Entrepreneurial Education Spans the Six Critical Skills of Entrepreneurship
Message from

SAMUEL ZELL, CHAIRMAN
Equity Group Investments

Entrepreneurship has always been the formula for success in any kind of economy. That’s what prompted me to endow and grow the Zell Lurie Institute at University of Michigan. The basic tenets of entrepreneurship — thinking outside the box, risk taking, testing limits, and understanding what it takes to put a new enterprise together and make it work effectively — are all elements that ultimately lead to growth. And if there’s anything this country needs today, it’s growth.

Our world is driven by entrepreneurial activities. The United States emerged as the most-powerful global economy, because it unleashed the entrepreneurial ability that came from an immigrant base. The immigrants who came here were risk takers with aspiration, and they were empowered to drive our country forward. Today, America faces growing competition from abroad. We’ve witnessed an explosion of entrepreneurs in emerging markets, such as India, China and Brazil, who are launching new companies and creating growth for their countries. To remain competitive, we need to promote and foster the kind of entrepreneurial skills that the Institute offers to students at the Ross School of Business and throughout the University.

At Michigan, the entrepreneurial-studies curriculum is engaging other disciplines on campus, including law, medicine and engineering, to expose students to value-added practices of entrepreneurship, thereby creating a 1+1=3 scenario. Osmosis is a wonderful concept.

The new Zell Entrepreneurship and Law Program will establish a curriculum specifically designed to prepare law students either to advise business entrepreneurs or to launch their own enterprises. The program will include a new legal clinic in entrepreneurial business as well as curricular and co-curricular initiatives designed to expand entrepreneurship business law offerings. It also will establish a new live-client clinic to provide legal services for student entrepreneurs in other University programs.

I’m very pleased with the progress we’ve made in facilitating the spread of entrepreneurship at Michigan. During the last 12 years, we’ve educated and motivated a whole generation of entrepreneurs. We’ve also influenced “intrapreneurs” who can take the lessons learned about idea generation and problem solving and apply them to careers in the corporate world.

My objective with the entrepreneurial endeavors at the University has always been to create a robust curriculum that gives young people a reason to choose Michigan over other schools. I believe we’re doing just that.

Message from

ALISON DAVIS-BLACE
Edward J. Frey Dean, Stephen M. Ross School of Business

The Ross School and the Zell Lurie Institute are well-positioned to deliver entrepreneurship education using an action-based approach to Michigan students across campus who are interested in honing their entrepreneurial perspective and skills. The Institute also provides ready access to a deep talent pool of Ross alumni, including global leaders in business, finance and investment who have been involved in successful entrepreneurial ventures. These outstanding individuals enhance the School’s classroom and project learning with one-on-one coaching, mentoring and networking. In coming years, Ross and the Institute will continue to play an important role in expanding the entrepreneurial ecosystem on and off campus to ensure that Michigan graduates continue to innovate and build great companies.
Message from

THOMAS C. KINNEAR
Executive Director

This was a banner year for the Samuel Zell and Robert H. Lurie Institute for Entrepreneurial Studies. We expanded and enriched the entrepreneurial ecosystem at the Stephen M. Ross School of Business and throughout the University of Michigan. We increased our efforts to draw together the diverse expertise and multidisciplinary skills on campus that are central to business formation. We were ranked third in the nation for the excellence of our innovative courses and programs in entrepreneurship education by the Princeton Review and Entrepreneur Magazine. In addition, we laid the groundwork for several exciting initiatives that will extend opportunities for entrepreneurial engagement to more students at Michigan’s 19 schools and colleges during every stage of their University careers.

Our collaborative interface with the College of Engineering continued to gain traction over the past year. Since our initial involvement in the founding of the college’s Center for Entrepreneurship in 2007, we have partnered on the development of several programs and courses. The TechArb business accelerator for student start-up companies opened in May 2009 with sponsorship from the institute, the College of Engineering and the Vice President for Research. TechArb is a new incarnation of a business accelerator the institute created in 2002.

In fall 2012, the Ross School of Business and College of Engineering will unveil the first master’s degree in entrepreneurship that will be taught by engineering and business faculty, pending approval by the Presidents Council, State Universities of Michigan. This first-of-its-kind joint degree will open a cross-disciplinary entrepreneurial conduit to new venture creation driven by technological innovation.

