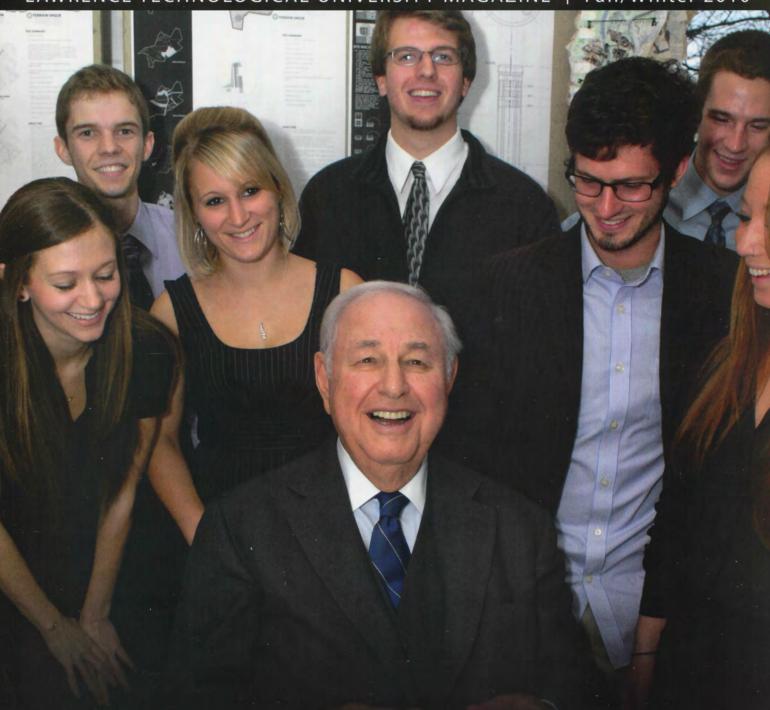
Lawrence Tech.

LAWRENCE TECHNOLOGICAL UNIVERSITY MAGAZINE | Fall/Winter 2010



Class Act: Former student A. Alfred Taubman shares lessons learned as a pioneer retail developer

Students compete with autonomous robots | Alumnus soars high with F-35 program Helping Brad Pitt build homes in New Orleans | Two exciting National Science Foundation grants

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LAWRENCE TECHNOLOGICAL UNIVERSITY MAGAZINE

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Fall/Winter 2010 Volume XXIX, Number 1

Published by Lawrence Technological University, Office of Marketing and Public Affairs, 21000 West Ten Mile Road, Southfield, MI 48075-1058; 248.204.2200 or 800.CALL.LTU, ext. 4 Fax 248.204.2318 email: mktngpub@ltu.edu

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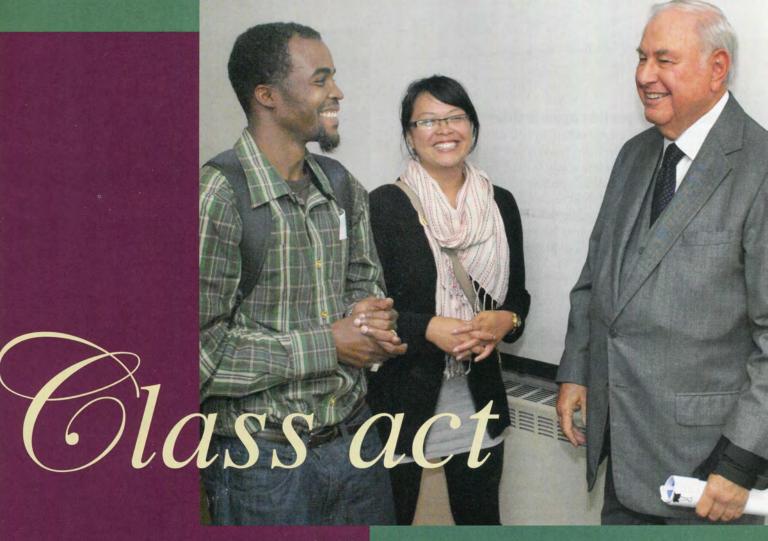
Photography: Bruce J. Annett, Jr.; Ken Cook; Gary Duncan; Justin Munter; Eric Pope; Rick Smith; and others.

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On the cover: In October A. Alfred Taubman aided the annual fund-raiser of Lawrence Tech's chapter of the American Institute of Architecture Students (AIAS). He and architect and product designer Michael Graves signed books to help raise money for "Freedom by Design," the AIAS community service program to make homes of people with mobility challenges more accessible and functional. (Cover photo by Gary Duncan)

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A. Alfred Taubman elaborates on one of the points he made during a lecture in his course, Real Estate Practice: Land Economics, with Lawrence Tech graduate students Charles McLean and Lily Diego.

Former Lawrence Tech student A. Alfred Taubman returns to the classroom to share lessons learned during decades as a pioneer retail developer.

t's 3 p.m. on a Wednesday afternoon in early September on the lower level of the Architecture Building at Lawrence Technological University. Twenty-three students file into the small classroom at the end of the hall for Real Estate Practice: Land Development, a graduate-level course.

It's clear this isn't an ordinary class when Glen LeRoy, the dean of the College of Architecture and Design, takes responsibility for running the PowerPoint presentation. The lecturer is A. Alfred Taubman, a pioneer in the development of the modern shopping mall who has returned to Lawrence Tech as a professor 60 years after he attended classes here.

"This is the first time we've had a professor arrive in a Bentley," LeRoy commented with a smile.

Dressed in a three-piece suit, Taubman launches into a quick history lesson about the origins of the shopping mall, starting with a Persian fabric bazaar from more than 600 years ago. He shows examples of shopping centers from European and American cities in the 19th century, pointing out some of the characteristics that played a role in the more than 50 shopping centers that his companies have developed since the early 1950s.

"We certainly didn't invent the mall, but we have made a lot of positive changes," Taubman said.

Turning challenges into opportunities

He deviates from the course outline to talk about the origins of the food court, one of the many innovations that he and his team pioneered. He explains it was a way to get food service into the mall when a normal restaurant operation wouldn't work – the mall was open longer than most restaurants, and yet local zoning regulations only allowed food service two nights a week.

The food court model required fewer workers who could have more flexible hours, and was a good opportunity for a family business.

"Most things are invented on the basis of need." Taubman explained. "The food court was done around labor. It was not an innovation of food."

This was just one of many insights that Taubman provided students about how to resolve a problem and create new opportunities when confronted with what appears to be adverse market conditions. The story demonstrated that practical solutions that seem like common sense in retrospect only come when a developer like Taubman can combine a wide knowledge of his field, a close look at the specific situation, and acute observation of human behavior and shopping habits.

It is a combination of theory and practice that Taubman learned about when he studied architecture at Lawrence Tech in the 1940s. This fall he seized the opportunity to share both his knowledge and his experience with a new generation of architects.

Not ready for retirement

At 86, Taubman isn't ready for retirement. His sons, Robert and William, now lead the Taubman Company, but he continues to play an active role. Chairing the Taubman Medical Research Institute takes up a lot of his time, and he is a passionate crusader in that arena. He is also working on another book to follow up on his 2007 autobiography, "Threshold Resistance."

