

School of Business and Economics

# Impact

Summer 2010



Growth. Innovation.  
A New Direction.

***Michigan Tech***

Michigan Technological University



“We are striving to define the role of business education at a technological university.”

## LETTER FROM THE DEAN

Sixty years ago, the School of Business and Economics began as the Department of Engineering Administration, when Michigan Technological University was known as the Michigan College of Mining and Technology.

Since then, the needs of society have changed, our economy has changed, and our University has changed. Business schools, which play an important role in the US and global economies, must keep up with our ever-changing world. To give students the tools they need to compete and succeed, business education must change its focus to innovation, advancing new technologies, entrepreneurship, and business development.

At the School of Business and Economics, we are uniquely positioned to provide an education that will have a profound business and economic impact on the fields of business that are so vital to our future. To meet the challenges of our economy now and going forward, we are committed to finding avenues to merge business education with engineering and science education. We are striving to define the role of business education at a technological university.

To meet the call for this new paradigm, this year the School of Business and Economics is adopting an aggressive plan for change that complements Michigan Tech's strategic plan for growth. Our new mission, vision, and values will help our School develop leaders in business and innovation.

We are developing and implementing undergraduate and graduate curricula that are innovative, distinctive, and transformative. We are launching a new online program that will help our students keep pace with rapidly evolving technologies. We are forging partnerships with innovators in all avenues of the business world, many of whom are our alumni. You can learn more about the exciting changes in store at the School of Business and Economics in these pages.

As we continue to grow and change, we will be sharing our stories with you in the pages of this new magazine, *Impact*, and on our newly redesigned website: [mtu.edu/business](http://mtu.edu/business). Your feedback is important to us. Please get in touch with us at [business@mtu.edu](mailto:business@mtu.edu) with your comments, news, and suggestions for stories.

Sincerely,

Darrell Radson

## Dean's Advisory Council

The Dean's Advisory Council is composed of business professionals chosen for their experience and expertise in leading businesses or public and nonprofit organizations and for their commitment to the School of Business and Economics.

The council is a proactive organization dedicated to helping the School of Business and Economics achieve its mission and become a top-choice school for business education among students and employers.

We would like to recognize and thank our council members.

David Bernard, Retired  
Kimberly-Clark

David Brule, President/CEO  
Northern Star Industries Inc.

John Calder, CEO  
Cincinnati Controls Inc.

James Lenz, Director  
John Deere and Company

Hugh Makens, Office Counsel  
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Dhanni Systems Inc.

Scott Pattullo, Senior VP  
Sales and Marketing, Wheels Inc.

John Rockwell, Managing Director  
Element Partners

James Trethewey, Retired  
Cliffs Natural Resources Inc.

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Michigan Technological University is an equal  
opportunity educational institution/equal opportunity  
employer.

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The business world never stands still. New ideas, technologies, and innovations continually change our economy, our work, and our visions of the future. To keep up with the rapid pace of change, business education must evolve, too.

As a business school within a technological university, the School of Business and Economics possesses unique resources and opportunities to provide an education that will have a profound impact on the business world and the global economy. Our focus on innovation, advancing new technologies, entrepreneurship, and business development gives our School and our students a distinctive edge in meeting the challenges posed by the modern business environment.

This year, the School of Business and Economics is launching an aggressive plan for change. With this plan, the School will be able to grow at a pace equal to the continually changing world of business, and our students will gain the tools they need to emerge as leaders, now and in the future.

Our plan for change includes the adoption of new mission, vision, and value statements; the development of innovative programs; and other exciting changes. Here's a brief look at the plan and some of the ways in which the School of Business and Economics will continue to grow during this academic year and beyond.



## Undergraduate programs

### New curriculum

The School of Business and Economics offers a new undergraduate business curriculum that is distinctive and innovative, one that will prepare students to become leaders in business innovation, development, and entrepreneurship. The undergraduate curriculum will be an avenue where business, engineering, and science education merge.

Beginning in fall 2010, our new undergraduate curriculum will require students in all our majors to successfully complete a Business Development Experience during their senior year, which will allow our students to acquire the necessary skills for starting new businesses and expanding current businesses. This addition to the curriculum will permit the School to take advantage of innovations in engineering and science that are taking place on campus. Students will

- Develop, write, and present a business plan for a new product or technology developed by a College of Engineering Senior Design Team; or
- Develop, write, and present a business development and a management plan for a campus Enterprise; or
- Successfully manage an investment portfolio through the Applied Portfolio Management Program (APMP).

### New business majors

In fall 2009, the School of Business and Economics created six new degree programs from our previous Bachelor of Science in Business Administration with concentrations. These new degree programs represent a major step in the recognition and promotion of our undergraduate programs. We now offer a BS in Accounting, Finance, Management, Management Information Systems, Marketing, and Operations and Systems Management.

### MBA programs

The School of Business and Economics, which began offering a Master of Business Administration (MBA) in 2006, is expanding its MBA program with a new curriculum, a new delivery format, and a new name: the Tech MBA. A new distance-learning program, the Tech MBA Online, will be introduced this fall.

### The Tech MBA

The Tech MBA is focused on Innovation and Technology Management. This on-campus program will continue to be delivered in a one-year accelerated format, with the majority of students coming directly from engineering and science undergraduate programs across the University. Among the distinctive features of the Tech MBA is the addition of a series of professional development and communication workshops that enhance our students' skills and increase their chances for success in business.

### The Tech MBA Online

The Tech MBA Online is a two-year, distance-learning program with the same Innovation and Technology Management focus as the on-campus Tech MBA. Offering the program in an online format allows students around the country and across the globe to earn the Tech MBA. The program includes two on-campus residencies and one international residency. Tech MBA Online students come together face-to-face in these residencies in a learning environment that complements their online courses. The residencies allow students to interact with faculty, business leaders, and peers and offer a chance to put newly acquired knowledge into practice. To read more about the Tech MBA Online, turn to page 17.

### New lines of communication

To achieve our goals, the School of Business and Economics must maintain strong lines of communication with our current and prospective students, our faculty, our alumni, the University as a whole, and the business community.

Our new website features comprehensive information about our School and its programs, along with frequent updates about School news and events. Please visit us online at [mtu.edu/business](http://mtu.edu/business).

*Impact*, our new magazine that you are enjoying now, will be distributed regularly in print and electronic formats and will offer an in-depth look at the School of Business and Economics.

We'd love to hear your feedback as we continue to improve the School of Business and Economics. Please get in touch with us at [business@mtu.edu](mailto:business@mtu.edu).



## MISSION

The School of Business and Economics integrates Michigan Technological University's technological prominence with experience-based learning to develop leaders in global business and innovation and to advance knowledge through research.

