The highlights of the past year at the Institute can be summed up in three words: IMPACT, ACHIEVEMENT AND RECOGNITION.

New businesses have been formed and funded through Institute programs such as Dare to Dream. Several early-stage companies have made great strides as well. The Wolverine Venture Fund’s investment in Intralase, a spin-off of the College of Engineering and the Kellogg Eye Center, has been most rewarding. The medical high-tech company, which was assisted in developing its original business plan by the Institute’s action-based learning teams, has filed for an IPO and expects to go public later this fall. This promises to be a significant positive liquidation event for the Fund. Another University of Michigan spin-off and Institute protégé, Mobius Microsystems, has completed its first round of funding. Spin-off Xoran Technologies, which was helped during its formative years by a Dare to Dream grant, has received FDA approval for one of its products.

As the year unfolded, more internships and scholarships were established to give entrepreneurial-studies students greater opportunities to get real-world experiences working with the owners and management of high-growth startups and venture-capital firms. Five students were named Mitch Mondry Scholars in recognition of their academic achievements and contributions to entrepreneurship. Others participated in the Institute’s case-writing program, which is supported by gifts from Paul Brentlinger. And one student, Laura Whitridge, won a national case-writing competition for her case study of TAL Materials, a nanotechnology materials company.

Through its impact on business formation and growth, and with the achievements and recognition of its students, the Institute has been able to advance its own goal of providing outstanding leadership in entrepreneurship and entrepreneurial education.
PERSONAL PASSION
ENTREPRENEUR SEARCHES FOR PROMISING IDEAS
What started as a class project in the fall of 2003 at the Michigan Business School turned into a compelling new business venture for Sreeram Veeragandham, MBA ’04.

“The Samuel Zell and Robert H. Lurie Institute for Entrepreneurial Studies aims to develop and enhance the entrepreneurial skill set and mindset of tomorrow’s business leaders. Through its support of new venture creation and the expansion of its curriculum and programs, the Institute has been able to provide outstanding leadership in entrepreneurship and entrepreneurial education since its inception in 1999. In the future, the Institute hopes to continue to generate entrepreneurial success stories that equal or surpass those in the past.”

Veeragandham and his team explored the market potential for the new monitor and created a comprehensive business plan. After the class ended, he continued working voluntarily on the new venture, and last March when Gluconix was incorporated, he became the company’s CEO. With assistance from the Zell Lurie Institute, the startup quickly gained traction.

“The value of an entrepreneurial education, however, is not limited to startup and venture-capital environments. In today’s dynamic business climate, it has a much broader application. As large corporations confront the growing demands of globalization, product innovation and overseas competition, they seek out professional managers and business consultants who can think and act with speed, flexibility and creativity. Traits customarily associated with entrepreneurship. To capitalize on these growing opportunities, more Michigan MBA students are choosing to augment their general-management core curriculum with entrepreneurship.”

“Through the Zell Lurie Institute, we became a better known to the business community,” Veeragandham says. “We also received help from the Michigan Economic Development Council and the Toledo Regional Growth Partnership.” In addition, Gluconix made a poster-presentation session at a March conference hosted by the Zell Lurie Institute, gaining valuable media exposure.

For the time being, Gluconix is on hold, and Veeragandham is searching for another promising idea for a startup. “Not every project goes forward, but each one enhances my capabilities and confidence,” he says. “I view this as a continuous learning experience.”

THE MICHIGAN EXPERIENCE
PATHWAY TO ENTREPRENEURIAL LEADERSHIP
The Samuel Zell and Robert H. Lurie Institute for Entrepreneurial Studies aims to develop and enhance the entrepreneurial skill set and mindset of tomorrow’s business leaders. Through its support of new venture creation and the expansion of its curriculum and programs, the Institute has been able to provide outstanding leadership in entrepreneurship and entrepreneurial education since its inception in 1999. In the future, the Institute hopes to continue to generate entrepreneurial success stories that equal or surpass those in the past.

While entrepreneurial skills can be leveraged in a variety of business settings, they are most effectively learned in an entrepreneurial environment. For this reason, the Institute augments the principles students learn in Michigan’s business courses with hands-on, action-based learning programs. The Institute’s programs that support the formation, development and renewal of innovative, high-potential businesses provide the ideal incubator for students to develop their entrepreneurial skills. Gaining a variety of entrepreneurial experiences ranging from identifying new business opportunities to creating a cogent actionable business plan based on incomplete and disparate information to plotting a company’s future direction based on market feedback is all possible through the Institute’s programs.

“Through the Zell Lurie Institute, students may be asked to analyze existing data and select a course of action, but they never have to implement that solution, monitor its success and readjust their thinking, if necessary,” Faley says. “In the real world, information does not usually exist in a convenient form, and a solution’s implementation may require overcoming numerous obstacles. That is why the Institute augments entrepreneurial coursework by placing student interns and project teams inside small, high-growth companies where they can work on real problems with real people in real time.”

The Institute has 22 full-time and adjunct faculty, many of them Michigan alumni who are successful entrepreneurs and bring years of practical business experience to the classroom. Twenty-two entrepreneurship-studies courses are offered in a wide range of subjects, including new venture creation, entrepreneurial marketing, intellectual property and competitive strategy, legal aspects of entrepreneurship, nonprofit organization management and urban entrepreneurship.