'Most things are invented on the basis of need.... The food court was done around labor. It was not an innovation of food.'

Taubman clearly enjoys tackling a new role at this stage in his life, and he has thrown himself into this teaching project with enthusiasm and diligence. He explained to Carol Cain why he is teaching during a wide-ranging interview on the television news show, "Michigan Matters," in September.

"I'm teaching because it's enjoyable," Taubman said. "If you get a chance to enhance somone's understanding, you've accomplished a lot in life.... You've helped a lot of people... and give yourself a lot of satisfaction."

The course came about when the College of Architecture and Design offered Taubman an honorary professorship. "I don't believe in honorary professorships," LeRoy recalled Taubman's response. "If you're going to give me a title, I want to teach a course."

Taubman's offer provided the opportunity to revive the real estate practice course that hadn't been taught for several years. Now it's likely to return to the standard curriculum in future years with other professors taking the lead role.

Understanding the developer's perspective

"Having Mr. Taubman step forward is jump-starting the continuation of this course in the catalog. He has brought a high level of energy that should carry over to the future," said Assistant Professor Martin Schwartz, who is the graduate coordinator for design and practice.



Before a packed house in the Architecture auditorium, A. Alfred Taubman introduces Kenneth Walker (in the foreground) during one of the four public lectures that were offered in conjunction with Taubman's course.



Dean Glen LeRoy of the College of Architecture and Design confers with A. Alfred Taubman during the AIAS fund-raiser in October. LeRoy worked closely with Taubman in putting together his graduate-level course.

The course helps students learn how architects and developers interact and demonstrates how architects can play an important role in increasing the value and functionality of development. That knowledge will help architects communicate better because they will have a better understanding of a developer's goals and concerns.

"You're hearing stories that you will never be able to read in a book. [He shows you] the inside track on how to be successful in the industry," said architecture graduate student Lily Diego. "Everyone always wonders about the celebrities around town [making movies], and we have one right here. In this industry he is a celebrity."

'Quite often the person who learns the most in a class is the faculty member because to teach it you have to relearn it yourself, even if it's in your own field.' "He's got his name on a building, and here he is teaching a class.... What he says seems so easy and like common sense, but there is no way you would have thought of it yourself," said student Amanda Kight.

Kight likes how the theories involved are explained and then demonstrated in case studies. "You see where the theories were applied and where they weren't, and how a project failed [as a result]."

Even though the country is struggling with a business recession and high unemployment, Taubman believes there will be opportunities for young architects in retail development because demographic studies indicate the population of the United States will grow by 40 percent by 2050.

He predicts there will be a continued demand for innovation. "The test is, can you make it new and better," he told his class.

Preparation is essential

Taubman has said he spends many more hours preparing for a lecture than he anticipated, but LeRoy has noticed that this labor of love seems to energize him.

"Quite often the person who learns the most in a class is the faculty member because to teach it you have to relearn it yourself, even if it's in your own field," LeRoy said. "He approaches these lectures with such joy. There's laughter in the room. There's a warmth and graciousness with which he has approached the course, and he really loves being with the students."

LeRoy said that working on a course with one of the foremost experts on real estate development is also an energizing experience for someone like him who worked in the field for many years in addition to teaching. "This is the most fun I've had since I've been at Lawrence Tech," he said.



Acclaimed architect and product designer Michael Graves listens to A. Alfred Taubman while signing one of his books during the AIAS fund-raiser. The Architecture Building auditorium was filled to capacity for Graves' lecture, and many people watched him on screen in an overflow room across the hall.

Taubman, who received a Doctor of Architecture *honoris causa* from Lawrence Tech in 1985, has also marshaled the resources of his company in the classroom. He took personal responsibility for nine of the 18 lectures, and other executives and experts from the Taubman Company have shared their knowledge with the class. As an added bonus, Taubman invited some of the best known architects in the world to deliver lectures. (*See sidebar*.)

Students also have access to proprietary information used by the Taubman Company to make critical decisions – another inside view that most other professors can't share with their students.

Schwartz noted that the amount of detailed information that goes into the decision-making process has grown exponentially in recent years. The plethora of information that is now available to decision-makers has increased his appreciation of the decisions Taubman was making 50 years ago.

"[Back then] he didn't have the benefit of all the research, but he was an acute observer of people and the way they shopped," Schwartz said. "He also understands how the architecture of a building pertains to people."

Taubman has given his students the benefit of decades of experience in the development world. And he has shown that some of the best lessons in the business world come from making mistakes.

"You remember everything, all the good and bad, primarily the bad. When it comes up again – and everything comes up again – you remember that you really got killed when you did so and so in that deal, and you don't do it again. That's why you remember," Taubman said.

As John Gallagher of the *Detroit Free Press* observed after attending a class in September, Taubman's course on real estate practice was "roughly the equivalent of learning music at the hand of Mozart." $\triangle EP$

International architect Rafael Vinoly and A. Alfred Taubman exchange views prior to Vinoly's guest lecture in October for Taubman's course on real estate practice.



Taubman assembles star-studded cast of guest lecturers

Alfred Taubman assembled a distinguished list of guest lecturers for his course, Real Estate Practice: Land Economics. In addition to drawing on the extensive resources of the Taubman Company, he enlisted the services of several executives, including his son, William Taubman, the company's chief operating officer. Local architects who have addressed the class include Arthur Smith, BSAr'78, BAr'81, of Harley Ellis Devereaux; James Ryan, BSArE'66, of JPRA Architects; Daniel Winey, BSAr'74, BAr'75, of Gensler; and Mark Farlow, BSAr'81, BAr'82, of Victor Saroki & Associates.

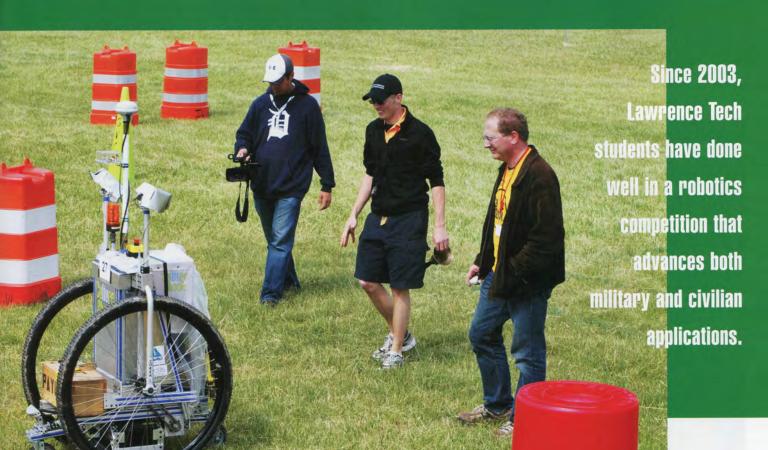
Taubman also brought in four architects with national and international reputations to give guest lectures for his course and public lectures in the Architecture Building auditorium:

- Kenneth Walker, whose companies have provided designs and branding for such clients as FAO Schwartz, The Gap, Circuit City, Bloomingdale's, and Citibank.
- Eugene Kohn, chairman of Kohn Pedersen Fox Associates (KPF), one of the world's largest architecture firms that provides architectural, interior and urban design, as well as programming and master planning services.
- Rafael Vinoly, who founded and led one of the largest architectural practices in South America before coming to the United States where he has built an international practice with offices in London, Dubai, and Bahrain.
- Michael Graves, a Princeton professor who has been in the forefront of architecture and design since the 1960s. He is perhaps best known for designing household products.