## VISION

The School of Business and Economics will be a nationally recognized business school known for our leadership in providing avenues for business education to merge with engineering and science education; our scholarly research; and for our students who become leaders in innovation, new technologies, entrepreneurship, and global business development.

## VALUES

As we educate our students, we value hard work, innovation, impact, collaboration, integrity, and risk taking.

# Roads to su







# ccess

## OUR ALUMNI MAKE AN IMPACT

**W**hen students graduate from the School of Business and Economics, they set off on divergent roads into the business world. Many alumni choose to chart their own course at the helm of a new business.

We'd like to introduce you to five of our enterprising alumni, whose careers run the gamut of innovative business endeavors. Jim Anttonen '65 founded a sustainable construction firm that has become a leader in its field. Kristina Marshall '98 runs a growing nonprofit organization that provides mentoring to middle and high school students. Venture capitalist John Rockwell '79 gives entrepreneurs the support they need to boost their businesses. Steve Vizanko '04 and Caleb Wendel '07 own a thriving shop that caters to bicycling enthusiasts.

Each of these successful professionals earned their bachelor's degrees from the School of Business and Economics, and all have gone on to make a unique mark in their chosen fields. While these pioneering individuals—along with many more School of Business and Economics alumni—have arrived at success through different paths, their stories all share one key element: a passion for innovation.

A close-up photograph of a silver, metallic pen resting diagonally across a document. The document features a bar chart with yellow bars and a red line graph that trends upwards. The pen has a textured grip and a fine-point tip. The background is slightly blurred, emphasizing the pen and the data visualization.

# Venture capitalist helps entrepreneurs build strong businesses



In his career as a venture capitalist, John Rockwell '79 frequently draws on the knowledge he gained in his courses at the School of Business and Economics. He said that he picked up one of his most valuable business skills not in the classroom but on the ice.

"I came to Michigan Tech on a hockey scholarship," said Rockwell, who lives in Silicon Valley. "I was one of twenty-six guys on a team. We all made contributions, and when we worked together we could do some great things."

"That same principle is true in the business world, too. I enjoy working with companies as a member of their team, helping them develop into great businesses."

Rockwell, who has more than twenty-three years of financial investment experience, currently serves as managing director of Element Partners, a private equity firm that invests in high-growth companies offering innovative solutions to global energy, resource, and environmental problems. The company, which is part of the Draper Fisher Jurvetson global venture capital network, has offices in Menlo Park, California, and Philadelphia.

Since 1995, Element's team has successfully managed more than \$1.2 billion in capital commitments in partnerships focused on investing in and profitably growing energy, industrial, and environment-related businesses.

Along with providing funding for pioneering companies in the field of clean technology, Rockwell provides strategic insights and industry contacts to help businesses grow.

"My goal is to build companies that are the best in their niche," he said.

Rockwell considered a career in chemical engineering before transferring to the School of Business and Economics for his undergraduate degree. He went on to earn an MBA from the Carlson School of Management at the University of Minnesota.

"I realized that I wanted to work with people," he said of the switch from engineering to business.

Before joining Element Partners, Rockwell served as a partner at Advent International Corporation, invested and managed early-stage companies with Materia Ventures Associates, and held various positions in 3M Corporation's Acquisitions and Business Development.

During his time at Materia, Rockwell scored a huge success as CEO of Luxar Corporation. When he took the helm of the medical laser manufacturing firm, the struggling company was valued at \$4 million. After two years under his direction, Luxar was valued at \$130 million.



With millions of dollars on the table every time Rockwell does a deal, he's looking for dynamic entrepreneurs who are offering new ways to solve problems. Of every 1,000 business plans that come across his desk, Rockwell will choose to invest in just a couple of them.

"I'm looking for entrepreneurs who are really passionate," he said, "and I like to work with people who have good leadership characteristics. It's also important to be good at what you do on the technical side and also have a business perspective."

As the clean tech field continues to expand, Rockwell expects the opportunities for investment to grow as well. That's an exciting prospect for an investor who loves the fast-paced nature of his work.

"The typical venture capitalist does about three deals every two years," Rockwell said. "I like to be on six deals at a time, and I'm usually doing even more."

For more information about Element Partners, visit [elementpartners.com](http://elementpartners.com).

# Cycling enthusiasts roll their passion into a profitable business

In their classes at the School of Business and Economics, Steve Vizanko '04 and Caleb Wendel '07 learned how to craft a detailed business plan and meticulously estimate a new enterprise's growth.

As owners of The Bike Shop in Houghton, Vizanko and Wendel are discovering the thrills and challenges of running a flourishing business that has quickly exceeded their on-paper projections.

"Our first year has been phenomenal," said Wendel. "And this year has been even busier than last year."

Vizanko and Wendel opened The Bike Shop in April 2008. As longtime bicycling enthusiasts, they knew the sport's popularity was booming. While working together at a local cycling store during college, they discovered that many cyclists in the area would welcome a new business offering a variety of services to people who love to ride.

In fact, as students, Vizanko and Wendel pitched their idea to open a bike shop in the Copper Country as a project for their entrepreneurship class.

"We knew our market, and we knew the people we were trying to reach," said Vizanko. "Most importantly, cycling is something we're both passionate about."

All that legwork added up to more than a good grade on that class project for Wendel and Vizanko. Their innovative concept of a one-stop cycling shop is paying off in the real world, too.

"We figured that, after the first year in business, we'd be busy enough to hire our first employee," Vizanko said. "After the first week we were open, we had to hire someone. After three months, we hired our second employee."

"We are very lucky to have found employees who are as excited about bikes as we are," Vizanko said. "There are times when Caleb or I can't be here, and it's comforting to know that we are leaving the shop in good hands with people who care."

Vizanko and Wendel conceived of The Bike Shop as more than just a store that sells all kinds of cycling equipment, from top-of-the-line bicycles to water bottles. It's a life-style destination for anyone who loves to ride.

Customers often gather on the couches in the front of the shop to swap advice and road stories. The owners are eager to share their extensive knowledge of the sport with riders who stop in to look for gear and take advantage of the expert services offered, which include repairs and tune-ups.

The Bike Shop's comprehensive marketing plan also plays a big part in its success. No surprise, since Wendel and Vizanko both focused on marketing as students.

Customers can buy an array of T-shirts, hoodies, and other accoutrements that are screen-printed on-site with The Bike Shop's logo. The business also has begun sponsoring cycling events, including the Miner's Revenge Mountain Bike Race. Vizanko and Wendel enjoy taking cycling trips of their own that help them take the pulse of the sport and spread the word about their business.

Vizanko and Wendel forecast even more growth for The Bike Shop, and they're dedicated to working all the angles to keep their business profitable. They're also planning to "keep having an awesome time doing it."

"We're doing this because we really love it," Vizanko said. "We're excited: going to work every day and having fun."