Students are encouraged to co-create and customize their educational experience by selecting the mix of courses, classroom projects and extracurricular club and event activities they need to further their personal career goals.

The Institute offers six action-based learning programs designed to develop and combine entrepreneurial leadership skills with the ability to drive results. As part of the Michigan MBA program, first-year students are assigned to multidisciplinary action projects (MAP) at sponsoring companies. Their options for placement also include entrepreneurial startups (EMAP), traditional corporations (CMAP) or overseas companies (IMAP). Over a seven-week period, the MAP teams execute high-level management assignments, such as developing business plans, identifying new product opportunities and formulating strategies for market entry.

Through internships, such as the Marcel Gani summer internship program, entrepreneurial-studies students can spend up to 14 weeks at startups and early-stage companies, working down in the trenches with entrepreneurs. The rewards stemming from this full-immersion experience are great for students who wish to “learn the ropes” by actually participating in an entrepreneurial company’s planning and execution.

Entrepreneurial firms, in turn, benefit from the students’ management expertise and strategic recommendations they might otherwise not obtain.

“The $3 million Wolverine Venture Fund, which is overseen by Michigan Business School, offers yet another opportunity to learn firsthand about the entrepreneurial and venture-capital business. Eight first-year MBAs are chosen each year to serve on the Fund’s Student Advisory Board. Assisted by faculty and an Advisory Board of professional venture capitalists and entrepreneurs, the students evaluate new investment opportunities and track the performance of the Fund’s existing portfolio.”

With financial support and mentoring from the Zell Lurie Institute, students also are encouraged to hone their skills, test new business concepts, expand their networks and win cash awards by participating in the Business School’s, as well as intercollegiate, business-plan, venture-capital and case-writing competitions. One of the biggest regional events is the Great Lakes Entrepreneur’s Quest, which the Institute has co-managed in past years. In addition, each year the Institute hosts several major symposia: Entrepreneurship & Emerging Industry and Michigan Growth Capital.
that attract entrepreneurs, venture capitalists and industry leaders to the Business School for in-depth discussions, trends analysis and networking.

Students who wish to develop their own entrepreneurial concepts or to launch new businesses may apply for one of the Institute’s Dare to Dream grants or tap the many community resources available through the Ann Arbor IT Zone and MichBio, an industry association.

Another important pillar of support and inspiration for the Zell Lurie Institute is its Advisory Board, which includes talented individuals from the entrepreneurial, venture-investment and corporate-business sectors. Together, these professionals provide guidance and inject new thinking about entrepreneurship that keeps the Institute at the “top of its game.” In addition, the Zell Lurie Institute benefits from its association with supporting organizations such as the Kaufman Foundation as well as alumni and friends in the community.

PROVIDING VISION FOR THE FUTURE

The Zell Lurie Institute also serves as a conduit connecting Business School students to world-class researchers in diverse fields, including medicine, public health, engineering, computer science and law, at the University of Michigan’s top-ranked schools and colleges. In 2002-2003 alone, research expenditures at Michigan topped $749 million, one of the largest amounts spent by any U.S. university.

This rich collaborative environment focusing on scientific inquiry provides the perfect setting for the discovery, development and commercialization of emerging technologies, which is facilitated by the University’s Office of Technology Transfer. Through the Zell Lurie Institute’s experiential-learning opportunities, MBA students are able to work side by side with members of the scientific community, as well as students and faculty from other disciplines, on important business strategies and operations. This hands-on involvement enables the students to apply their classroom skills and theories to the real-time challenges of emerging technology-based ventures.

“What makes the Michigan entrepreneurial experience so unique is the fact that it owes its life blood to so many different individuals from such diverse backgrounds,” says Professor Tom Kinnear, executive director of the Institute. “Whether the career paths of our graduates take them into conventional entrepreneurial endeavors, such as startups or turnarounds, or into the boardrooms of large established companies, we know they are well-prepared to face the challenges that lie ahead of them.”

Initially, Emerson lacked the experience and confidence to turn his innovative idea into reality. That changed when he enrolled in an entrepreneurship course to learn more about how to start new business ventures.

“Before coming to Michigan, I was risk-adverse,” Emerson recalls. “But seeing how the startup process works and the results you can get with talented people opened my eyes.” He pitched his idea for RiskReps in class, and four MBA students joined him to start the high-potential enterprise as a class project in the fall of 2003.

“After the fall semester ended, we realized that we all felt passionate about making this business a reality,” says team member Ted Taylor, MBA ’04. “From that point on, we no longer did things just to meet a class commitment. We began preparing for venture-capital pitches and planning how to implement our business plan.” The team also explored its network of contacts in an effort to break into the tightly held professional-athlete market. “It was difficult at first,” Taylor adds, “but I learned the best way to find contacts is to start with the people you know.”

The Samuel Zell and Robert H. Lurie Institute for Entrepreneurial Studies provided mentoring and support by awarding RiskReps an $11,000 grant through its Dare to Dream program and sponsoring the company at the Harvard Business Plan Competition, where it was a finalist. The funding enabled the students to launch a Web site, create marketing materials and participate in the Ann Arbor IT Zone Entrepreneurial Boot Camp.