We worked closely with faculty and administrators in 2011 to help in the creation of a new entrepreneurial center in the Law School. The recently announced Zell Entrepreneurship and Law Program envisions entrepreneurial law clinics where law students will furnish legal advice to student start-up companies. The program is funded by a $5 million gift from Sam Zell, the Institute’s co-benefactor and a 1966 Law School graduate. It will serve as a valuable resource for new business ventures while affording law students an opportunity to gain hands-on experience in the practice of entrepreneurship law.

In 2011, the Institute’s faculty and professional staff ramped up their activities at the School of Medicine’s Medical Innovation Center. They provided coaching and business advice to teams of Ph.D.s, M.D.s and MBAs that are commercializing research discoveries and advancing new ideas for cutting-edge medical diagnostics, tools and devices.

The Zell Lurie Institute also aided in the fueling of innovation and economic revitalization in the state during 2011. This year, we observed the 30th anniversary of the Michigan Growth Capital Symposium, founded by Finance Professor David Brophy. The symposium is one of the largest, most effective forums for connecting venture capitalists from Michigan and other states with emerging high-potential companies seeking venture-capital investments. Individually and collectively, we also continued to play a formative role in several statewide economic-development initiatives. These include the Michigan Pre-Seed Fund, which invests in early stage companies, the Invest Michigan Fund, which invests directly in start-up companies, and the Venture Michigan Fund, which invests in venture-capital funds.

The main beneficiaries of this year’s success, of course, are the University students and graduates who will deploy their entrepreneurship skills, knowledge and experience to launch new companies, drive venture-capital investment, and forge innovative career pathways at major corporations.
Message from  

DAVID J. BROPHY  
Director, Center for Venture Capital and Private Equity Finance

Michigan is experiencing a significant growth in available venture capital and a dramatic change in culture tied to the realization that innovative new and growing companies spawned in our own backyard hold the key to our economic future. The state is using its financial strength to support venture-capital funds and direct grant investments to emerging companies. The University of Michigan is conducting sponsored research at an annual rate of approximately $1.5 billion and is accelerating the pace of research commercialization. As a result of the combined efforts of the state, the U-M, other universities and the private sector, Michigan is making a sustained economic comeback, perhaps slow but certainly steady. And entrepreneurship and venture capital are close to the heart of that renaissance.

At the Center for Venture Capital and Private Equity Finance (CVP), we prepare students for local, national and global leadership roles through our finance/entrepreneurial-studies courses in venture capital, private equity, global private equity, financing research commercialization and entrepreneurial finance. To augment classroom materials and lectures, we engage students in actual projects with University researchers, entrepreneurial company founders and U-M alumni who bring live, current deals to class. This first-hand experience immerses students in real situations with real people where they can apply their skills to real challenges in real time. At the CVP, we also conduct scholarly research on global issues. Our recent study of cross-border mergers and acquisitions and private-equity investment in the BRIC countries will be featured in the India Business Conference this October. Our study of private investment in public entities, published in The Review of Financial Studies, is currently the most widely cited work on that topic. Our study of the underlying theory and drivers of venture capital and buyout fundraising is breakthrough research in financial economics.

In May 2011, the CVP-originated Michigan Growth Capital Symposium celebrated its 30th year, further burnishing its image as the centerpiece for early stage venture-capital investment and entrepreneurial activity in Michigan. Over the past three decades, the annual gathering has grown in quality and success by attracting increasing numbers of venture capitalists, institutional investors, practicing entrepreneurs and corporate sponsors. The Global Private Equity Conference, which focuses on later-stage investment capital and harvests, entered its sixth year in 2011. We continue to realize tremendous enthusiasm for the Alan Gelband Public-to-Private Buyout Competition, a head-to-head challenge between two top teams from our Private Equity MBA class selected by a panel of private-equity judges.

One of the greatest advantages of the CVP, the Zell Lurie Institute and the Ross School of Business is that former students — such as Jeff Blau, BBA ’90, president of The Related Companies and benefactor of the School’s Blau Auditorium, David Evans, AB ’85, founder of Glencoe Capital and benefactor of the University of Michigan, Alan Gelband, BBA’65, MBA ’67, founder of Gelband Investment Company, and Naimish Patel, BBA ’97, an investment partner in Long Point Capital — cycle back to the University throughout their careers, along with a host of other graduates who participate in CVP-supported and other courses in our programs. Their ongoing interest and engagement greatly enrich our overall educational environment.
Since 1999, the Samuel Zell and Robert H. Lurie Institute for Entrepreneurial Studies has led the nation, the state and the University of Michigan in pioneering award-winning entrepreneurial courses and programs. During that time, it has served as a catalyst in creating a vibrant entrepreneurial ecosystem on and off the U-M campus. Through the Institute’s cross-disciplinary outreach, entrepreneurship has planted a firm foothold at the Stephen M. Ross School of Business, the College of Engineering, the School of Medicine and, most recently, the Law School. This synergy has created a Michigan model of entrepreneurship education that sets the University apart from its peers.