For more information about The Bike Shop, visit [goridebikes.com](http://goridebikes.com).





*Caleb Wendel '07, left, and Steve Vizanko '04 in The Bike Shop, living their dream.*





# Michigan CEO reaches out to today's youth

Kristina (Sobczynski) Marshall '98 began her education at Michigan Tech with an interest in environmental engineering and landed a student co-op job at General Motors. One evening while driving home from the GM plant in Ypsilanti, Marshall realized that she needed to turn her life in a completely different direction.

"It hit me that my purpose was to make my life about helping kids," said Marshall, who lives in Shelby Township with her husband, Duane Marshall, also a School of Business and Economics graduate.

While attending Warren Mott High School outside Detroit, Marshall learned firsthand how mentoring can make a big difference in a young person's life. She was one of the first high school students to take part in a new program called Winning Futures. That guidance helped Marshall to graduate in the top one percent of her class, and she earned Winning Futures' first grand prize and received its first scholarship.

When Marshall returned to Michigan Tech after her co-op ended, she switched to the School of Business and Economics. After graduating, she knew exactly where she wanted to work.

"I went right to the founder of Winning Futures and told him I wanted a position," Marshall said. Sam Cupp, the entrepreneur who launched Winning Futures in 1994, hired Marshall in 1998 to serve as the organization's managing director. She has since been named president and CEO.

When Marshall signed on with the organization, Winning Futures was operating in one Michigan school district. She has led the program's expansion to six districts in southeast Michigan.

Marshall also has worked to expand the organization's reach by making the successful mentoring curriculum available to students everywhere. Currently, twenty-two organizations in Michigan use the Winning Futures model, and the program has been adopted by agencies in nine other states as well.

"We want to reach as many children as possible," Marshall said. "Through the workbooks and training manuals we've developed, we've created a social entrepreneurship arm of our organization. We take our product and sell it to other nonprofits, schools, and parents. We then use those profits for our local fundraising missions."

Marshall said her long-term goal is to make Winning Futures a national program.

"I want us to become the go-to agency for youth development curriculum," she said.

Thus far, Winning Futures has touched the lives of more than 16,000 students and given out more than \$1.5 million in scholarships. In 2008, *Crain's Detroit Business* acknowledged Marshall's efforts by naming her one of its "Forty Under Forty." The list recognizes the top-forty influential business professionals, community activists, and leaders who are younger than age forty.

Drawing upon her business school education, Marshall takes an entrepreneurial approach to running Winning Futures.

"We have innovative processes and systems in place, and we don't allow rigid guidelines to affect the way we serve our kids," she said. "We're always looking at creative new ways to serve our mission."

Marshall said that, at Winning Futures, she's found the perfect opportunity to fulfill her life's mission of helping others.

"What I enjoy most is seeing our organization make an impact on young people's lives," she said.

For more information about Winning Futures, visit [winningfutures.org](http://winningfutures.org).



Winning Futures has touched the lives of more than 16,000 students and given out more than \$1.5 million in scholarships.



# Construction company owner leads his field with green practices

Jim Anttonen '65 became a pioneer in environmentally sustainable construction long before the term “sustainable” became a household word.

In 1985, Anttonen launched ARS Denver Inc. with his partner, Kim Haarberg. The Colorado-based corporation has grown to become one of the top firms in the country specializing in soil stabilization and asphalt reclamation.

Using methods that are friendly to the environment, including the grinding and repurposing of existing asphalt, ARS Denver prepares roadways and other thoroughfares to be paved.

“We were one of the companies that pioneered full-depth asphalt reclamation in this part of the country,” said Anttonen.

The green practices that helped cement ARS Denver’s success don’t just preserve the environment. Sustainable measures reduce costs and, therefore, make good business sense, as well.

“My philosophy has always been to leave something for the next guy,” he said.





*Denver International Airport*

ARS Denver has tackled more than 3,000 projects during the last two decades, including a number of grand-scale endeavors: highways, state parks, and citywide bike paths. When Denver International Airport was being built in the 1990s, the company prepared all the parking areas, the major highway in and out of the airport, and all the runways, including the longest public-use runway in the United States.

Although Anttonen has found great success as the owner of a business, he didn't jump into entrepreneurship right out of college. He served in Vietnam after graduating from Michigan Tech, then sold construction and mining equipment for eighteen years before launching his first business.

"I went from selling a piece of equipment to telling clients, 'Why don't I just buy the equipment myself and do the work for you?'" he said.

As a Michigan Tech graduate, Anttonen had no trouble making industry contacts. Many of his fellow alumni worked in the mining and construction industries, and he had built a strong business network during his sales days, as well.

"I already had my foot in the door," he said.

"Having a good reputation is very important in the construction business."

Anttonen said that his years of marketing and sales experience gave him an edge when he went into business for himself. The marketing principles he first discovered in his classes at Tech still come in handy when he's going after big government contracts.

"We know how to talk to cities and counties and states," Anttonen said. "In fact, most of our jobs have been with governmental agencies this year, since the home-building industry is struggling right now."

Anttonen stepped down as president of ARS Denver this year, but not so he could retire, he quickly added. He's now seeking out new opportunities to keep his company growing.

ARS Denver, which employs about eighty people, continues to complete more than 100 projects per year throughout the western states. The firm recently launched a training division in partnership with several universities and has forged a partnership with a recycling company. Anttonen also is overseeing a new land development venture.

"The company's not slowing down, and I'm not, either," he said. "We're going to keep on going and going."

For more information about ARS Denver, visit [arsdenver.com](http://arsdenver.com).

# Call for Presidential Council of Alumnae nominations

The members of the Michigan Tech Presidential Council of Alumnae (PCA) are recognized for achievements in a number of areas such as educational excellence, professional accomplishments, past student service, current community services, University support, and other success. The PCA's main responsibility is to advise the president on campus climate issues and provide suggestions for enhancing the University's environment for students, especially women.

Do you know of anyone who deserves this noteworthy recognition? Email [business@mtu.edu](mailto:business@mtu.edu) to submit your nominee and reason for nomination.



**Tell us your story** Are you an alumnus or alumna of the School of Business and Economics who would like to share your career experiences in our magazine and on our website ([mtu.edu/business](http://mtu.edu/business))? We'd love to hear your story! Please get in touch at [business@mtu.edu](mailto:business@mtu.edu).

**Call for alumni/class notes** Career change? Wedding? Continuing your education? New child? The School of Business and Economics wants to hear from you.

Visit [mtu.edu/business/contact](http://mtu.edu/business/contact) to submit your news and look for it in our next *Impact*.



## Save the date for MBA golf outing

The MBA Association is planning a golf scramble at Portage Lake Golf Course during alumni weekend so students, alumni, and friends can participate in some friendly competition.