After graduation, Emerson returned to his former employer to fill an exciting new position as the CFO of DuPont Air Products Nanomaterials, a $30 million joint venture. Currently, RiskReps is on hold, but not forgotten. “All the training I received in running a startup business and thinking like an entrepreneur was invaluable,” Emerson says. “It helped to prepare me for this new role and future ones.”
ENTREPRENEURIAL FACULTY

The time to start thinking about how to manage intellectual property is sooner than you realize, says Rosemarie Ziedonis. "For some startups, the rights to patented technology are necessary for attracting venture capital, forming partnerships or alliances and exchanging technologies with other companies." In her course, she focuses on the value of intellectual property and its use in a variety of contexts, including emerging technologies. Ziedonis, who has studied the role of intellectual property in the semiconductor industry and testified at national hearings on patents, integrates her research findings with case studies and complimentary material from economists and management scholars. "The strategic management of intellectual property is central to entrepreneurship," she says. "It can make or break successful companies."

ROSEMARIE ZIEDONIS
Assistant Professor
INTELLECTUAL PROPERTY AND COMPETITIVE STRATEGY

KEITH E. ALESSI
Adjunct Lecturer
TURNAROUND MANAGEMENT

The highly successful turnaround of income-tax preparation services company Jackson Hewitt, completed by then-CEO Keith Alessi in the late 1990s and formalized as a 20-page case study last fall by student Matt Franklin through an Institute case-writing grant has become the capstone of Alessi’s course. “Every day I talk about real-life war stories, putting my own personal experience in turnaround management against a backdrop of other cases,” Alessi says. “In the case of Jackson Hewitt, it added a personal aspect to have the CEO who did the turnaround teaching the course and the student who wrote the case study sitting in on the course.” Taking a practical, hands-on approach to turnaround management, Alessi first provides students with the diagnostic skills they need to analyze the causes of business problems. Then he leads class discussions focusing on various options for turning around companies, including the emotional challenges encountered by turnaround managers. “I'm very candid about what things worked for me and what things didn't,” he says.

LEN M. MIDDLETON
Adjunct Professor
CO-DIRECTOR, IMAP

Five IMAP teams traveled to Ireland during the 2004 winter term to assist Irish technology startup companies at two business-incubation centers with developing market-entry strategies for the U.S. market. Through their work, the students gained real-world experience in a foreign business culture, and the five startups received action-oriented plans designed to help them achieve their overseas marketing goals. “We put students in a situation where they must gather data, synthesize it and create recommendations and tactics that have impact for startup companies,” says Len Middleton, an advisor for the International Multidisciplinary Action Project (IMAP) program. “This takes students well beyond the case-study method of learning.” American companies, particularly those with overseas operations, value individuals with work experience abroad, he adds. “These firms like our students because they know how to apply their knowledge.”

DAVID J. BROPHY
Associate Professor
VENTURE CAPITAL/PRIVATE EQUITY

For the past 23 years, the annual Growth Capital Symposium has brought “real investors together with real companies seeking real money.” This highly charged confluence of movers and shakers has enriched the entrepreneurial climate at the Michigan Business School, which is now recognized worldwide for its leadership in entrepreneurship and entrepreneurial studies. “Our students gain exposure and the opportunity to interact with key players in a venture setting designed to build business and to commercialize technology,” says David Brophy. “This is as close to a living observatory as you can get.” Many graduates have gone on to pursue careers in venture capitalism, and more than 125 are currently working in the industry. They and other alumni who have started new ventures provide a “critical mass” of expertise and experience that Brophy often taps for his classes. At the same time, the Growth Capital Symposium has served as a catalyst for the development of the venture-capital industry and entrepreneurial activity in the state of Michigan.

WILLIAM F. PICKARD
Adjunct Professor
URBAN ENTREPRENEURSHIP

Bill Pickard never knows exactly where his students’ entrepreneurial instincts will take them. Some have started or purchased franchises for fast-service restaurants and pet-supply companies. Others have developed lofts in Detroit, entered family-owned businesses or pursued startups in health-related services. To prepare his class for the challenges of urban entrepreneurship, Pickard enlivens his presentations with examples drawn from the day-to-day operations of his McDonald’s restaurants and six manufacturing facilities, which he operates in Michigan, Georgia, Alabama, South Carolina and Canada. He also serves as a coach and sounding board for aspiring entrepreneurs long after they have graduated and launched their own companies. “Students know I’ve done it and I’m doing it every day,” says the 30-year entrepreneurial veteran. “In addition, I bring in speakers who are engaged in entrepreneurial ventures. More importantly, I believe we do a good job of connecting the political, social and economic forces in the inner city to the entrepreneurial process in urban America.”

J. MICHAEL DAVIS
Adjunct Professor/Lecturer
ENTREPRENEURSHIP VIA ACQUISITION

For Mike Davis, an entrepreneur is a “rugged individual who creates value.” He also believes that entrepreneurship is not limited to startup companies. “Entrepreneurs have created more value through mergers and acquisitions than through startups,” Davis says. In his class, he reviews case studies in favor of in-depth discussions of actual M&A transactions. His firsthand knowledge of the dynamics and personalities behind those deals provides students with a fuller understanding of the important role M&As can play in an entrepreneurial setting. “We complement my experience as an M&A professional by bringing in guest speakers who are bankers, private-equity professionals and entrepreneurs involved in M&A activity.” Rather than studying a list of what makes a company an attractive acquisition candidate, students have the opportunity to direct their questions to key players in the industry.” Davis has had a significant impact on his students. “After being exposed to the world of acquisitions, many students change their career plans from the traditional MBA path to an entrepreneurial track with a focus on creating wealth by acquiring companies,” he says.