Graves and Taubman also participated in the annual fund-raiser

of the Lawrence Tech chapter of the American Institute of Architecture Students (AIAS) for Freedom By Design, an ongoing student project to make homes of people with mobility challenges more accessible and functional. Graves, who is confined to a wheelchair, has served as honorary chairman of the AIAS Freedom By Design national community service initiative.

▲EP



Competing with computers

Lawrence Tech graduate student Brace Stout (right) and two IGVC judges follow Culture Shock II as it navigates between two obstacles in 2009.

t has been said that the successful military campaigns of the British Empire were won on the playing fields of Eton where future British officers learned to compete. Every year since 2003, Lawrence Technological University has sent teams to compete on a different kind of playing field where students develop the skills needed to produce both military and civilian intelligent vehicles of the future.

The Intelligent Ground Vehicle Competition (IGVC) is held

every June on a course filled with orange traffic barrels and other obstacles designed to confound the artificial intelligence of robotic vehicles. It is organized by the Joint Center for Robotics associated with TARDEC (Tank Automotive Research, Development and Engineering Center) based in Warren and hosted by Oakland University in Rochester.

The Intelligent Ground Vehicle
Competition (IGVC) is held
every June on a course filled
with orange traffic barrels
and other obstacles designed to
confound the artificial
intelligence of robotic vehicles.

Sponsors include the U.S.

Department of Defense, the Air Force Research Laboratory, the Association for Unmanned Vehicle Systems International, the National Defense Industrial Association of Michigan, General Motors Corp., Microsoft Robotics, Science Applications International Corp., Raytheon, and many others.

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Competing CONTINUED

Lawrence Tech teams traditionally have done well in the competition, but the real payoff for some students comes after graduation. Half a dozen members of Lawrence Tech's IGVC teams have gone on to work at TARDEC, and many others have worked on TARDEC projects as consultants.

Putting robots on wheels

In the main event called the autonomous challenge, an unmanned ground vehicle must complete an outdoor obstacle course in under the prescribed time while staying within the 5 mph speed limit. The course requires the robot to look for intensity differ-

ences, use range finders, and employ other programs to navigate a path that becomes progressively more difficult.

The purpose of the competition is to promote the development of automated and intelligent vehicles for both civilian and military purposes. Military applications include unmanned weapon deployment, mine detection, and surveillance systems. Civilian uses range from collision avoidance in transportation systems to material handling in manufacturing.

While these future applications for robotic skills are very important, the IGVC competition itself isn't much of a spectator sport, acknowledges Associate Professor CJ Chung of the



Lawrence Tech introduced an autonomous vehicle powered by a hydrogen fuel cell in 2006. The next year the H₂Bot II won the top prize for design. Team members were (left to right in the back) Brandon Bell, Shawn Ellison, Jeremy Gray, and Gary Givental; and in the front, Phil Munie, Marcus Randolph, and Brace Stout.



Lawrence Tech students (left to right) Ze Cheng, Gary Givental, and Brian Koroncey follow the Viper's movements closely during the 2008 competition at Oakland University.

College of Arts and Science's Department of Mathematics and Computer Science. He has coached the Lawrence Tech team since 2003.

Unlike the racing competitions sponsored by SAE International where the vehicles are fast and fun to drive, the IGVC rewards vehicles that move methodically and are designed for functionality rather than style.

The IGVC could be considered the engineering world's triathalon, another competition that requires endless hours of preparation, plenty of pain, and little recognition. IGVC teams must draw on their knowledge of mechanical engineering, electrical engineering, and computer science in order to create an unmanned robotic vehicle that can make complex calculations quickly in order to react to changing conditions.

"Working with robotics takes a lot of hidden effort. No one can see a computer program," Chung explained. "These students are working with invisible things that are almost impossible to make functionally perfect."

In order to excel at the IGVC, the Lawrence Tech teams seek to introduce the intelligence of human toddlers to a ground vehicle robot. The robot often turns out to be as unpredictable as a rambunctious two-year-old.

Computer programs are always crashing, and mechanical components often perform in unexpected ways. A computer glitch or a wheel that doesn't have enough traction in wet grass will foil long hours of computer programming. In many cases, it's impossible to pinpoint what isn't working in the few minutes before the next trial.

That first Lawrence Tech robot was powered by windshield wiper motors out of old Saturn automobiles. A simple desktop webcam served as the 'eyes' of the robot.

Learning to deal with failure

Chung insists on recruiting team members who are capable of doing professional work in computer programming, but he finds that the ability to deal with failure is just as important.

"The students have to overcome the stress of lots of failures. They have to endure a long process. They have to keep working without getting frustrated," he said.

The final days leading up to the IGVC inevitably turn into almost endless nights with only one or two hours of sleep. "I like competitions, but it can be a kind of torture for the team members," Chung said.

Team members have praised Chung for setting high standards and providing constant concern and encouragement while letting the students succeed on their own.

"CJ played a key role in getting students motivated to do IGVC. He was quite hands-off during the design/build of the project, which allowed students to self-organize and overcome challenges on their own," said 2008 Viper team captain, Gary Givental, who now works at IBM Internet Security Systems. "He wasn't overbearing, but still asked for measurable and demonstrative results."

Starting from scratch

Lawrence Tech made a dramatic debut in the IGVC in 2003 by finishing fourth in the autonomous challenge with the CogitoBot that cost just \$800 to construct from scratch.

"Other LTU teams have since placed better, but I'm sure our team went the furthest per dollar spent," said 2003 team member David Chamulak, who went on to earn a PhD in physics at Michigan State and is now doing post-doctoral research at the Argonne National Laboratory in Illinois. "Expensive components are nice, but being clever is what gets you 90 percent of the way to the end."

That first Lawrence Tech robot was powered by windshield wiper motors out of old Saturn automobiles. A simple desktop



Robot dogs helped students 'bone up' to compete

Sometimes programming robots really is all about fun and games.

In 2006 and 2007, several Lawrence Tech students competed nationally and internationally with Sony AlBO robot dogs. AlBO stands for artificial intelligence robot, and the now-discontinued robot dog received input from an on-board camera and various sensors using Wi-Fi connections.

In the 2006 RoboGames in San Francisco, the Lawrence Tech team of Steven Kryskalla and Emily Trudell won the gold medal in the AIBO performance division for a synchronized dance routine. One robot dog transmitted commands to the others for coordinated arm and leg movements and blinking LEDs.

The Lawrence Tech robot dogs were also programmed to play soccer, and in 2007 Trudell led a team that competed in the "world series" of robot soccer, RoboCup 2007, an international project to promote artificial intelligence. Only 24 teams from around the world – and just six from the United States – qualified after submitting a video and a technical paper. The Blue Devil robot dogs competed against teams from Germany and Japan.

