



For the love of Tech

The 2009 Alumni Association Award recipients give back again and again

by Dennis Walikainen

Michelle (Stevens) Boven '99

Outstanding Young Alumni Award



Michelle (Stevens) Boven has used her BS in Mechanical Engineering to help create better-engineered vehicles and solar products while engineering a better Michigan Tech.

Boven got her first job after graduation in 1999 at the Dow Chemical Company, and has been there ever since. Now a senior development specialist in Dow Solar Solutions, she leads a team researching improvements to photovoltaic cells.

She joined Dow Automotive in 2000, where she provided technical support to grow the STRAND-FOAM plastic foam business. In 2005 she was named project team leader in Diversified Products, where she drove the successful commercialization of Dow's structural foam inserts. Here she developed and patented a new process for making the foam inserts used to reinforce vehicle bodies. Her process slashes production time from over an hour to less than a minute. She also led a team that focused on commercializing a variety of energy-absorbing foams that enhance vehicle safety. Her contributions on IMPAXX foam helped earn her and her team an R&D 100 Award in 2007 from the science and technology magazine *R&D*, as well as a PACE (Premier

Automotive Suppliers' Contribution to Excellence) Award from *Automotive News*.

Boven completed an MBA from Northwood University in 2008. She has also earned Black Belt certification through the Six Sigma quality improvement methodology and has served as a Six Sigma Black Belt coach for teams at Dow working to improve their processes.

Boven has been recognized by the Detroit Section of the Society of Women Engineers, receiving its 2006 Distinguished New Engineer Award, as well as the 2006 Region H Professional Development Award and the 2006 Distinguished New Engineer Award. She is a charter member of the new professional mid-Michigan section and serves as its president.

Boven recruits talented Tech graduates on behalf of Dow and makes a point of reaching out to female engineering students and girls considering engineering as a profession. "The women want to know what to expect," she says. "They want to know what it's like out there after they get their degrees."

Boven was active while at Tech, competing in cross country, Nordic skiing, and track and field, and serving as a resident assistant in Douglass Houghton Hall. She also started the first women's club hockey team—which went to the nationals—and served as its goalie. But it was as a coach in the Mathematics Learning Center, under the guidance of Dennis Lewandowski, senior lecturer in the mathematical

sciences department, that she learned one of her most important lessons outside the classroom.

“I was more proud of the grades of the students I helped than I was of my own grades,” she says. “And now I find that it means far more to accomplish something as a team than as an individual.

“Results in life are key; however, it is important not to forget how we arrive at those results. If you achieve your goal, but nobody wants to work with you again, what have you accomplished? How do you do the next project? But if you have team members saying, ‘I can’t wait to be on a team with you again, take me with you,’ that’s the best feeling of accomplishment there is. This is the type of momentum that is needed to do great things together.”

John F. Calder '67 '76

Outstanding Service Award



By an almost universal measure of personal sacrifice—service on committees—John Calder’s devotion to Tech inspires awe among even the most jaded meeting mavens.

Calder is an active, contributing member of 1) the National Advisory Board of the School of Business and Economics, 2) the Tech Fund Board of Trustees, 3) the ME-EM Building for the Future Campaign, and 4) the University’s Capital Campaign Committee.

His dedication has led him to do the unthinkable: forgoing cherished moose-hunting trips to Canada so as not to miss important meetings.

In addition, Calder volunteers with Ducks Unlimited and the Boy Scouts in his hometown of Cincinnati. Both his sons, J. Scott and John, made Eagle Scout, “but I was not the Scout leader doing their merit badges,” he is quick to point out.

Calder earned two degrees from Michigan Tech, a BS in Mechanical Engineering and an MS in Business Administration. He gives his hours and days to Tech both out of loyalty to his alma mater and for concern about the future of American technical education.

“I have been very fortunate and successful in my life thanks to Michigan Tech, and I want to help spread the word about STEM [science, technology, engineering, and math] and Michigan Tech,” he says. “I’m also concerned about STEM classes and their growth in the US. In particular, I want young people to get interested in STEM, and I want the rest of us to understand how important it is to our economy and our place in the world.”

He also believes that Tech engineering students need to think beyond engineering. “I appreciate the engineering education that you receive at Tech, and the fact that you can hit the ground running,” he says. “But, in the future, we need more emphasis on

project management and tying together business and engineering.”

His own understanding of engineering and business contributed to Calder’s success. “I seem to be able to look at some distressed businesses and figure out what it would take to make them work,” he says. Calder has bought, developed, and sold a number of ventures and now is CEO of three companies in the Cincinnati area: Rilco Industrial Controls, E and M Equipment, and Cincinnati Controls, a firm he founded that specializes in motion, safety, and sensing controls.

To promote the marriage of engineering and business, Calder and other alumni have been putting their heads together to discuss opportunities to cooperate in curriculum development. The input of all parties involved impressed Calder and bodes well for the University, he says.

He also serves as an International Advancement Ambassador for Tech, promoting the University abroad, and is a member of the McNair Society. Calder and his wife, Joan, have established the Calder Systems and Controls Laboratory in Mechanical Engineering and have established a planned gift to endow a professorship in mechanical engineering.