ENTREPRENEURIAL FACULTY
ROLE MODELS AND RESOURCES

ENTREPRENEURIAL FACULTY

ENTREPRENEURIAL FACULTY
ACTION-BASED LEARNING  University Spin-offs

CORPORATE BOUND

ENTREPRENEURIAL SKILLS APPLY IN LARGE COMPANIES

After completing her entrepreneurial studies at the Michigan Business School, Laura Whitridge, MBA ’04, did not go out and start her own company. Instead she returned to her former employer, Deloitte Consulting. “At Michigan I learned about starting new ventures but I was not ready to do that right away,” Whitridge explains. “I went back to Deloitte to learn about the health-care industry, which I’m interested in. I hope to combine my entrepreneurial skill set and industry knowledge later on.”

Whitridge believes she will be a better large-company consultant after having worked in an entrepreneurial environment where important decisions must be made quickly with limited information. In her corporate role she also expects to utilize her entrepreneurial skills in researching potential sales markets and developing creative business solutions.

ACTION-BASED LEARNING

TAL MATERIALS

CREATING A WIN-WIN SITUATION

As the president and COO of Ann Arbor-based nano-technology company Tal Materials, Peter Gray has discovered that Michigan MBAs bring a level of business sophistication to a small company that otherwise could not afford.

“We didn’t know our own costs to make a material,” Gray explains. “Lars developed a pricing model that our scientists could use for customer quotes.” In addition, Reyes investigated the feasibility of entering into the fuel-cell market and compiled a detailed analysis.

“Small companies don’t have time to do that sort of analytical thinking,” Gray says. A case study written by MBA student Laura Whitridge also was helpful to Tal Materials. “Laura dug and probed and asked the right questions that made us introspective about ourselves,” he explains. “We refined our own business model and produced a usable strategy outline.”

Laura Whitridge (MBA 2004) and Peter Gray, Tal Materials

Photo: Martin Vloet

Two years ago, student intern Lars Reyes created a model to help the company price its products. “We didn’t know our own costs to make a material,” Gray explains. “Lars developed a pricing model that our scientists could use for customer quotes.”

LAUNCH PAD

EXPERIENTIAL LEARNING PREPARES ENTREPRENEUR

All Ian Cummings, MSE ’98, MBA ’05, needs is a good idea. “I want to start a technology company,” says the electrical engineer, whose graduate work focused on control systems and artificial intelligence. “The Michigan area is a good launch pad for startups because it has many resources. I have built up a good network of venture capitalists, business managers and faculty advisors.”

Cummings left his job in the defense industry to enter the Michigan Business School because it was “the best match for what I wanted to do.” He has carefully selected the entrepreneurial coursework and experiential learning he needs to prepare for his new career as an entrepreneur.

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In 2003 Whitridge assisted two new ventures, BioSante and Neural Intervention Technologies, as part of a multidisciplinary student team under the auspices of TechStart, an internship program established by the University’s Office of Technology Transfer. “In my market research, I learned to think about problems from a higher level by putting myself in the seat of the startup CEO,” she says.

Vinya Gupta, a TechStart entrepreneur and an adjunct lecturer of entrepreneurial studies, invited Whitridge to join planning meetings for his new outsourcing startup, enabling her to see the initial formation phase of an innovative, high-growth company. In an entrepreneurial-studies course, Whitridge’s student team assisted Above the Tree Line, a local startup, by analyzing the market for a new software product.

She also wrote a case study on Tal Materials, which won first prize in the KACE competition at Wake Forest University in January. Working with COO Peter Gray, Whitridge learned about the company’s proprietary process and researched potential applications, markets and partnerships. “Tal Materials helped me expand my contacts in the entrepreneurial community and gave me a true taste of what it’s like to head a small startup and make very difficult decisions,” she says.

Soar Technology

BRINGING AN MBA MINDSET TO A STARTUP

In an MBA approach to a business context with a managerial and market-development mindset, observes Soar Technology President and CEO James R. Rosbe, “whereas an engineer is more likely to apply his or her skills to an engineering problem rather than look for new business opportunities.”

Rosbe leveraged that results-oriented MBA approach by assigning Ian Cummings, the company’s first Business School intern, to do independent work he himself had not had time to pursue. Soar Technology, located in Ann Arbor, performs contract research for the U.S. military based on its artificial-intelligence-encoded software but has not yet developed a commercial product to sell in the open market.

“An MBA approaches our business context with a managerial and market-development mindset,” observes Soar Technology President and CEO James R. Rosbe, “whereas an engineer is more likely to apply his or her skills to an engineering problem rather than look for new business opportunities.”

Rosbe helped us develop some new business tools we can carry forward,” Rosbe says. Those tools include a new set of financial metrics to measure the company’s performance and a new process for evaluating the quality and cost-effectiveness of bid proposals submitted to the U.S. Department of Defense and the National Science Foundation. In addition, Cummings made market studies of comparable companies with similar products in order to determine how those companies “productized” their technology and moved from consulting engineering into product sales.

As a summer intern at Soar Technology, Cummings helped the management develop much-needed business systems and define new products for future commercialization. “My internship provided operational experience inside a young company,” Cummings says. “I learned how entrepreneurs can use government resources to fund startups, as well as the different challenges a small company faces and how to address them.”