Date: Saturday, August 7, from 1:00 PM to 6:00 PM

Contact Event Coordinator Brett Waterson-Rosso to participate or become a sponsor at [btrosso@mtu.edu](mailto:btrosso@mtu.edu).



# Tech MBA goes global

## Advance your career from anywhere

Students who live and work anywhere in the world will soon have the opportunity to earn a Tech MBA online. The School of Business and Economics will launch the Tech MBA Online in fall 2010.

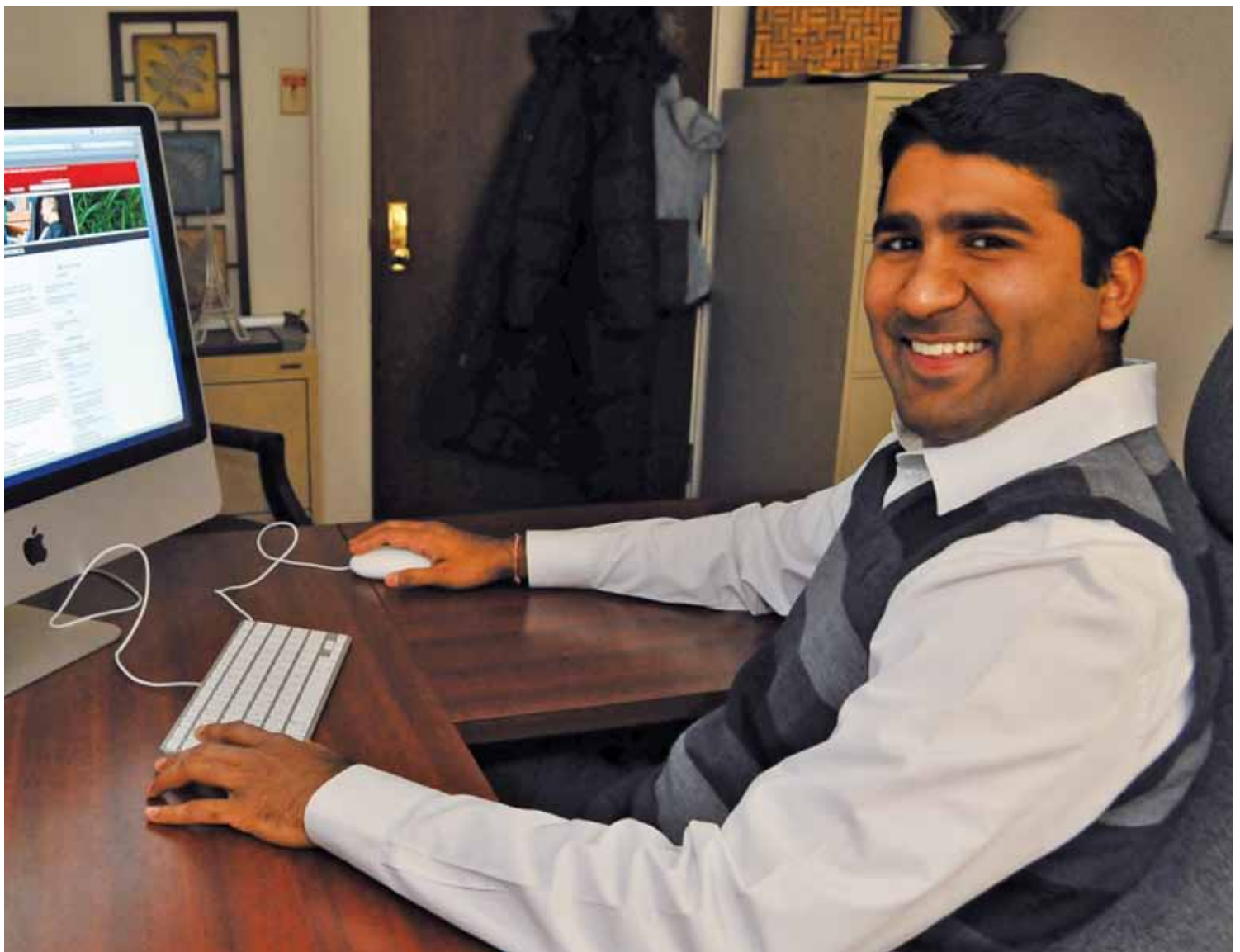
“The new two-year online program will bring the Tech MBA’s academic curriculum and professional development resources to a distance-learning environment,” said Ruth Archer, director of graduate business programs. Faculty and students will interact on the Internet using Blackboard educational software.

Just as with the on-campus MBA, the online program will focus on innovation and technology management. As a Master of Business Administration program tied to a technological university, the Tech MBA is geared toward professionals who work in a diverse number of fields.

“Our MBA programs, on campus and online, understand scientists, engineers, and others who work in technical areas,” Archer said. “We want to help students gain their competitive edge and advance in their careers.”

Tech MBA Online students will attend two extended weekend residencies on the Michigan Tech campus and one weeklong international residency. During the residencies, students work together to develop their teamwork and oral presentation skills. They also interact and get to know faculty members and business leaders. The international residency allows students to achieve a global perspective on innovation and technology management.