Betty Chavis

Honorary Alumni Award



“Betty.”

Over the past two decades at Michigan Tech, no last name has been necessary.

Betty Chavis has been ubiquitous, generous (try leaving her office without a book or a piece of bubble gum pressed into your palm), and even somewhat famous.

“I was the person who brought the dinosaurs up here,” she says. As one of the creators of the annual Parade of Nations, Chavis, then the director of Multi-Ethnic Programs, arranged for animated dinosaurs to be displayed on campus after they made a Jurassic trek through downtown Houghton and Hancock.

“We had school children all over campus for days,” she says. “And for many it was their first trip to Tech.”

It was just one contribution from this gregarious Detroitier whose main mission has been to bring people of color to campus. Before her, that mission didn’t exist; she was the first minority recruiter at Michigan Tech.

“[Former Michigan Tech president] Dale Stein recruited me,” she says, “and he and I had many great heart to hearts about the vision for Michigan Tech in the twenty-first century.”

She recalls flying over the campus that first time in the winter. “All I could see was white, and the campus was the same hue.”

She's worked to alter that perception ever since.

A colleague says, "Betty has made it her life's work to pave the way for Michigan Tech students, faculty, and staff, who are sometimes from very diverse backgrounds."

Her persistent efforts over the last twenty years have improved enrollments of underrepresented students on campus, including Latinos and Native Americans, as well as African Americans.

"I challenge the students to think beyond their comfort zone," she says, meaning Detroit and other metropolitan areas. "I've traveled to and visited many universities extensively, and that has reinforced my belief that Tech is one of the best schools in the country. And I tell Michigan students that they can go out of state and pay out-of-state tuition, or they can stay in Michigan, go to Michigan Tech, and get an education that's better than most."

She knew they could succeed at Tech, and she's got the stories to prove it.

"Gari Mayberry is a volcanologist at the Smithsonian in DC," Chavis says. "Derhun Sanders is now director of plans and programs at the US Army Tank-Automotive Research, Development and Engineering Center in Warren, Michigan, and he serves on the Board of Directors of the Alumni Association. Then there's Rod Barton, who earned his PhD here and now is employed at Boeing in Seattle. And Darnishia Slade is a recruiter for Michigan Tech, just to name a few."

More successes are on the way. Chavis is currently recruiting students for the Graduate School, and she "has five in the hopper."

There have been many opportunities elsewhere for Chavis, but she stayed here for the students, "students who had vision for themselves, who cherished the goal of earning their degree. It's a vision that Tech could and did satisfy for so many."

"I believe in Michigan Tech," she adds. "If I didn't, I wouldn't have stayed. I've always been impressed with the quality, the diverse degrees, and of course the genius of this University."

Frank Pavlis '38

Distinguished Alumni Award



Frank Pavlis turned an interest in global industrial economics into great opportunities for Michigan Tech students.

"Everything we do has global implications nowadays," he says.

So he established the Pavlis Institute for Global Technological Leadership, which integrates business acumen, global awareness, and technological savvy, providing Tech students a foundation for success in the world marketplace. This interdisciplinary program combines unique studies, leadership training, inter-

national travel, and a final thesis to shape the student to become a better leader.

Pavlis was the first in his family to attend college, and, though working his way through Tech, he finished first in his graduating class. Subsequently, he attended the University of Michigan Graduate School and the Harvard Business School.

That work ethic served him well in business. In 1940 he was hired by the founder of Air Products and Chemicals Inc. as its first employee. Subsequently, as an officer and director, he helped to grow it into a Fortune 500 company with business in some thirty nations and annual global revenues of over \$9 billion.

"I want to move education beyond the insular or the regional," Pavlis says. "I chose Tech over Michigan or Harvard, which I also attended, because of Tech's technological focus, ready acceptance, and greater need."

Thus, the institute, which he hopes will give students a global focus. Pavlis also wants to ensure that the core of the student's Tech education, "whether engineering, science, or whatever," remains key. "I want to make sure that they are good students first and that this is an addition to their educations."

One such student is senior business major SherAaron Hurt, who speaks glowingly of her Pavlis Institute experience. "It's helped me tremendously with my personal development and leadership skills," she says. "I've improved in public speaking and writing, and I even learned Twi, a dialect from Ghana."

Hurt helped bring a new library to Sunyani, Ghana, this summer. It's one of three projects the Pavlis Institute is supporting. The other two will bring minicomputers and sanitation to smaller villages. "We are truly the leaders of the projects," Hurt emphasizes. "We have advisors, but we are responsible for the logistics and everything involved with getting the projects completed."

Pavlis hopes the institute will attract more highly qualified students to campus who might have gone elsewhere. He also hopes that many alumni, their parents, and others will think the program is worthwhile and deserving of resources to support it.

Pavlis is a member of the Academy of Chemical Engineers, the Hubbell Society, and the McNair Society, which recognizes deferred giving. He likes nothing better than coming to campus and meeting with the students in his program, and, at age 92, he plans on doing just that again this fall. ■