During an EMAP team assignment with Cooling Technologies in Toledo, Ohio, last spring, he looked at possible applications for the company’s natural-gas-powered cooling system and developed a market-entry plan. “The most valuable thing I gained was learning research methods,” he says.

“Michigan gave me the opportunity through internships and class projects to try a lot of different areas with very little risk, so I could decide if I liked small companies,” Whitridge says. “This gave me more confidence.”

James R. Rosbe, Soar Technology, and Ian Cummings (MBA 2005)

Photo: Steve Kuzma

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Cross-Borders
ACTION-BASED LEARNING:

Karen Sharp, MBA ’04, came to the Michigan Business School with a desire to gain international experience. Little did she realize she would travel around the world and win recognition from the Zell Lurie Institute as the Social Entrepre-

“I wanted to solidify my business skills and apply them in a nonprofit environment,” Sharp explains. “At Deloitte Consulting, I had experienced the for-profit sector, but I lacked nonprofit experience.” Through Michigan’s MBA program, Sharp was able to apply the business knowledge and skills she learned in the classroom to community projects both at home and abroad.

In 2003, she served as the project manager for an IMAP team assigned to work with the Carter Center, established by former President Jimmy Carter and former First Lady Rosalynn Carter. The team created an organizational analysis of the Carter Center, established by former President Jimmy Carter and the First Lady, Rosalynn Carter. The team created an organizational analysis of the Carter Center and developed a five-year plan for its growth.

Karen Sharp (MBA 2004)
Photo: Martin Vast

Patience Allen, MBA ’04, is combining her three-pronged interest in arts non-
profits, entrepreneurial business activity and international organizations in, of all
places, Norway.

“I was interested in gaining international experience and I wanted to be part of an organization that was making a difference in the world,” says Allen. “I applied for the position of a Board Fellow and was selected.”

Bitten by the travel bug at age 12, she first traveled to Norway in January 2004
on a David B. Herrnstein Fellowship through the Center for European Studies.
Her internship this past summer with the Norwegian Association of Arts and Crafts afforded an opportunity to help launch an artists exchange program and coordinate a Norwegian art exhibit in Geneva, Switzerland.

Patience Allen (MBA 2004)
Photo: John Nordahl, Norway

To prepare MBA students for international startup ventures or corporate assignments overseas, the Zell Lurie Institute this year sponsored five IMAP teams in Ireland, which collaborated with five startups at business incubators in Limerick and Waterford. Over the course of the seven-week program, the IMAP teams gained hands-on experience in conducting international business, and the Irish companies received high-level strategies for expanding into a foreign market.

“We’ve created quite a name for the Zell Lurie Institute in Ireland,” says Adjunct Professor Len Middleton, the co-director of IMAP. “This is an opportunity to promote international-entrepreneurial outreach and to take the Zell Lurie name beyond the U.S. border. The international community, in turn, provides a real-time laboratory where our students can learn how to start a business anywhere in the world.”

The Irish-incubator IMAP initiative started in 2002 when two student teams were paired with two startups at Waterford SEBIC, which supports new venture creation in Ireland’s southeastern region. The following year, the IMAP program was expanded to InnovationWorks Limerick in the mid-western region.

“Our clients appreciate the independence of the IMAP teams’ research, which can, and often does, support company strategies with stakeholders and investors,” says InnovationWorks Director Pat O’Neill. “They also value the students’ challenging approach to current market thinking and business assumptions. This can open new business opportunities or validate existing market-entry strategies.”

Frank Roche, the managing director of HomeNet Communications Ltd., credits an IMAP team for helping his Internet-technology firm develop strategic planning for international expansion. “Their findings verified that our company was in the correct market,” he says. “This gave confidence to our current investors and will assist us with the next fund-raising round.”

Michael Wolfe, MBA ’05, was part of an IMAP team assigned to 3DEagleView, which has developed three-dimensional mapping for prestigious golf courses in Ireland and Scotland. “The company was not familiar with the U.S. golf industry or American business practices, so we built out a full marketing plan,” Wolfe says. “This was a double learning experience for us. We gained exposure to another culture and saw how a business operates there. Then, using our core business skills, we applied what we learned to the U.S. market.”

3DEagleView Managing Director Jim Nugent reports the IMAP team made the “hard calls” and produced a fast-track promotional and sales strategy for maximum impact. “Their industry analysis demonstrated the U.S. market is more price sensitive than the European market,” he explains. “We also were compelled to reevaluate the unique differentiators for our products. Their recommendations have had far-reaching consequences for how we price and sell our solution not just in the U.S. but world-wide.”

Sid Sahni, MBA ’05, had never been to Ireland until he accompanied his IMAP team to Waterford for a preliminary meeting at Lightwave Technologies, a thermal-imaging software firm. “The company had a good idea, but had not done any research to validate its marketing strategy and rollout plans,” Sahni explains. In their final report, the students recommended that Lightwave target universities and public areas in the U.S. rather than large commercial buildings for their software products, and provided a scoring mechanism to help the management evaluate potential customers.