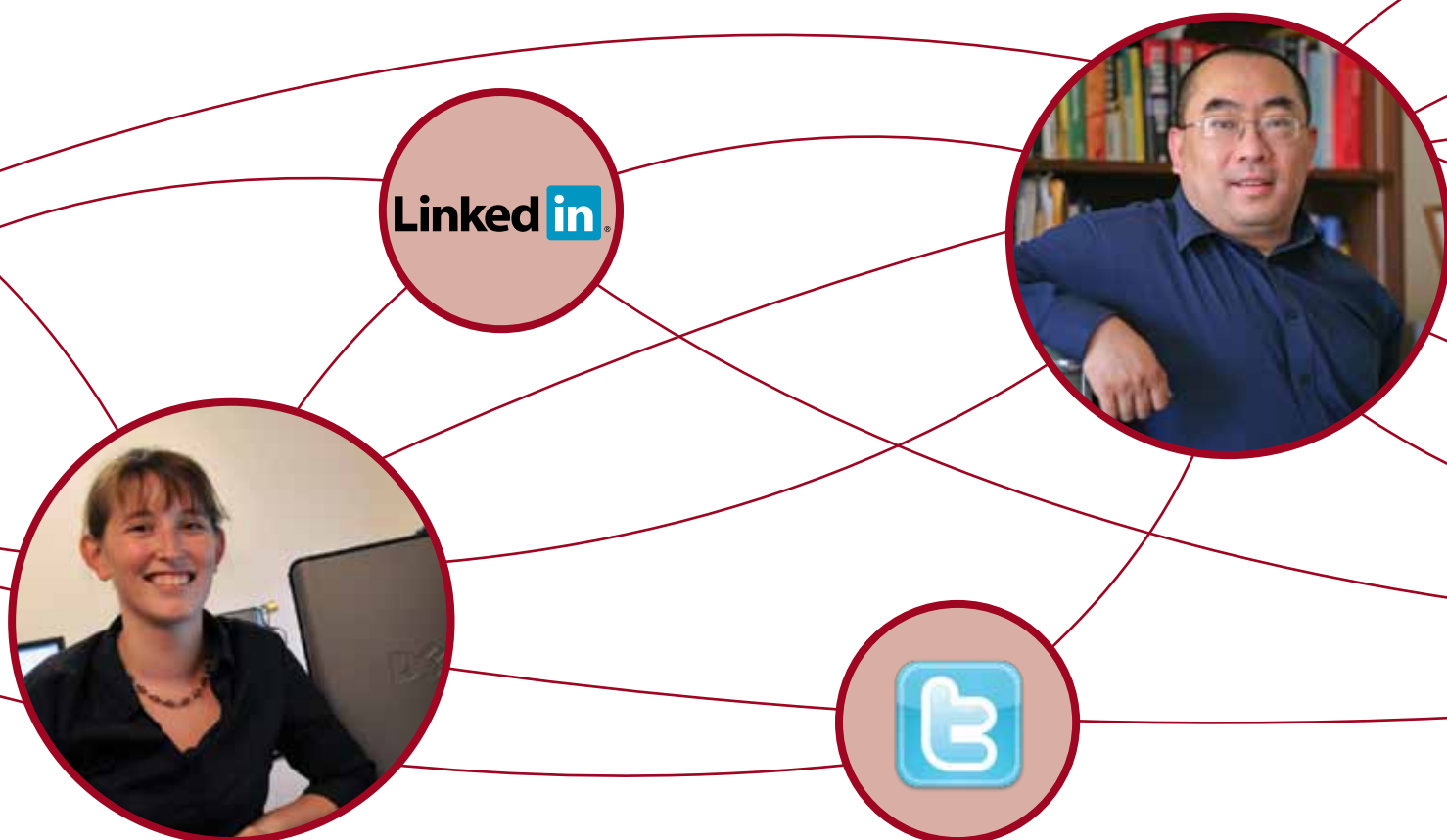
For more information, visit [mbaonline.mtu.edu](http://mbaonline.mtu.edu).





# NETWORKING

Make connections through social media



By carving out a strong Internet presence, the Tech MBA program connects with students far beyond the walls of the classroom.

In the past year, the Tech MBA program has established a vibrant identity in the world of online social media. A blog, the MBA Experience at Michigan Tech, offers an in-depth view of the program, and pages on Facebook and LinkedIn, two popular networking sites, spark conversations among students, alumni, faculty, and staff. A lively Twitter account serves up instant bites of news, useful information, and inspiration.

Ruth Archer, director of graduate business programs, launched the Tech MBA into the fast-moving realm of social media last year and contributes to the program's various online endeavors. She learned how to jump into the online domain by taking a class offered by adjunct lecturer Hajj E. Flemings as part of the Michigan Tech Enterprise Program.

With Twitter and other social media tools, Archer is speaking the language of current and prospective MBA students, whose use of the web in their professional lives continues to increase.

"I have a lot of fun with Twitter," Archer said. "One MBA student who follows me said that other MBA students who aren't reading my tweets are really missing out. That was nice to hear."

Archer also created a LinkedIn page for MBA alumni, so graduates can share professional contacts, job opportunities, and other career resources. (LinkedIn hosts a group for all Michigan Tech alumni, as well.)

"LinkedIn is an easy way to stay in touch with people," Archer said.

"Mastering social media is vital for students currently working toward their MBAs," Archer said. During a series of Professional Development Seminars, Tech MBA students learn valuable online skills, including creating a LinkedIn page, establishing a professional online presence on the web, and creating a visual résumé.

"In most MBA programs, you just take classes and complete projects. That's not what our MBA is all about," Archer said. "Our program is about curriculum and accreditation, of course, but it's also about professional development and networking. Those skills are just as critical."



YouTube



## Connect with us

Stay up to date by connecting with us through social networking websites. Find us on Twitter, Facebook, YouTube, and LinkedIn at the links listed below.

[www.twitter.com/businessattech](http://www.twitter.com/businessattech)

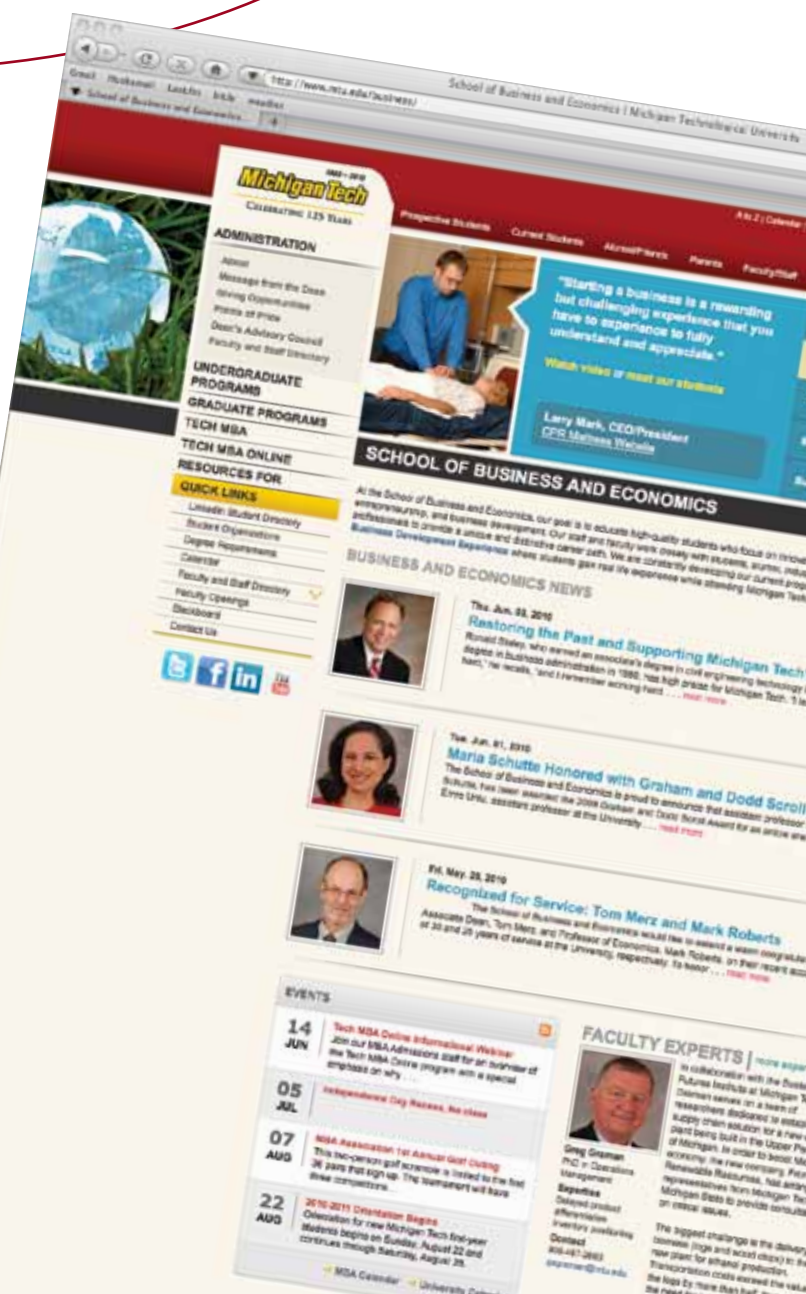
[www.facebook.com/businessattech](http://www.facebook.com/businessattech)