Trudell taught AIBO robot programming at a Robofest summer camp for young gifted students and went on to write an online book at Lulu.com, "Beginner's Programming Guide to Robotics using AIBO®," an introduction to AIBO programming with C++.

"The contents of this book are based on our learning experiences over several years of AIBO use and code development," Trudell said. $\triangle EP$



Representing Lawrence Tech in RoboCup 2007 were (left to right)
Nate Johnson, Anthony Mitchell, Emily Trudell, and Joseph Szostek.

Lawrence Tech made its debut in the Intelligent Ground Vehicle Competition in 2003 with CogitoBot. Associate Professor CJ Chung is at left.

Competing CONTINUED

webcam served as the "eyes" of the robot.

"I ended up writing a lot of the code ... [and] I remember being so excited to get the camera to work for the first time and realizing we had a robot that could actually see things," Chamulak said.

To date, Lawrence Tech's best IGVC performance came in 2008 when the Viper – another robotic vehicle developed from scratch – finished second in the autonomous challenge and fifth overall. That year Lawrence Tech and Hosei University in Japan were the only teams to reach level 3 in the JAUS competition.

JAUS is the acronym for Joint Architecture for Unmanned Systems, a standardized communication protocol designed to develop open architecture for the domain of unmanned systems.

The 2008 team equipped the Viper with a computer and navigational sensors, including digital cameras, digital compasses, Differential-GPS, encoders, and scanning laser range finders. Team members used a Programmable Logic Controller (PLC) coupled with a Human Machine Interface (HMI) display to create the Electronic Diagnostic Fail-Safe System (EDFSS).

"IGVC requires the development of sophisticated intelligent software integrating all the sensory data," Chung said.

As an added challenge, some hardware components for the robot invariably arrive late in the process, requiring the team to write new computer code in the final hours before the competition begins or even during the event itself.

Givental, the captain that year, said one lesson he took away from IGVC is that hardware requires a lot of testing, as does the software that relies on hardware. "There are so many environmental conditions that impact the success of your design that only through field testing can a team hope to achieve a well-performing system," he said.

In 2010, Lawrence Tech finished eighth overall – for the second year in a row – in a field of 48 teams from 39 universities, including a few from other countries.

Marcus Randolph, who earned a master's degree in computer science in 2007, worked on the H₂Bot and H₂Bot II robots, believed to be the first in the world to be powered with a hydrogen fuel cell. Working with engineering students on the IGVC team proved to be good preparation for his current job as a computer scientist with TARDEC where he works closely with engineers on dozens of robotic projects.

Randolph credits Chung for introducing him to technology that he is using on the job at TARDEC, and providing the experience of working on a team with students majoring in electrical engineering and mechanical engineering.

"Dr. Chung is a great professor and mentor. He assembled the team, and then we got together to define our roles based on our backgrounds," Randolph said. "He didn't interfere, but he gave us guidance and directed us to where we needed to be in the end." $\triangle EP$

eighth overall – for the second year in a row – in a field of 48 teams from 39 universities, including a few from other countries.

Lawrence Tech fields a second IGVC team in 2010

Even though many engineering students have been involved with the Intelligent Ground Vehicle Competition (IGVC), this was the first year that the College of Engineering had its own entry, the H₂.2.Bot powered by a hydrogen fuel cell.

The alternative energy robot team was formed in 2008 to do a research project funded by TARDEC for Associate Professor Rob Fletcher, director of Lawrence Tech's alternative energy lab. Because of the capabilities of the new H₂.2Bot, IGVC directors requested that it be entered in the 2010 event.

With Fletcher serving as the faculty advisor and with support from Associate Professor CJ Chung in the Department of Mathematics and Computer Science, the student team designed the systems for a new computer and purchased the controlling computer and many of the components. The fuel cell was a 1.2 kW Ballard NEXA hydrogen-powered PEM fuel cell, which was already on hand in the alternative energy lab. Also integrated into the robot are high-tech energy storage systems, such as ultracapacitors and advanced lithium-ion batteries, along with metal hydride hydrogen storage tanks. This robot focuses on energy management issues on robotic vehicles, a topic of great interest to the U.S. military.

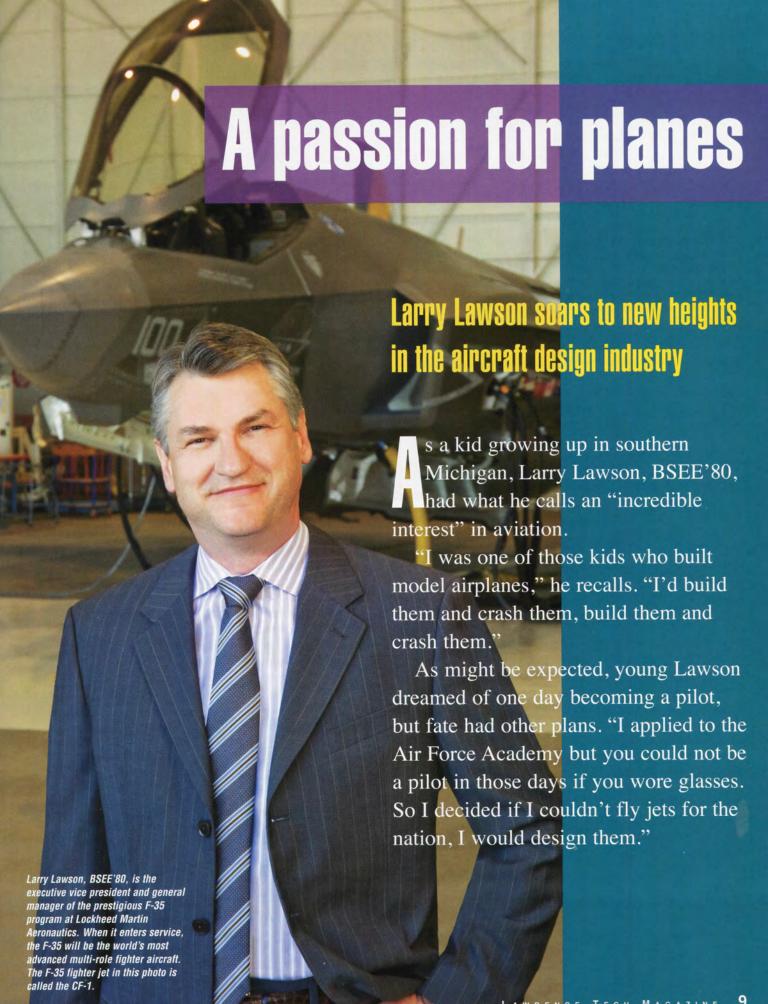
Fletcher said his team faced many challenges in preparing for the IGVC.

"There are many, many challenges with such a robot build and they are all interwoven. The difficulties involve many software and hardware interactions," Fletcher said. "Very often it is quite easy to get them to work perfectly independently from the rest of the system. The challenges become exponential when you integrate the components into an overall system."

The research team's next goals are to carry these technology developments on to new projects involving tracked-drive and even walking robotic systems. $\triangle EP$



Associate Professor Rob Fletcher (wearing the white cap) watches as students Stephanie Shevenock, Matt Lanting, and Alex Campbell make last-minute adjustments to the H₂.2Bot.