“The company received a U.S. market-entry plan that is going to work and avoided making costly mistakes,” Sahni says. “We got practical experience in international marketing and learned how entrepreneurs think and work.” This, he believes, will help him in the future. “Competition today is global,” Sahni continues. “If I launch a company with competitors in India or China, I have to know how they operate. This project gave me a valuable perspective.”
ACTION-BASED LEARNING: Information Technology

**TAPPING RESOURCES**
 ACTION-BASED LEARNING DEEPENS UNDERSTANDING

Juan Pablo Bedoya, MBA ’05, tested the waters of entrepreneurship briefly in 1996 when he co-founded an Internet service-provider company in Lima, Peru. Although he eventually went to work for International Business Machines, Bedoya remained committed to pursuing an entrepreneurial career track. He got that opportunity at the Michigan Business School when his 2004 EMAP team worked with San Francisco-based Papilia, an early-stage Internet software company.

“I wanted to learn more about entrepreneurship in the U.S. and combine that with my interest in the nonprofit market,” Bedoya says. “Michigan has a lot of different resources for people who are interested in entrepreneurial careers.” Over seven weeks, his team updated Papilia’s competitive analysis, worked on the sales and distribution strategy, reviewed the company’s pro-forma financials and assisted the founders with product management. Bedoya returned to Papilia over the summer, where, as product manager, he helped develop phase 2 of the company’s Internet-based stewardship platform. His experiences provided insight into important entrepreneurial strategies, such as pitching investors to secure funding and leveraging network contacts with other CEOs.

**PUTTING SKIN IN THE GAME**

Jill Hetherington made the Michigan Business School EMAP team assigned to Papilia her No. 1 priority for seven weeks. She was more than rewarded for her commitment of time and effort.

“We put some skin in the game and developed a personal relationship with the team,” explains Hetherington, who oversees corporate development and marketing for the software company, which offers a communications platform enabling nonprofit organizations to interface more effectively with supporters. “We received a phenomenal return on our investment, in terms of the team’s deliverables and the contribution they made to Papilia.”

**OPENING DOORS**

NEW VENUES ROUND OUT MBA EXPERIENCE

Through an EMAP assignment and Marcel Gani Summer Internship placement with Interlink Networks, Brian Loh, MBA ’05, was introduced to a business environment that challenged his thinking and abilities.

“Coming from McKinsey & Company, I had never worked with a small company before,” he explains. “At Interlink Networks, I learned a lot by being immersed in an entrepreneurial environment.” The early-stage technology company asked Loh and his EMAP teammates to develop a marketing strategy for the launch of a new security-software product and to identify the target customer segment and potential channel partners.

**INTERLINK NETWORKS**

RECRUITING THE RIGHT TEAM

As a young company, Interlink Networks has limited resources to meet its many demands. In early 2004, the Ann Arbor-based technology firm was ramping up for the launch of its new Wi-Fi-security software product, LucidLink, and refining its sales strategy and marketing campaign.

Interlink Networks accomplished these objectives with the help of an EMAP team in the spring and continued its rollout with assistance from two interns, Brian Loh, MBA ’05, and Jamie Conroy, MBA ’05. In hosting its third EMAP, Interlink Networks, a University of Michigan spin-off, benefited from the fresh perspective, creative ideas, technical skills and extra manpower brought by the Michigan MBAs.

“Recruiting the right team is important to the success of an EMAP project,” Ziolkowski explains. “You have to be able to articulate your company’s value proposition and present a well-defined scope of work in order to attract compatible partners. By spending time on site, the students become part of the company environment, better understand what you want to achieve and take on the same degree of urgency.”

“As you develop your EMAP project, you also get a feel for the company culture and their personal work styles. They also helped the MBAs develop practical business skills.”

Brian Loh (MBA 2005), Wayne Burkan, Interlink Networks and Jamie Conroy (MBA 2005)
Photo: Steve Kuzma

Other doors have opened to Loh through his extra-curricular activities. He is a board member of the Consulting Club and co-chair of the upcoming 2005 FuturTech conference. “FuturTech is a fun way to stay involved in technology and to meet other students and companies with the same interest,” he says. In addition, Loh has volunteered in the nonprofit arena with the Ann Arbor Learning Community, a small charter school, and the Southeastern Michigan Chapter of the American Red Cross, where he is a Board Fellow.

“The Michigan Business School has a lot of great programs through which students can volunteer and contribute,” he says. “Participating in these activities also helps me get a more well-rounded MBA experience.”

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Juan Pablo Bedoya (MBA 2005)
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* "In a small company, you have to be very flexible in adjusting to constant change and you have to roll up your sleeves and do things that, as an MBA, you wouldn’t ordinarily do,” Bedoya observes. “But your input can really make a difference in the company, and you can create more.”

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* "The students worked independently and showed great initiative,” says Wayne Burkan, vice president of marketing. “Their participation accelerated the timing of what we needed to accomplish by months. It was a huge payoff.”

* "Recruiting the right team is important to the success of an EMAP project,” Ziolkowski explains. “You have to be able to articulate your company’s value proposition and present a well-defined scope of work in order to attract compatible partners. By spending time on site, the students become part of the company environment, better understand what you want to achieve and take on the same degree of urgency.”

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STANDING AT A FORK IN THE ROAD

With graduation from the Michigan Business School's evening MBA program in sight, Sanjeeb Das, BA '98 MBA '05, stands at a fork in the road. "Do I continue working for small companies or do I need to get my ticket stamped at a big pharmaceutical company before I can become a senior manager at an entrepreneurial firm?" Das wonders. Fortunately, he has a choice, thanks to the Zell Lurie Institute's entrepreneurial studies curriculum and action-based learning programs.