[www.youtube.com/businessattech](http://www.youtube.com/businessattech)

<http://bit.ly/businessattech>

## New look

The School's website (right) has been updated to provide news, events, and the latest information about our programs, students, faculty, and staff.



# Faculty Globe Trekkers



**WILLIAM BREFFLE, Estes Park, CO**

Colorado State University: Pathways to Success  
"Increasing Human Capacity for Global Human-Wildlife Coexistence"

**ALAN BROKAW, Chicago, IL**

Marketing Management Association  
"An Exploratory Examination of Consumer Behavior and the Fear of Rare Events"

**GARY CAMPBELL, Portland, OR**

Business and Sustainability  
"Fighting Resistance with Community Engagement: The Case of Kennecott"  
**Perth, Australia**  
ALTA  
"Copper in Global Market: What's Next?"

**JAMES GALE, St. Louis, MO**

Missouri Valley Economics Association  
"The Economics of Agricultural Fairs"

**SONIA GOLTZ, Anaheim, CA**

Academy of Management  
"Within-Group Design Options and the Questions They Can Answer"  
**Phoenix, AZ**

Association for Behavior Analysis International  
"Perceived Fairness of Groups and Organizations: A Human Foraging Rule?"

**GREG GRAMAN, Orlando, FL**

Production and Operations Management Society  
"Value Recovery in the Built Environment"

**DEAN JOHNSON, Las Vegas, NV**

Global Business International  
"Is a Project's Initial Investment Risk Free? A Decision Tree Paradox"

**DANA JOHNSON, Orlando, FL**

Production and Operations Management Society  
"Beliefs on Climate change and the Impact on Firms' Operations and Integrating a Multidisciplinary Program Using Concept Mapping"

**PAT JOYCE, Tucson, AZ**

Economic Science Association  
"Stuck in the Middle: An Analysis of the Median Voter in a Binary Choice Game"

**TOM MERZ, New Zealand**

Massey University  
"Stuck in the Middle: An Analysis of the Median Voter in a Binary Choice Game"

**PAUL NELSON, Washington, DC**

National Collegiate Inventors and Innovators Alliance  
"Failure and Success Experiences in Commercializing Student Inventions"

**DAVID OROZCO, Chicago, IL**

Economic Growth  
"Innovation Policy and Friends of the Court Patent Right Advocacy before the US Supreme Court"  
**Munich, Germany**  
Munich Intellectual Property Law Center  
"Innovation Policy and Friends of the Court"



In 2008 and 2009, faculty members in the School of Business and Economics presented their research and shared their expertise across the nation and around the world.

*The dot colors correspond with faculty members' presentation locations.*





# Examining the Great Lakes

Connecting the environment  
and the economy





*The invasive zebra mussels are one of the environmental threats being studied by a multidisciplinary team led by William Breffle.*

The Great Lakes help shape the industries, recreation, and culture of the people who live near them. The activities of those residents, in turn, affect the lakes and their ability to provide economic services in the future through a feedback loop.

William S. Breffle, associate professor of natural resource economics, is conducting research that explores this symbiotic relationship between the Great Lakes and the population surrounding them. The project, “Assessing the Carrying Capacity of the Great Lakes Natural Environment of Western Michigan,” examines the long-term environmental and economic impact of human activity on one of the Great Lakes—Lake Michigan.

In October 2008, Breffle received a \$115,100 grant from the Colcom Foundation for the project, for which he has assembled a multidisciplinary team of researchers. Currently, the group’s work focuses on the western region of Michigan that borders Lake Michigan in communities such as Grand Rapids, Kalamazoo, and Saugatuck, among many others. In future projects, Breffle plans to extend his research to the entire Great Lakes region.

The optimal number and types of uses that the Great Lakes can support, or their carrying capacity, is determined in part by a variety of environmental stressors, such as the introduction of zebra mussels, contamination of wetlands and watersheds, and population density. According to Breffle, the ways in which these stressors are managed play a major role in whether resource use is sustainable or whether carrying capacity is exceeded.

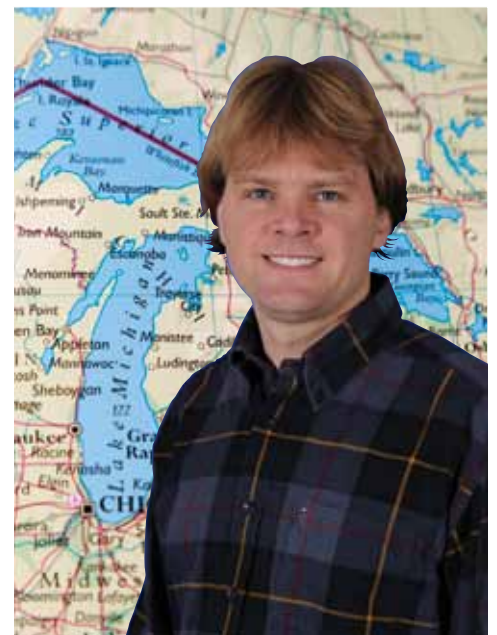
As part of that assessment, he and his team aim to investigate the heart of residents’ attitudes, opinions, and preferences about the Great Lakes and how the resources are being utilized. To do this, the researchers are administering a series of surveys.

Through survey questions, the researchers will learn how people use the Great Lakes, what they know about environmental stressors, which stressors they are most concerned about, and what they think are the best policies for the limited funds available to address those issues.

The information gleaned from the surveys is being used, along with additional data about the western region of Michigan bordering Lake Michigan, to build a dynamic systems model. This research tool will show the path of how one of the Great Lakes has been used as a resource over time and its possible future fate. The data generated by the model will then serve as a springboard for future studies.

Breffle said he hopes that, ultimately, the research will aid in the development of environmental management tools that sustain the environmental services provided by Great Lakes resources.