While visiting Larry Lawson at the Lockheed Martin Aeronautics plant in White Settlement, Texas, in September, Lawrence Tech President Lewis Walker got a demonstration of what is involved in flying a F-35 Lightning II fighter jet.



And that was the beginning of a spectacular career trajectory that has propelled Lawson into the front ranks of the aircraft design industry. Earlier this year he was appointed executive vice president and general manager of the F-35 program at Lockheed Martin Aeronautics in Fort Worth, Texas. The promotion came after six years of service as executive vice president and general manager for the F-22 Raptor program, which won the Collier Trophy, the most prestigious award in aerospace.

The F-35 Lightning II is a single-seat, single-engine stealth fighter, which is being built by an international aerospace industry team led by Lockheed Martin. When it enters service it will be the most advanced multi-role fighter aircraft in the world, performing ground attack, reconnaissance, air combat, and air defense missions. The United States intends to buy nearly 2,500 of these aircraft for an estimated \$323 billion, making it the largest defense program ever.

Wide range of experience

Prior to joining Lockheed Martin Aeronautics in 2004, Lawson

was vice president of business development for Lockheed Martin's Electronic Systems Business Area. He was respon-

Lawson began his career with McDonnell Douglas, working in Advanced Programs for the F-15. He next joined Recon-Optical Inc., fielding domestic and international reconnaissance systems. In 1986 he joined Martin Marietta, serving in various technical and managerial roles in developing and producing air-

sible for \$10 billion of new business, including naval and aircraft

combat systems, missiles, and a large civil segment. Earlier, as

vice president of Strike Weapons Programs at Lockheed Martin

Missiles and Fire Control Co., he was responsible for domestic

and international weapon programs. These programs have been

recognized with the Air Force Schriever Award and the David

Packard award from the Office of the Secretary of Defense.

to-air and air-to-ground weapons systems.

In addition to his degree from Lawrence Tech, Lawson holds a master's degree in electrical engineering from the University of Missouri. He is a graduate of the Harvard Business School Advanced Management Program and an MIT Seminar XXI Fellow.

Looking back on his career, Lawson said he takes great-

est pride in his work on the Joint Air-to-Surface Standoff Missile, nicknamed JASSM. "I was fortunate to be the

Lawson credits his family – and especially his grandmother for motivating him to dare to think of doing great things. And, of course, Lawrence Tech.

'I wanted to help someone who had the passion but needed a little help to realize their dream and at the same time acknowledge my debt of gratitude to Lawrence Tech.'

program manager. I most enjoyed the opportunity to lead the design team from a clean sheet of paper to fielding a very important system in the U.S. arsenal," he explained.

Complexity requires great teamwork

JASSM is an autonomous, long-range, conventional, air-to-ground precision standoff missile for the U.S. Air Force and Navy. Standoff missiles are designed to be launched from a distance sufficient for the attacks to evade defensive fire. Weighing in at 2,000 pounds and capable of traveling as far as 500 nautical miles, it is classified as a "stealth" cruise missile, hard to detect by radar.

JASSM missiles are now being used on a number of U.S. and allied military aircraft, and will be used in the future for the F-35 Joint Strike Fighter. Australia, the Netherlands and South Korea have begun using JASSM on their military aircraft.

Lawson is quick to point out that it takes top-quality teamwork to succeed in his industry. "Today's very complex programs involve thousands of people, multiple services, and international partners, and are very demanding," he said.

Lawson credits his family – and especially his grandmother – for motivating him to dare to think of doing great things. And, of course, Lawrence Tech.



The right educational environment

"I often think about how fortunate I was to end up at Lawrence Tech," he said. "It was the right environment for me; it provided me the education I needed. It was a great foundation for me to move on in my career."

In appreciation, he has established the Larry A. Lawson Endowed Scholarship in Electrical Engineering with an initial gift of \$20,000. He was able to utilize Lockheed Martin's matching gift program to make the scholarship a reality.

"The idea came to me as I was reflecting on my 30th anniversary in aerospace," he said.

"I wanted to help someone who had the passion but needed a little help to realize their dream and at the same time acknowledge my debt of gratitude to Lawrence Tech."

"It's been great to watch Lawrence Tech grow," Lawson said. "I don't get back to the Detroit area often but when I do, I always plan a campus visit. I enjoy seeing the latest improvements."

Lawson and his wife, Debra, are the parents of two grown children.

Lockheed Martin named Lawson Inventor of the Year in 1991 and Manager of the Year in 1997 and 1999. He received the Atlanta Father of the Year Award in 2007 and the National Management Association's Silver Knight of Leadership Award in 2008.

It's an enviable record of accomplishment for the boy from southern Michigan who once dreamed of becoming a pilot.

▲CWM

The F-35 Lightning II combines advanced stealth with fighter speed and agility. Lockheed Martin is developing the F-35 with its principal industrial partners, Northrop Grumman and BAE Systems.

On Campus

Higher Education Commission team gives thumbs up to reaccreditation

The accreditation team that visited Lawrence Tech Oct. 18-20 on behalf of the Higher Learning Commission (HLC) of the North Central Association of Colleges and Schools will recommend reaccreditation of the University for another 10 years, President Lewis Walker has announced.

The HLC team will also recommend approval of Lawrence Tech proposals for a new doctor of engineering program and PhD options in both engineering and management. It will recommend approval of the proposal to use an internal review process for developing academic programs that are fully online.

"The positive recommendations of the Commission team represent a significant accomplishment for the University and position us for continued progress toward preeminence over the next 10 years," Walker said. "We are able to get this kind of recommendation due to the great work of the entire campus community over the last 10 years."

After reviewing Lawrence Tech's self-study and meeting with various groups on campus, the Commission team cited a number of institutional strengths, including:

- Lawrence Tech demonstrates a family atmosphere and high levels of commitment.
- Lawrence Tech faculty relate strongly to their students, and longevity of faculty and staff reflects on their commitment to the University.
- The Board of Trustees is energetic, engaged, and involved.
- Lawrence Tech has weathered the current economic crisis with minimal impact on students.
- The campus is functional, attractive, and well maintained.
- The Undergraduate Leadership Curriculum and Entrepreneurship Program are forward-thinking

and add value to the Lawrence Tech experience.

 Support of online learning and technology is exemplary.

Based on the quality of LTU
Online and technology support
operations, the HLC team will
recommend that Lawrence Tech
be authorized at "level three" of
a four-level model for online program authorization that the HLC
approved in July. This will allow
Lawrence Tech to deliver up to 50
percent of student credit hours and
up to 35 percent of academic programs via distance learning.

"Level three" authorization provides Lawrence Tech with the flexibility to make internal decisions about online program offerings. Previously the University had to gain HLC approval for each new program taught entirely online.

The accreditation approval process is not over. After the draft report is completed, the University will have the opportunity to point out any errors of fact. Another panel will review the document before the HLC Institutional Actions Council and Board of Directors make a final decision in spring 2011.

The University will submit a progress report no later than March 2012 on the establishment of the appropriate infrastructure and services to support its research efforts and new doctoral programs.