"The Zell Lurie Institute creates alternatives to the traditional corporate career path," Das says. "With the entrepreneurial experience I have received, I don't have to sacrifice five to ten years at a corporation. I can go straight into an entrepreneurial setting after graduation."

The Zell Lurie Institute had a great deal of impact on our company in the beginning because we didn't have much business experience. The Institute's role has evolved into providing feedback that has helped us refine our business operations."

HANDYLAB

HandyLab developed a revolutionary "lab on a chip" technology that has many potential applications. Spun off from the University of Michigan in June 2000, the startup raised $2.4 million in private capital, including $120,000 from the Wolverine Venture Fund (WVF), which provides seed money to emerging high-growth companies. In the fall of 2000, a student team from a new business development class conducted market research for the firm, and the following summer, intern Ranjit Patnaik, MBA '02, investigated alternative sales opportunities in food and veterinary testing.

"When you are going at the speed of a startup, unless you have a fresh pair of eyes looking at your business, you can easily miss something of strategic importance," says Karlyn ("Handy") Handique, Ph.D. '00, the co-founder and chief technology officer of HandyLab.

"I was attracted by the breadth of the Michigan Business School's programs and its strength in entrepreneurial studies, which is supported by the Zell Lurie Institute."

HANDYLAB GAINING A FRESH PAIR OF EYES

HandyLab also hosted two business students as part of the Day in a Life program. "They were able to see how a startup works, and we learned what they perceived to be unique about our business model and operations," Handique says. "WVF student board members also visit us periodically to learn about our business and to check on their investment. All this provides good feedback for us."

Das has benefited from the formal instruction provided by the Zell Lurie Institute’s full-time and adjunct faculty, many of whom are involved in new-venture creation. "Being in an entrepreneurial world requires different skills, and the Institute provides that critical hands-on training in a formal MBA setting," he explains. "I have been able to take key lessons and apply them immediately at HandyLab, where I worked for three years as a business-development associate, and Asterand, a Detroit-based biotechnology company, where I interned this past summer."

Das also has leveraged the many opportunities afforded by the University of Michigan’s rich research culture and life-sciences initiative through his multidisciplinary interaction with other students from public health, medicine and engineering and his participation in the Life Sciences and Health Care Club.

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Oxford Biomedical Research

Procuring high-level business expertise

During Nelson’s first year in the MBA program, he concentrated on a core business curriculum, and this fall he plans to take entrepreneurial-studies elective courses. "I had little nuggets from my prior business experience in banking and consulting, but this was an opportunity to broaden my knowledge into a strong base across multiple business functions," he explains.

Over the summer, Nelson participated in the Marcel Gani Summer Internship program and was assigned to Oxford Biomedical Research in Rochester Hills, Michigan, where he assisted CEO Denis Callawert by developing a comprehensive business plan for a new spin-off. "I started with technological ideas and developed them into a realistic business plan while, at the same time, addressing the funding requirements," he explains. "This experience helped me understand the process you must go through in a startup venture and the issues you must resolve. It will be valuable to me as a consultant and later as an entrepreneur."

Extracurricular activities with the Management Consulting Club, where he is vice-president, and the Rugby Club, where he is a winger and scrumhalf, have enabled Nelson to expand his network and gain entrepreneurial experience outside class. "I’ve seen a lot of new ventures and spoken with the people who are starting them at events such as the Michigan Growth Capital Symposium and Entrepalooza," he says. Nelson is also the co-director of the M-TREK student travel program, and in August he led a group of incoming MBAs on a 10-day excursion through New Zealand’s South Island.

Winger and Scrumhalf

Michigan’s program breadth attracts New Zealander

Ann Arbor is a long way from Auckland, New Zealand, the place Blair Nelson, MBA '05, calls his home. But he is not one to let long distances keep him from reaching his educational and career goals.

I wanted to get academic training in business and to explore healthcare and entrepreneurship," Nelson explains. "I was attracted by the breadth of the Michigan Business School’s programs and its strength in entrepreneurial studies, which is supported by the Zell Lurie Institute."

MichBio, an industry association, and the Zell Lurie Institute, which placed summer intern Blair Nelson at his company.

PROCURING HIGH-LEVEL BUSINESS EXPERTISE

"I was impressed with how the Michigan MBAs I interviewed for the internship position could quickly learn the core scientific concepts required to move the business forward," says Callawert, who also is director of the Center for Biomedical Research at Oakland University in Rochester. "Blair has previous business experience and has worked in growth markets, so he brought a lot of good recommendations to the table."

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Like many biotech firms, Oxford Biomedical Research has a lot of scientists but much less business savvy. "I do not have any formal business training," says CEO Denis Callawert, who founded the scientific-magnets company in Rochester Hills, Michigan, 20 years ago. With only 14 employees, the company was not well-equipped to evaluate its current business operations, let alone conduct the exhaustive market research needed to launch its new spin-off, Diannomics.

