addressing the three primary responsibilities of a university: teaching, research, and service.

In terms of teaching, we are now offering a new masters-level course in private equity. It was well-received by the students so it is being offered again this academic year. We hope to expand our private equity offerings in the future.

The office has given out a number of research grants to Illinois faculty to further research in the industry. We want to encourage our faculty and students to pursue world-class academic research on private equity and entrepreneurship.

In April, the office coordinated and hosted a joint conference for practitioners and academics in Chicago in collaboration with colleagues at the University of Chicago. The conference brought together academics and practitioners for discussions on issues facing the industry. I was very pleased with the synergies created between the two groups. A second similar conference will be held next April. ■

**Michael S. Weisbach** holds the Stanley C. and Joan J. Golder Distinguished Endowed Chair in Corporate Finance. He is a respected scholar in corporate finance whose early work dealt with corporate governance and control. Weisbach now focuses his research on corporate financial policy. His work applying quantitative methods to capital structure choices won the Jensen Prize, and his research on the motivations for stock repurchase programs led him to advise the SEC about regulations for these types of programs.

Weisbach has a BS in mathematics from the University of Michigan and a PhD in economics from MIT. He is on the editorial boards of *Journal of Financial Economics*, *Financial Management*, and *Journal of Corporate Finance* and is a Research Associate of the National Bureau of Economic Research.

### Weisbach Named Endowed Chair

In an investiture ceremony held in May 2003, Michael Weisbach was honored with the Stanley C. and Joan J. Golder Distinguished Endowed Chair in Corporate Finance.

Remarks by University of Illinois at Urbana-Champaign Chancellor Nancy Cantor, Dean of the College of Business Avijit Ghosh, and Chair of the Department of Finance David Ikenberry highlighted the generosity of the Golder family and the achievements of the late Stanley Golder, an Illinois alumnus ('51 Economics) and a pioneer in modern private equity.

Benjamin E. Hermalin, a professor of banking and finance at the University of California at Berkeley, focused his remarks on Weisbach's work with corporate governance, citing his research involving the evolution of a corporation's board and the correlation between firm performance and CEO turnover.

Joan J. Golder also spoke on behalf of her family and her late husband, congratulating Weisbach for his achievements.

### Market Entry Project Funded by Office

This fall, the Office for the Study of Private Equity and Entrepreneurial Finance awarded Steven Michael, professor of business administration, a research award for a study entitled "One of These Things Is Not Like the Others: Novelty Versus Imitation in Market Entry." The office funds research that broadens understanding of entrepreneurship, transformational management, incentives, corporate governance, and corporate control. Previously funded projects investigated risk measurement for private equity investments and the role of the legal system in firm capital structure.

### ***Kauffman Foundation Planning Grant Awarded***

The College of Business was awarded a \$50,000 planning grant earlier this year to underwrite the development of a proposal to the Ewing Marion Kauffman Foundation in December. Work is on-going for the proposal to "make entrepreneurship education a common and accessible campus-wide opportunity," according to a summer press release from the foundation.

Although the College of Business has a long history of providing entrepreneurial classes and experiences for its students, undergraduates and graduates in other U of I colleges have more limited opportunities. The Kauffman competitive grant program will provide up to \$5 million to as many as seven US universities as part of a \$25 million-dollar program.

Director of OSBI Consulting Paul Magelli prepared the preproposal — called the Academy for Entrepreneurial Leadership Development — that resulted in the opportunity to compete for a full grant. Fourteen other schools, including Wake Forest, Syracuse, and the University of Wisconsin, will prepare full proposals. Business Dean Avijit Ghosh, former dean of the Graduate School of Library and Information Science Leigh Estabrook, and College staff member Cynthia Kehoe also contributed to the preproposal.

The Kauffman Foundation of Kansas City works to advance the study and understanding of entrepreneurship, including financial support for entrepreneurial education in higher education. According to the foundation, more than 1,500 colleges and universities offer entrepreneurship training, which is now beginning to spread beyond the borders of colleges of business. More information on the Kauffman Foundation is available at [www.kauffman.org](http://www.kauffman.org).

### ***Business Plan Boot Camp***

Entrepreneurs and aspiring entrepreneurs who are "passionate about their business ideas and products" were the target audience for the first annual Business Plan Boot Camp offered by the Center for Entrepreneurial Development (CED) in early September. The one-day workshop, held at EnterpriseWorks in the campus Research Park, attracted 13 participants representing 10 companies in EnterpriseWorks and regionally. Faculty and students from the Urbana-Champaign campus were among those selected to attend the workshop.

Dinesh Ahluwalia, director of CED, said that the camp was designed to help the participants "move closer to articulating a business plan that will influence strategic decision making." In other words, boot camp participants learned how to define their audience and help the audience understand and buy into the company's vision.

Ahluwalia and students from the Illinois MBA program contributed to the success of the camp, which may become a biannual event.

### ***OSBI Consulting Announced***

A familiar College of Business program has a new name but with the same emphasis and expertise. OSBI Consulting was unveiled in June as the new name for the former Office for Strategic Business Initiatives.



Associate Director Stig Lanesskog noted that the staff wanted the office's name to be "more relevant and meaningful to students, clients, and the campus." He and Paul Magelli, OSBI Consulting director, believe that the office has good brand recognition with campus and alumni audiences but they wanted the name to better describe their primary function of consulting.

OSBI Consulting is a business consulting operation managed and staffed primarily by MBA students. OSBI executes 40-50 projects each year. Clients include Fortune 500, mid-sized, and start-up organizations, as well as departments of the University of Illinois.

### ***CED and EnterpriseWorks Partnership***

The College's Center for Entrepreneurial Development (CED) and the campus Research Park announced in June a strategic working relationship designed to foster entrepreneurial development at EnterpriseWorks, state-of-the-art incubator facility for start-up companies located in the Research Park. CED staff will work with start-up companies and entrepreneurs at EnterpriseWorks in an advisory capacity by providing such services as assessment reports, business plan reviews, market feasibility studies, and financial modeling services. Dean Avijit Ghosh called the partnership "a unique opportunity for CED and the College of Business to play a vital role in economic development and to give our students an understanding of entrepreneurship and entrepreneurial management principles."

### ***Evaluating the State of Entrepreneurial Education***

Five research articles summarizing the state of entrepreneurial education will be prepared by teams of OSBI Consulting students working with U of I faculty and with senior staff from the Ewing Marion Kauffman Foundation. According to Paul Magelli, director of OSBI Consulting, MBA students will analyze quantitative data collected for other OSBI projects to prepare articles on the status of entrepreneurial education in two- and four-year colleges; entrepreneurial education outside of business colleges and schools; and the status of entrepreneurial education as a discipline. Another article will summarize entrepreneurial education by institution type and the final will identify significant case studies. The Kauffman Foundation is funding the analysis of the data and the development of the research articles that are expected to be published in 2004.