“It’s a question of how much we use today versus how much we save for future generations,” he said. “We want to focus on managing environmental stress in ways that maintain the capacity of the natural environment to provide services to future generations at a constant level or better.”



In future projects, Breffle plans to extend his research to the entire Great Lakes region.



# DIGITAL MARKETING

OUR STUDENTS  
ON THE  
NEW FRONTIER





There's no question about it — the successful marketers of the twenty-first century must be masters of the digital arena. Last fall, the School of Business and Economics offered its first digital marketing class to help students gain an edge on the Internet.

True to its subject, the class was taught almost entirely online by instructor Cindy McColley, manager of digital advertising for General Motors service and parts operations. McColley drew on more than twenty years of marketing experience to make sure that students knew the ins and outs of the emerging forms of media that are changing the way the world communicates.

McColley began her teaching by delivering four online sessions in spring 2009 as part of Alan Brokaw's Consumer Behavior class. She welcomed the opportunity to work with Michigan Tech students again when Dean Radson invited her to develop a full course on digital marketing.

"Students who attain an understanding of digital marketing are going to be ahead of those who do not," she said.

McColley said that students cannot underestimate how important the digital realm has become to the marketing profession. The skills she taught in the digital marketing class would benefit anyone who is interested in promoting their work and products, from entrepreneurs to engineers.

"If someone is in the market for anything—for any product or service—they're online," McColley said. "Everything has to be marketed, so everyone can benefit from understanding digital marketing. If you

become a doctor, you have to understand how to market your services.

"As part of the class learning objectives, I think it's very important to provide students with hands-on experience to learn how to market on the Internet," McColley said.

McColley, who is based in the Detroit area, met with her students face-to-face during a campus visit this fall.

Using Blackboard educational software and a blog that McColley set up for the class ([LearningDigitalMarketing.typepad.com](http://LearningDigitalMarketing.typepad.com)), students explored the ever-expanding world of digital media, from the professional networking site LinkedIn to the streaming video hub Hulu. The class kicked off with an online scavenger hunt that sent students scrambling all over the web for information.

In addition to their online work, students also gained real-life experience as digital marketers. They worked in teams with four start-up companies, including one that was founded by a recent Michigan Tech graduate, to create digital marketing plans that met these fledgling businesses' needs.

The teams presented their plans not just to the business owners but also to several heavyweights in the realm of digital marketing. Professionals from Google, Yahoo, Digitas, and SMG judged the Internet marketing plans.

As the students interacted with McColley and each other in person and online, they shaped the body of knowledge, à la Wikipedia, that will inform future digital marketing classes, she said.

"They became contributors to the learning," McColley said. "As the students posted on my blog, they created new insights. That's one of the reasons why the online community is so valuable."

# The Lipstick Queen

Poppy King started her first business when she was eighteen, forging success from a unique idea. Since then, the native of Melbourne, Australia, has earned the title of Lipstick Queen by introducing a series of cosmetic products that have garnered a fervent global following.

King believes that anyone can transform a great idea into a thriving business. She brought that inspiring message to the Michigan Tech campus during Entrepreneurship Week in November. As this year's Distinguished Entrepreneur, King shared her success story and offered advice to enterprising students.

During Entrepreneurship Week, Michigan Tech joins the global celebration of business innovation and enterprise. This year, the event was sponsored and organized by a student group, the Entrepreneurs Club, with support from the Institute for Leadership and Innovation (formerly CenTILE), the School of Business and Economics, and grants from the Michigan Initiative for Innovation and Entrepreneurship.

Larry Mark, president of the Entrepreneurs Club, said that he encouraged his peers of all majors to check out the Entrepreneurship Week events.

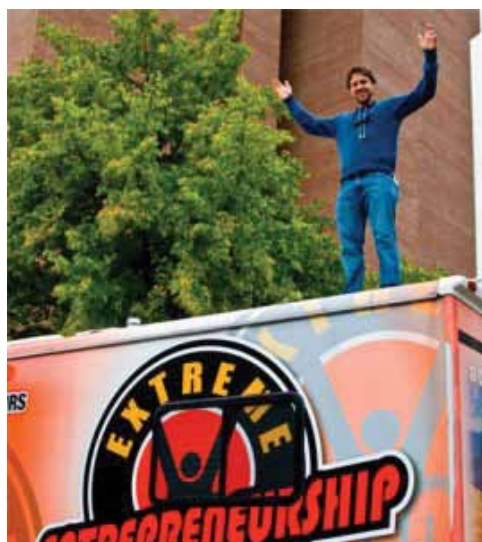
"Students gained a lot of knowledge, and it was fun and entertaining, too," he said.

As part of the weeklong slate of events, several self-made women and men joined Poppy King in visiting the campus and talking with students about how to become an entrepreneur. Students also got the chance to take their own business ideas for a test run.





# Entrepreneurship Week events



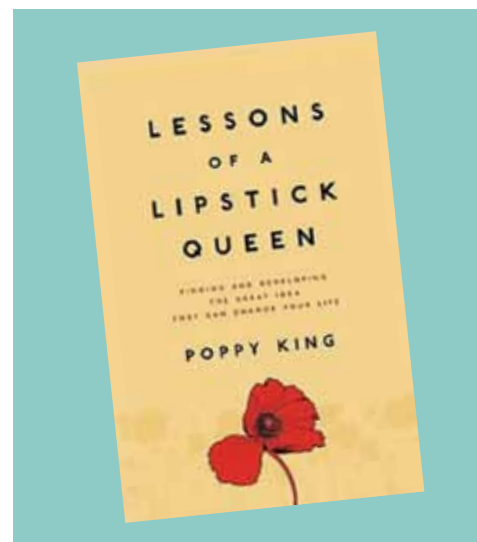
## Extreme Entrepreneurship Tour

The national tour returned for the third consecutive year to Michigan Tech. During a high-energy presentation, a lively group of young entrepreneurs from diverse corners of the business world discussed how they've carved out their own niches and answered questions from students who want to do the same.



## Elevator Pitch Competition

In rapid-fire fashion, students presented their ideas for new businesses during this fast-paced annual contest. The winners received seed money to help make their concepts a reality and will have the opportunity to travel to Chicago this year for a national elevator pitch competition.



## Distinguished Entrepreneur presentations

In her engaging book, *Lessons of a Lipstick Queen*, Poppy King explained how she built an international market for her cosmetic products and offered practical advice for those who want to bring their own ideas to fruition. She read from the book and signed copies at the J. R. Van Pelt and Opie Library. Later that day, King talked about her enterprising experiences during a presentation at Fisher Hall.

For more information, please visit the School of Business and Economics website, [mtu.edu/business](http://mtu.edu/business).