Callawert was able to procure the high-level business expertise he needed through his connections with MichBio, an industry association, and the Zell Lurie Institute, which placed summer intern Blair Nelson at his company. "I was impressed with how the Michigan MBAs I interviewed for the internship position could quickly learn the core scientific concepts required to move the business forward," says Callawert, who also is director of the Center for Biomedical Research at Oakland University in Rochester. "Blair has previous business experience and has worked in growth markets, so he brought a lot of good recommendations to the table."
INTELLECTUAL MECCA

MEDCI CO-FOUNDERS TAP UNIVERSITY RESOURCES

The shared desire to start an entrepreneurial venture in the health-care field that would help sick patients worldwide prompted Dr. Manish Singhal, MBA ’04, and Kyojin Park, MBA ’04, to launch Medical Corporation International, or MedCI, in April.

“R&D is shifting from large pharmas to smaller and medium-size companies in the U.S.,” Dr. Singhal explains. “These specialized firms often lack the internal resources they need to develop and market new drugs globally. Thus, strategic alliances have become vital to successful expansion into secondary markets.” MedCI offers business-consulting services to pharmaceutical and biotechnology companies in North America, South Korea and Japan that are seeking to out-license or in-license innovative technology and/or marketing rights in those markets.

The two co-founders met during a 2003 IMAP team assignment with Trinity Health Care System in Novi, Michigan. Dr. Singhal is board certified in internal medicine and has intimate knowledge of disease processes, pharmaceuticals and research. Park has 10 years of experience with new-business development between the U.S. and South Korea. Both were attracted to the Michigan Business School by its balanced general-management curriculum and the Zell Lurie Institute’s entrepreneurial-studies courses and action-based learning programs.

“The University’s faculty and students and the surrounding community,” Park says. “Our business requires a lot of expertise. Here, we can obtain legal counsel for licensing contracts, medical opinions on drugs, and advice on intellectual property.” MedCI hired a Business School intern to assist with its time-consuming negotiations and paperwork.

“We decided to headquarter our company in Ann Arbor because of the resources available through the University’s faculty and students and the surrounding community.” Park says. “Our business requires a lot of expertise. Here, we can obtain legal counsel for licensing contracts, medical opinions on drugs, and advice on intellectual property.” MedCI hired a Business School intern to assist with its time-consuming negotiations and paperwork.

“This is a highly concentrated intellectual mecca,” Dr. Singhal says. “If you stay here, you will develop connections all over the world.”

VALUABLE CONNECTIONS

NETWORKING PAYS OFF IN JOB SEARCH

Networking in the entrepreneurial community paid off for Chuck Fuller, MBA ’04, during his job search last spring. A year earlier, he had interviewed for a Marcel Dari Samir Sharaf, Entrepreneurship at Indigo Security, an early-stage technology company funded by venture-capital firm Sloan Ventures. Although Fuller ended up interning at another company, he stayed in contact with Indigo’s co-founder Jonathan Hudson. That connection proved valuable.

In April, Hudson put him in touch with Chris Cameron, the CEO of SmartCollector, a new startup company. After learning Fuller had worked previously at online bookseller Amazon.com Inc., Cameron hired him to be SmartCollector’s new marketing and business-development manager. Fuller went to work immediately, preparing the company’s Web site for its July launch.

“I love the challenges and risks of working in a startup,” he says. “My job and my priorities change every day, and I really thrive on that. Right now, we have a lean team, so I wear a lot of hats. My job, literally, is anything that needs to be done.”

Unlike many business students, Fuller never worked for a large corporation before entering the Michigan Business School MBA program. He joined Amazon.com in 1999 after college and when the startup had approximately 500 employees. As it expanded, he began to feel stifled by the big-company atmosphere. With an undergraduate history degree, he realized his lack of formal business education was impeding his advancement.

Fuller joined his entrepreneurial talents through a MAP assignment with Interlink Networks, a summer internship at Arborsoft and an entrepreneurial-studies class project with a local software inventor. “Working with a single entrepreneur is bootstrapping his own company gave me the last perspective on launching a business,” Fuller says. “I was able to apply both my Amazon experience and my classroom knowledge to the project.”

SMARTCOLLECTOR.COM

NOT FOR THE FAINT OF HEART

Working for a new-venture company is “not for the faint of heart,” says Chris Cameron, the CEO of SmartCollector.com, a Sloan Ventures portfolio company offering Internet-based information and management services to buyers and sellers of collectibles.

“At a startup, you must be able to manage your time and direction and think very independently,” he says. “You also must come to the table with new ideas and innovative approaches and be willing to speak up. The culture and bureaucracy in big companies do not often encourage this.”

Cameron selected Chuck Fuller to be SmartCollector’s first employee in part because he already had demonstrated his entrepreneurial skills in other small-company settings. Fuller’s well-honed oral and written communication abilities and excellent organizational skills also made him appealing.

“Oral and written communications skills are often underrated,” Cameron says. “However, these skills are vital if you want to earn respect in an organization like ours where people can be highly critical of how someone’s work is written and where your job requires you to develop original content. Similarly, you must be able to organize your thoughts and ideas and present them in a structured way to other team members.”

Academic programs often overlook the key drivers for entrepreneurial success. “You may have all the pieces, but you have to decide how to create opportunities, complete projects, close business deals and make money,” Cameron observes. “Without good entrepreneurial programs and mentors to help you bridge classroom theory and real-world application, you can get stuck.”

Sloan Ventures has benefited from its ongoing association with the Zell Lurie Institute. “Without access to people like Chuck Fuller and the Institute’s resources, I couldn’t run companies like this,” Cameron says. “You need the right people on your team to make an idea a winner.”