Walker expressed his appreciation to everyone involved in the

three-year project. The self-study committee was led by Associate Provost and Dean of Graduate Studies Alan McCord. The other committee members were Associate Professor Patty Castelli of the College of Management, Associate Dean Lewis Frasch of the College of Engineering, Associate Professor Dale Gyure of the College of Architecture and Design, and Associate Professor Valentina Tobos of the College of Arts and Sciences.

"The Commission team has affirmed that we are headed in the right direction and has provided us with their backing to extend our doctoral and online programs. This is great news for the University and we look forward to continuing our journey toward pre-eminence," Walker said. $\triangle EP$

Mathematical group honors two Lawrence Tech professors

The Michigan section of the Mathematical Association of America (MAA-Michigan) has given its two annual awards for 2010 to professors at Lawrence Technological University.

Associate Professor Michael Merscher won the Distinguished College or University Teaching of Mathematics Award and has been nominated for the annual teaching award from the national association. Professor Emerita Ruth Favro won the Distinguished Service Award. It is unusual for both awards to go to faculty members at the same college or university.

Merscher was honored as a teacher "who has been widely acknowledged as extraordinarily successful and whose teaching effectiveness has had influence beyond his own institution."

He was cited for assessing the learning patterns of students at the end of freshman year in order to identify what can be done to improve retention of material. He tries to diagnose student problems

early and follows up with students on an individual basis.

Merscher has been a leader in the Detroit Metropolitan High School Math and Computer Club, and he initiated the Lawrence Tech Mathematics Contest for high school students.

Favro has been active for many years in promoting student competitions at both the college and high school levels. She has been involved in the Lower Michigan Math Competition, the MATH
Challenge, the Math Modeling
Competition, and the Michigan
Mathematics Prize Competition.
For the past 15 years she has
coached the Michigan team in the
American Regions Math League for
high school students.

"Professor Favro has consistently promoted and worked tirelessly for the MAA, mathematics at LTU, women in mathematics, and mathematics in general," the MAA-Michigan citation read. "She has been our most effective faculty member in involving students in mathematical activities."



Associate Professor Michael Merscher and Professor Emerita Ruth Favro have been honored by the Michigan section of the Mathematical Association of America.

ONGAMPUS

Lawrence Tech helps Brad Pitt build houses in New Orleans

In September Lawrence Tech dispatched two students and 11 of its high-end computers equipped with professional design software to help Make It Right, a foundation established by Brad Pitt to build green homes for Hurricane Katrina victims in New Orleans. The foundation was preparing for a blitz build in the Lower Ninth Ward.

Eleven university students from Lawrence Tech, Tulane University, and ITT Technical Institute spent five days analyzing the architectural and construction plans for compliance with green building standards, as well as calculating the cost of materials for the building blitz.

The university students used AutoCAD and Autodesk Revit professional software on Lawrence Tech's Lenovo W510 laptop computers. The computers were loaded with software used by students in the College of Architecture and Design.

The project was initiated by Steve Ragan, a former senior vice president of university advancement at Lawrence Tech who is now director of development and government relations for the Make It Right Foundation.

"We appreciate how quickly the University put this project together. The knowledge and enthusiasm of university students will help us meet our construction goals in the Lower Ninth Ward, and we look forward to working with Lawrence Tech in the future," Ragan said.

Representing Lawrence Tech were Lily Diego and Kristen Bettis, graduate students working on master's degrees in architecture with a concentration in sustainability. Ralph Nelson, assistant dean of the College of Architecture and Design, also was in New Orleans during the week.

"We brought the technology down here to ... figure out how much the houses will cost," Bettis told *The Defroit News*. "That means figuring out the most costeffective way to build the houses, including every single nut and bult" The two students worked closely with Lawrence Tech alumnus Rob DeCosmo, BSAr'00, who is director of design for the Make It Right Foundation.

"Lawrence Tech is one of the few universities capable of deploying what amounts to a mobile design studio so quickly," said Glen LeRoy, dean of the College of Architecture and Design. "This is because Lawrence Tech provides its students with unparalleled access to electronic technology, an outgrowth of the University's early commitment to provide students with all the software they need to excel in their studies." $\triangle EP$



The Lawrence Tech crew at the Make It Right Foundation in September consisted of (left to right) Rob DeCosmo, BSAr'00, Assistant Dean Ralph Nelson, architecture graduate students Kristen Bettis and Lily Diego, and Steve Ragan, Lawrence Tech's former senior vice president of university advancement who now has a similar position with the Make It Right Foundation.

Graduates earn Metro Detroit's highest return on tuition investment

Lawrence Technological University ranked highest in the metropolitan Detroit three-county area and placed in the top 30 percent of a new national survey commissioned by *Bloomberg Businessweek* on the increased earning power generated by a college bachelor's degree.

Lawrence Tech also has advanced in the top tier of its category in the America's Best Colleges report compiled annually by *U.S.*News & World Report.

In addition, for the second year in a row, Lawrence Tech earned the *Princeton Review's* 2010 "Best in the Midwest" designation, and

Bloomberg Businessweek

was named to the Military Friendly Schools list compiled by G.I. Jobs.

Payscale, Inc. of Seattle, Wash., analyzed over 23 million unique user profiles for *Bloomberg Businessweek* to determine the 30-year net return on investment (ROI) in a college education. Only college graduates without advanced degrees were included in the survey.

Lawrence Tech was the secondhighest-ranking private university and fifth overall among the Michigan colleges and universities covered by the survey. It ranked 17th nationally among private technological universities. MIT ranked first.

Lawrence Tech was among the colleges where "investing in college costs, even at full price, has been competitive versus getting a job out of high school and putting the money in the market or treasury bonds," according to Payscale.

Scholarships and other forms of financial aid can greatly increase the payoff on a college degree. Historically, over 70 percent of Lawrence Tech students receive some form of financial aid. **AEP**

Student laptop, tablet, software packages among the nation's best

ONGAMPU

In 2001, Lawrence Tech became the first university in Michigan to provide laptops to every undergraduate student. Nine years later, Lawrence Tech remains unique in Michigan and rare nationally by supplying not only a computer but also all the software programs students need for their courses – all included in the cost of tuition.

This fall, Lawrence Tech provided new Lenovo laptops to most architecture students and Fujitsu Lifebook tablets to engineering, management, and arts and sciences students. Both computers are configured with at least a 320-gigabyte hard drive and four gigabytes of random access memory with new processors. Students in transportation design, imaging, and media communication are provided MacBook Pros.

Software provided to students in Lawrence Tech's Colleges of Arts and Sciences and Management has a retail value of \$11,926. The software packages for the Colleges of Architecture and Design and



Engineering have a retail value of \$12,360 and \$14,873, respectively. Software packages are customized for several degree programs.

Lawrence Tech issued more than 2,600 new computers this fall, and that volume enables the University to negotiate volume discounts on the software needed by students, according to Tim Chavis, executive director of Information Technology Service Delivery.

"It's a lot of work loading all that software in customized configurations for students, but they end up with everything they need to study and experiment in our rigorous curricula," Chavis said. "Vendors tell us that Lawrence Tech's package is unique."