## Women in Technology panel gets female professionals talking

Women who work in technological fields have stories to tell. That's why Associate Professors Mari W. Buche and Chelley M. Vician invited a diverse group of female technology professionals to describe their experiences during the second annual Women in Technology event.

The event was hosted by the School of Business and Economics in March as part of Michigan Tech's campus-wide Women's Month. The panel discussion was sponsored by a grant from the Ford Foundation.

Buche and Vician brought together women who are at different points on their career trajectories for a candid discussion.

The panelists were Michele Blau, IBM, senior manager, IT delivery project management and enterprise automation distributed services; Lara Lane, Ford Motor Company, NextGen AVS application supervisor; Amy Lemley, self-employed, computer diagnostics and repair; Sue Lines, self-employed, IT services and business consulting; and Cindy Watson, Ford Motor Company, ITO S3 supervisor, order fulfillment practice.

"Students also had the opportunity to chat with the panelists at a reception and attend

an evening workshop," Buche said. "The event was created to attract more women to technology fields and to explain some of the wide variety of career choices and paths available," she said.

The panelists stressed that technology careers do not necessarily involve programming, writing code, or residing in a cubicle. Social interaction, interpersonal communication, and problem-solving skills are vital for anyone entering these career tracks.

The panelists agreed that technology-related careers are rewarding and constantly changing.

# Faculty Publications



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Coauthored by **Roberts, M. C.** (May 28-29, 2009) "Copper in the Global Economy," Invited Opening Presentation at the ALTA 2009 Copper Conference, pp. 1-15.

*The American Business Law Journal*

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*Dana Johnson, professor of operations and supply chain management.*



*Dean Johnson, associate professor of finance.*



*Mari Buche, associate professor of management information systems.*

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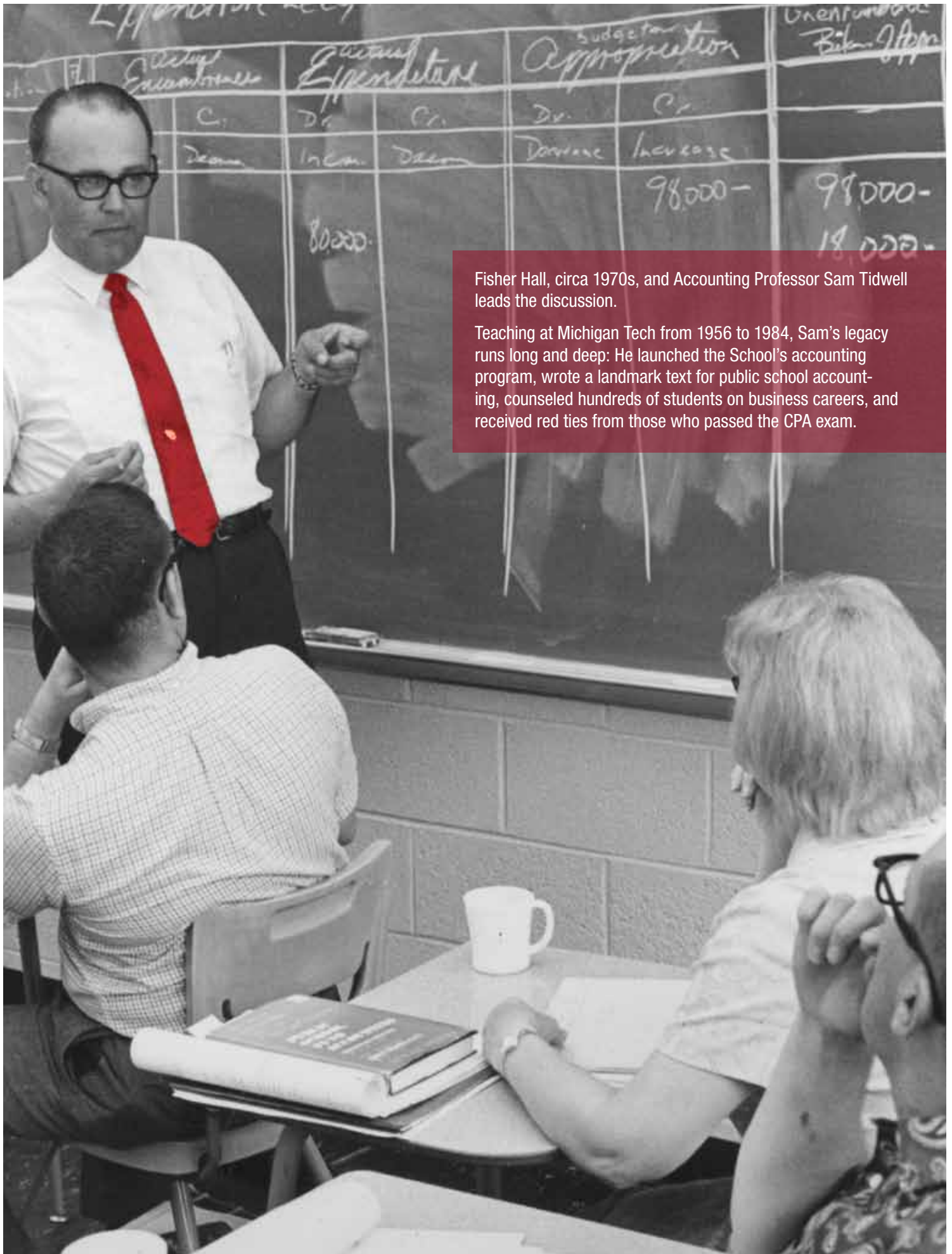
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## Do you remember?



Fisher Hall, circa 1970s, and Accounting Professor Sam Tidwell leads the discussion.

Teaching at Michigan Tech from 1956 to 1984, Sam's legacy runs long and deep: He launched the School's accounting program, wrote a landmark text for public school accounting, counseled hundreds of students on business careers, and received red ties from those who passed the CPA exam.



Michigan Technological University  
School of Business and Economics  
1400 Townsend Drive  
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# Be a part of the legacy



We invite you to be a part of our mission, our School, and our efforts to shape future leaders. You can help by giving to one of the funds found on our website at [mtu.edu/business/administration/giving-opportunities](http://mtu.edu/business/administration/giving-opportunities), by contacting the Michigan Tech Fund, or by using the enclosed envelope to initiate an individual gift. Every donation helps make a big difference in our students' lives.

Support for student programs exceeds \$4 million and includes the Applied Portfolio Management Program, the Tidwell Student Center, the Michigan Tech MBA, and much more.

**"Thank you for awarding me a School of Business and Economics scholarship. It is greatly appreciated. Without the help of this scholarship, I'm not sure if I would be here at Michigan Tech. Thank you again for the opportunity."**

**— Corinne Borel, Class of 2012**  
Recipient of the First-Year Freshman Scholarship