The Institute’s success arises from its identification of and focus on six core entrepreneurial skills—opportunity identification, business design, business assessment, business planning, resourcing the business and managing growth—which it teaches through a matrix of multidisciplinary coursework, action-based learning, staff and faculty seminars, and alumni networking. This approach entails:

- Engaging students early and consistently over a period of time
- Providing multiple experiences at each skill level
- Catalyzing diverse teams across academic disciplines
- Offering continually accessible one-on-one coaching

“The actual experiences of entrepreneurs engaged in technology, life sciences, online sales or social causes may be different, but the skills they need to succeed are still the same,” says Tim Faley, the Institute’s managing director. “We deliver courses and programs along a continuum to help students acquire those foundational skills.”

PLATFORM FOR ENTREPRENEURIAL SUCCESS

“Altogether these six interrelated foundational skills create an impactful, holistic approach to entrepreneurship education at Michigan and provide our students with a solid platform for entrepreneurial success,” Faley says. “The Institute and other entrepreneurial centers on campus are teaching students how to launch multiple businesses rather than simply guiding them through the formation of a single business. This ‘learn-do, learn-do’ repetition is ultimately what differentiates our programmatic approach from others in the higher-education field.”
OPPORTUNITY IDENTIFICATION
Every day, changes that occur in the world generate new opportunities. Students need to understand their own capabilities, skills, assets, network and passions, and those of their team members in order to identify an opportunity that can become the foundation of a new business that they can build.

Developing the Skill
Joint Business-Engineering Courses
Dare to Dream $500 Venture Shaping Grants
Michigan Business Challenge (round one)

Firing Up Undergrad Entrepreneurs
Peter Adriaens, Professor of Entrepreneurship

A mobile-phone application for paying parking fees and a service plan for water-damaged electronic devices were among the innovative business ideas posed by undergraduate students last fall in Business Basics for Entrepreneurs, the University’s first campus-wide entrepreneurship course designed for undergraduates. “At the undergraduate level, students come in with great ideas, but they are miles removed from starting a business,” says Professor of Entrepreneurship Peter Adriaens, who teaches the one-semester course. “We help them think about the framework around the idea to shape it into a business and the complexity of the different pieces of the puzzle that must be in place.” The Zell Lurie Institute collaborated with the College of Engineering’s Center for Entrepreneurship, to offer the course with support from the Williamson Collaborative Entrepreneurial Education Fund. Using contemporary examples from Facebook, current movies and popular celebrities to illustrate fundamental business concepts such as value creation and customer segmentation, Adriaens guides undergraduates through the process of developing a viable business model. He also helps them acquire entrepreneurial skill sets, including business planning and resourcing, that are essential for launching a successful start-up. At the conclusion of the course, individual students and teams present three-minute pitches for their businesses. “They leave with an understanding that there is more to a business than just an idea,” Adriaens says.

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Ankur Shah, BBA ’13
Top Photograph by: Douglas Schaible
BUSINESS DESIGN

Once an opportunity has been identified and validated, students need to determine: who their customers are and why those customers will buy what they are selling; who their business will collaborate with and why these other organizations will cooperate with them; and how they will make money.

Developing the Skill

Multidisciplinary Graduate-Level Courses
Entrepalooza
Distinguished Speakers Innovators Seminar
Dare to Dream $500 Venture Shaping Grants