Aaron Sprague, a Help Desk technician at Lawrence Tech, helps a student with her new laptop computer before the start of the fall semester.

Having students and faculty use the same version of software programs accelerates the instructional process, aids team collaborations, eases the transfer of data, and provides students with up-to-date skills matching industry expectations, according to Chavis.

"We feel it is essential that our students are familiar with the software tools they will encounter in the work place," said Provost Maria Vaz. "We provide our students with the software they need to hit the ground running at the start of their careers, and since it is on their computers, they can access it from home, at work, or anywhere on campus, regardless of proximity or their financial situation." $\triangle EP$

Aero design team surprises competitors with radical design



Lawrence Tech finished ninth in the SAE Aero Design East Competition in Fort Worth, Texas, with a radical new design - its plane had the longest wingspan of the 44 planes in the competition. The plane's relatively heavy weight of 15 pounds helped avoid serious damage in a crash on the final day. The team scrambled to repair the plane within an hour for a successful final flight. Members of Lawrence Tech's 2010 SAE Aero Design team are (left to right) Captain Mike Martinico, Dan Weitzmann, Stephanie Shevenock, Steve Musselman, and Danielle Kozak.

ONCAMPUS

National Science Foundation awards \$1.3 million for research facilities

Lawrence Technological University has received a grant of \$1,342,276 from the National Science Foundation (NSF) to upgrade the life sciences research laboratories in the College of Arts and Sciences.

Lawrence Tech's next-generation life sciences research facilities will include a molecular and cell biology research lab, a chemistry lab, an instrumentation room, and a room for preparing testing materials and equipment. Construction is

expected to be completed in time for the 2011 fall semester.

More than 1,500 universities and colleges filed letters of intent for this round of grants, and NSF is expected to make fewer than 125 awards.

"We are honored to win this NSF grant, which confirms the strength of the life sciences programs at Lawrence Tech," said Hsiao-Ping Moore, dean of the College of Arts and Sciences and the principal investigator for the grant.

The new facility will also support expanded research training opportunities for high school students through the University's participation in the Detroit Area Pre-College Engineering Program (DAPCEP) and its partnership with University High School in Ferndale.

The laboratory upgrades on the third floor are the latest in a series of projects to modernize the Science Building that opened in 1968, and Lawrence Tech will spend an additional \$300,000 on other improvements in conjunction with the NSF grant.

"It is part of the planning process for envisioning what the Science Building will look like for the next 20 to 30 years," Moore said

The NSF grant is the latest step in significantly upgrading facilities in the Science Building. An anonymous \$3 million donation in 2008 had provided funding for renovations, endowment, and future construction for the College of Arts and Sciences.

"Dean Moore and her faculty have been very successful in executing their vision for a strong life sciences program here at Lawrence Tech," President Lewis Walker said. "These improvements will help prepare students to take advantage of opportunities in this growing sector of the Michigan economy."

The life sciences research laboratories will be used by faculty members and undergraduate students in six programs: biomedical engineering, chemical biology, chemistry, environmental chemistry, molecular and cell biology, and psychology. ▲ EP



Dean Hsiao-Ping Moore (third from left) of the College of Arts and Sciences put together a large interdisciplinary team to prepare the successful grant application for a \$1.3 million grant from the National Science Foundation to transform several labs in the Science Building.

Recovery grants expanded to aid 200 additional students

In recognition of the slow economic recovery in Michigan, Lawrence Tech extended its 50 percent tuition "Recovery Grants" to 200 additional students beginning with the fall semester. The tuition grants are designed to help displaced workers or their dependent children to obtain the educational

training needed to make a transition to a new career.

"The lagging economy is still having an impact on many Michigan families. These tuition grants can help displaced workers prepare for the careers of the future," said Lawrence Tech President Lewis Walker. Lawrence Tech initially provided some \$3 million to introduce its "Recovery Starts Here" program in December 2008, when many Michigan families were facing layoffs at the start of the national recession. More than 400 students are benefitting from those tuition grants. The program was the first in the state and one of the first in the nation aimed at retooling workers for new careers.

Concurrent with the Recovery grants, Lawrence Tech has intro-

duced more than 40 fast-track certificate programs to help position graduates for employment opportunities in emerging areas of the economy, including energy, defense, film, and life sciences. Many degree programs can also lead to careers in these and other growing sectors.

For more about the Recovery grants or certificate programs, visit ltu.edu/recovery and ltu.edu/certificates. $\triangle EP$

Lawrence Tech prepares to join NAIA

Men's soccer and women's volleyball have become varsity sports at Lawrence Tech in preparation for the University joining the National Association of Intercollegiate Athletics (NAIA) next year.

The goal is to have six or seven NAIA varsity sports at Lawrence Tech, according to Recreation, Athletics, and Wellness Director Scott Trudeau. That will not include the men's hockey team, which is already a member of the American Collegiate Hockey Association.

The men's soccer team took a step toward NAIA membership by joining the College Club Soccer League this fall.

Collegiate athletics were once an important part of the Lawrence Tech tradition, but varsity sports were dropped in the 1960s. Dean of Students Kevin Finn would like to recapture some of the school spirit that athletic programs bring to a university campus. "The entire Lawrence Tech community will benefit from the addition of competitive intercollegiate athletics, as students, alumni, faculty, and staff will feel a revitalized sense of school pride as we cheer on our Blue Devils," Finn said.

Once the University's membership application is accepted, the NAIA would become the national governing body for athletics at Lawrence Tech. The University would join the Wolverine-Hoosier Athletic Conference (WHAC), which includes seven Michigan colleges and universities — Aquinas, Concordia, Cornerstone, Davenport, Madonna, Sienna Heights, and the University of Michigan-Dearborn — and Indiana Tech and Northwestern Ohio.

The NAIA was founded in 1937 and serves as the governing body for nearly 300 colleges and universities throughout the United States and Canada. The NAIA puts a strong emphasis on the academic



success of student athletes. Every freshman must meet stringent academic standards for initial eligibility and then must show steady progress toward graduation. Academic progress is monitored throughout each academic term.

Finn said Lawrence Tech decided to join the NAIA because athletic budgets are much lower than for NCAA Division II and III, and the size and scope of athletic programs will be determined by the University. $\triangle EP$

Scott Trudeau explains the process for joining the NAIA at a barbeque for the men's soccer team, which will be one of Lawrence Tech's first two NAIA varsity programs.

Disc golf comes to the campus



Assistant Professor Jason Barrett (left) sends his disc toward the basket on the first hole of Lawrence Tech's new disc golf course, while students Ehren Quigley and Adam Weglarz wait to throw. After winning the support of President Lewis Walker, Barrett set up the 18-hole course over the summer. The "front nine" starts on the east end of the Engineering Building, takes full advantage of the open areas of The Point, and ends near the CIMR Building. The "back nine" starts near the parking lot across from the Architecture Building, goes behind North Housing and then circles Parking Lot E.