Breaking into Online Retail

Allen Kim, BSE ’12, Co-founder, Bebarang.com

As an industrial-operations engineering student at the U-M College of Engineering, Allen Kim, BSE ’12, knew nothing about babies or baby clothes. However, with assistance from the Zell Lurie Institute and other on-campus entrepreneurial resources, he parlayed his interest in fashion and clothing into Bebarang.com (formerly Bebaroo), a start-up company offering online rentals of special-occasion children’s clothes. “I couldn’t resist my entrepreneurial calling,” says Kim, who conducted customer surveys by buttonholing Ann Arbor-area mothers at Starbucks and Briarwood Mall. Over the 2010 spring break, he took entrepreneurship trips sponsored by the College of Engineering’s Center for Entrepreneurship to the San Francisco Bay area and New York City, where he met world-famous entrepreneurs, venture capitalists and industry leaders. “The feedback I received, especially from Michigan alumni, was very helpful,” Kim says. He also benefited from intensive coaching at the two-day Ann Arbor SPARK Entrepreneur Boot Camp and exposure to entrepreneurial luminaries at the College of Engineering’s Distinguished Speakers and Innovators Seminar. Kim financed his start-up by winning business competitions, including Dare to Dream, the Michigan Business Challenge and the 2010 College Entrepreneur of the Year Award from Entrepreneur Magazine. Barbarang gained traction at the TechArb business accelerator and launched its Web-based rental service in August 2010. “Recently, we have pivoted the business to a different angle,” Kim says. “Currently, we are working out of a business incubator in New York City and plan to re-launch our service in the near future.”

Top Photograph by: Martin Vloet
Before building a business, students need to know if it makes sense to build. Conducting a feasibility study provides that reality check.

Developing the Skill
- Multidisciplinary Venture Creation Courses
- Dare to Dream $1,500 Assessment Grants
- Michigan Business Challenge (round two)
- Wolverine Venture Fund
- Frankel Commercialization Fund
- Social Venture Fund

Evaluating Entrepreneurial Potential

Justin Jackson, Ph.D. AeroE ’12, Student Fund Manager, Frankel Commercialization Fund

With his sights set on launching a successful business someday, Justin Jackson, Ph.D. AeroE ’12, wanted to augment his aerospace-engineering background with entrepreneurial business skills. Last fall, he joined the technology team on the student-directed, pre-seed Frankel Commercialization Fund, which engages students in the very beginning stages of research commercialization where deals are sourced, technologies and inventors are evaluated, and companies are formed. “The skills an engineer uses to solve an engineering problem or develop an engineering product are quite different,” Jackson explains. “The Frankel Fund offered me an opportunity to understand what makes business start-ups successful and what investors look for.” Jackson tested the entrepreneurial waters in two multidisciplinary courses — Finance Professor David Brophy’s Financing Research Commercialization and Professor of Entrepreneurship Tim Faley’s Innovative New Business Design — and won a $500 Dare to Dream assessment-phase grant for an aerial-photography services start-up.
BUSINESS PLANNING
Skill in business planning is essential for a successful company launch. Students are taught how to “operationalize” a business, not just create a document.

Developing the Skill
Multidisciplinary Entrepreneurial Management & New Venture Creation Courses
Dare to Dream Integration Grants up to $10,000
Michigan Business Challenge (final rounds)
TechArb Accelerator
Michigan Growth Capital Symposium

Charting the Course for Green Innovation
Paul Davis, MBA/MS ’11 and Robert Levine, PhD ’13, Co-founders, ReGenerate Solutions

One day soon, supermarkets and cafeterias may convert food scraps and leftovers into biogas for powering on-site hot-water heaters using an innovative “eco-dumpster” developed by ReGenerate Solutions. The start-up company, launched in 2009 by four Michigan graduate students, is perfecting its Compact Organic Waste Station (COWS), which utilizes anaerobic digestion to turn food waste into a methane-rich gas and organic-compost product. “We are currently raising financing in order to hire additional engineers, cultivate customer relationships and move from a one-fifth-scale prototype to a full COWS system by 2012,” explains Paul Davis, MBA/MS ’11. The four students met through the School of Natural Resources and Environment and the College of Engineering’s Better Living Using Engineering laboratory, or BluE laB. With dovetailing interests in waste management and renewable-energy generation, Robert (“Bobby”) Levine, PhD ’13, Nolan Orfield, PhD ’13, Hunt Briggs, MBA/MS ’11 and Davis quickly formed a team to develop and commercialize eco-dumpsters. They tapped the entrepreneurial resources of the Zell Lurie Institute, the Ross School and the College of Engineering, as they proceeded through the design, assessment and planning phases of business creation. ReGenerate amassed a considerable war chest by winning the $100,000 “Think Green” investment prize at the 2011 Rice University Business Plan Competition, as well as a $10,000 Dare to Dream integration-phase grant, a $7,500 U-M Dow Sustainability Award and a $10,000 runner-up prize at the Michigan Business Challenge. “The Clean Tech Entrepreneurship course taught by Institute faculty members Tim Faley and Peter Adriaens hooked me on entrepreneurship,” Levine says. “Paul Kirsch, the Institute’s associate director, was an excellent coach who helped us develop our business model, refine our pitch and shape our commercialization plan.”

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Angelique Johnson, MSE ’07, PhD EE ’11
Tyler Paxton, MBA ’11

Top Photograph by: Frank Fanzone
RESOURCING
In addition to financial capital, start-ups also must procure human capital, including management teams, board advisors and providers of legal and other services. Students learn and test their skill in resourcing from the investors’ side of the equation by taking active roles in the Frankel Commercialization Fund, the Wolverine Venture Fund, and the new Social Venture Fund.

Developing the Skill
- Venture Capital Finance Course
- Marcel Gani Summer Internship Program
- Wolverine Venture Fund
- Frankel Commercialization Fund
- Social Venture Fund

Money on the Firing Line
Erik Gordon, Managing Director, Wolverine Venture Fund

Michigan MBAs on the student-led $5.5 million Wolverine Venture Fund (WVF) put real money on the firing line by making venture-capital investments in early stage companies and managing a broad-based portfolio. “Their educational experience couldn’t be more hands-on,” says Erik Gordon, the Fund’s director. “Students learn and practice the skills they need to assess business opportunities, markets, technologies, industries and management teams. They also are taught how to structure financing deals that make sense for the company and the venture fund.” The WVF currently holds investment positions in 15 portfolio companies, and has overseen four successful exits through acquisitions or initial public offerings since its inception in 1998. At every step, students are guided by seasoned investors who provide critiques and feedback. “Our goal is not just to educate venture capitalists, but to give students an in-depth understanding of all aspects of growing a great company,” Gordon adds. “These are skills any entrepreneur, or anyone who deals with entrepreneurs, should know.”
MANAGING GROWTH

Once launched, in order for the start-up to achieve its goals and meet its investors’ expectations, skill in managing growth within a resource-constrained environment is vital.

Developing the Skill
- Managing the Growth of New Ventures Course
- Entrepreneurial MAP
- Marcel Gani Internships
- Global Private Equity Conference

Harnessing Growth Potential
Diane Bouis, MBA '12, Marcel Gani Intern, Inovo

Diane Bouis, MBA ’12, honed her skill in managing growth as a Marcel Gani intern working on client projects with established manufacturing companies seeking to develop new technological applications or product improvements. During her 12-week summer internship at Inovo, an Ann Arbor-based innovation consulting company, she combined creative thinking and community mining to help a Fortune 50 chemical company identify alternative uses for its proprietary technology in the energy sector and a leading pet-products manufacturer find ways to improve its cat litter. “Bringing fresh new thinking in more than one dimension can help companies pursue the innovation and development they need to stay ahead of the competition,” Bouis says. “As an innovation consultant, I need to think outside the box and not be limited by specific technological knowledge that can hamper the creative process.” At the Ross School, she also participated in case competitions sponsored by Medtronic, Deloitte and Boston Consulting Group that strengthened her problem-solving and business-management capabilities. Bouis plans to leverage her MBA education and background as a research scientist at the University of Michigan Cardiovascular Center to work in health-care innovation consulting or in the strategy division of a major pharmaceutical company after graduation.
2011 MILESTONES

The Samuel Zell, Mitchell Mondry and Zell Lurie Institute and Erb Institute Scholarship Awards totaled $55,000 providing 11 MBAs with $5000 each toward their tuition.

The institute’s three student-led funds, Wolverine Venture Fund, Frankel Commercialization Fund and Social Venture Fund, have $6.5 million in total under management. Seventy-eight graduate level students from across campus participated on the funds and three new investments were made under their direction.

The campus-wide Dare to Dream grant program for student start-ups awarded $93,500 to 40 student teams across campus to develop their business ideas and create a business plan, while earning their degrees.

The Michigan Business Challenge engaged 48 teams from the University’s 19 Schools and Colleges awarding $54,300 in prize money. The Institute sponsored 38 students among 14 teams at intercollegiate and U.S. based competitions to represent Michigan — bringing home $247,500 in prize money and services.

The Marcel Gani Internship program placed 13 students at start-up and venture capital firms across the U.S.

The TechArb incubator managed by the Zell Lurie Institute and Center for Entrepreneurship, awarded 39 student teams with office space and provided mentoring to develop their business concepts.

MAP placed 45 first-year MBA students at six start-up companies nationally and across the globe.

Entrepalooza, the Michigan Private Equity Conference and Michigan Growth Capital Symposium engaged over 850 attendees from the entrepreneurial and investment community, as well as from the University of Michigan.

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