ON CAMPUS

Marburger awards honor excellence

The 2010 Mary E. and Richard E. Marburger Fund For Excellence in Achievement Awards were presented in April to two professors, an administrator, and a staff person. This year's recipients are:

- Staff Person of the Year: Student Services Administrator Leslie Michalik, College of Architecture and Design.
- Faculty Member of the Year: Humanities Assistant Professor Jason Barrett.
- Administrator of the Year: Media Services Director Wally Bizon.
- Champion for Institutional Excellence and Pre-eminence: Professor Ken Cook, chairman of the Department of Engineering Technology.

A \$1,000 honorarium was presented with each award.

A Lawrence Tech staff member since 2002, Michalik is responsible for the overall management of administrative support to the Office of the Dean, administrative and teaching personnel, and students within the College of Architecture and Design. This includes the management of undergraduate student records, the academic advising process, registration, graduate and undergraduate class schedules, and departmental policy implementation.

She provides guidance to undergraduate students regarding proper course sequencing and selection, and has been instrumental in ensuring that hundreds of students have graduated on time.

Barrett teaches the Foundations/ Development sequence and junior/ senior seminars in American history and for the spring semester taught a class on the Afghanistan War. He contributes to campus life in many ways.

"Students clamor to get into his classes and this is not because he is an easy grader or cuts corners," said Associate Professor Melinda Phillips, chair of the Department of Humanities, Social Sciences, and Communication. "His students have described him as brilliant, engaging, rigorous, and makes them think about mankind."

Bizon, BSAr'75, BAr'77, began working in Lawrence Tech's Audiovisual Department shortly after enrolling as a student in 1970 and expanded the services he provided to include photojournalism, portraiture, and architectural photography. Since 1986, he has

also been responsible for filming Detroit Economic Club meetings for broadcast on cable channels throughout southeast Michigan.

Faculty and students describe Bizon as an amazing support person who welcomes students into the studio and goes out of his way to help them with their projects.

Cook, BSEE'64, is a registered professional engineer, a certified clinical engineer, and holds 28 patents of his own. He has many years of experience in engineering, management, entrepreneurship, marketing, and sales. Cook began teaching at the University as an adjunct in 1965.

His entrepreneurial-focused

senior projects class is the capstone course in which students generate project ideas, research, design, manufacture, and assess the market for inventive products. This year he was an advisor for five mechanical engineering senior projects.

Advisor/Lecturer Jerry Cuper describes Cook as "the most enthusiastic, passionate teacher that I have ever seen."

He also has enjoyed a long side career in magic, having performed in more than 40 countries and all but one state. He finds his hobby very useful in teaching. **AEP**



The annual Marburger awards were presented by President Lewis Walker (right) and the Marburger family (on the left), Kathryn Charles, Dennis Marburger, and President Emeritus Richard Marburger. The recipients in the center are Professor Ken Cook, Student Services Administrator Leslie Michalik, Media Services Director Wally Bizon, and Assistant Professor Jason Barrett.

Roualet joins board of trustees



General Dynamics Land Systems President Mark Roualet of Bloomfield Hills has been named to the Board of Trustees at Lawrence Technological University.

Roualet has been president of General Dynamics Land Systems and a vice president of General Dynamics Corporation since 2008. He joined General Dynamics Land Systems' predecessor, Chrysler Defense Inc., in 1981 as a quality engineer, progressing through positions of increasing responsibility over a 29-year career.

Prior to his current position, Roualet was Land Systems' chief operating officer responsible for all ground combat systems, including main battle tanks, amphibious vehicles, combat and tactical wheeled vehicles, robotic systems, and operations in Canada.

Roualet has a bachelor's degree in business administration from Michigan Technological University and an MBA from the University of Dayton.

Trustees at Lawrence Tech establish strategic direction, help formulate and approve major institutional policies, and hire the University's executive team. They serve without compensation. **\(\rightarrow EP \)**

ON GAMPUS

ARAMARK brings new approach to campus dining

With the start of the fall semester, Lawrence Tech's new food services provider, ARAMARK, implemented a new approach to dining services, Real Food on Campus (RFoC), after making major improvements to campus food facilities.

As part of a 15-year contract to provide food services on campus, ARAMARK has invested more than \$750,000 in renovating the dining facilities and building the Einstein Bros. Bagels shop in the Buell Management Building atrium and the Provisions on Demand Express (P.O.D.) shop in the University Technology and Learning Center (UTLC) lobby.

"ARAMARK was chosen with the aim of enhancing the student experience, improving the ambiance for dining, increasing the days and hours of dining services, and adding dining choices to meet the various lifestyles of our community," Dean of Students Kevin Finn said.

The centerpiece of the new food services program is ARAMARK's RFoC, which offers "all you care to eat" meal options that include staffed food stations: comfort food, deli, exhibition, grill, pizza and pasta, produce market (soups and salads), and bakery.

The principle behind RFoC is providing healthier food at affordable prices, and many students will find that they are eating better this year, according to Finn.

ARAMARK's new Einstein Bros. Bagels in the Buell Management Building atrium offers additional food and drink options and extended hours. Students also have food and drink choices at the P.O.D. Express, a mini-convenience store in the UTLC providing grab-and-go sandwiches and salads, as well as brewed Starbucks coffee. **AEP**



The new Provisions on Demand (P.O.D.) Express in the UTLC lobby gives students another option for food and drink.

Business fraternity chapter established at Lawrence Tech

College Professor Richard Bush, faculty advisor for the new Sigma lota Epsilon (SIE) chapter at Lawrence Tech, is flanked by Joyce Nichols and Anna Van Hyfte at the inaugural meeting of the national honorary and professional management fraternity. The purpose of Sigma lota Epsilon is to encourage and recognize scholastic excellence and to promote cooperation between the academic and practical aspects of management. At the first meeting, the SIE members set aside 50 percent of their dues to establish a scholarship fund for management students, and also extended a posthumous honorary membership to Patrick Scullion, a former professor in the College of Management.



ON GAMPUS

Students win two awards in steel design competition



Two Lawrence Tech teams won awards at the 10th ACSA/AISC Steel Design Student Competition for the 2009–10 academic year, administered by the Association of Collegiate Schools of Architecture (ACSA) and sponsored by the American Institute of Steel Construction (AISC).

The program challenged students, working individually or in teams, to explore a variety of design issues related to the use of steel in design and construction.

The team of Stephen Bonamy and Michael Fontana won second place in the competition to create a structure for the Re-Ligare Institute where people can become reconnected with themselves,

This illustration was part of an award-winning entry submitted by architecture students Stephen Bonamy and Michael Fontana. others, and nature. The architecture students were challenged to consider ethical, aesthetic, and critical issues facing contemporary civilization, vis-à-vis novel programmatic, technological, environmental, spatial, and phenomenological issues.

Commenting on their entry, "The Vertical Landscape," the jurors wrote, "Very well thought through in terms of the building experience. The idea is well communicated and well rendered."

A second entry from Lawrence Tech, "IN[tro]VERSION," by students Daniel Merritt and Kyle Post won honorable mention in the category. $\triangle EP$

Architecture students win ASHRAE's Integrated Sustainable Building Design competition

A Lawrence Tech team took first place in the Integrated Sustainable Building Design (ISBD) category of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 2010 Student Design Competition. In the last seven years, Lawrence Tech students have taken six awards in ASHRAE's international competition.

College of Architecture and Design students Carolyn Lamb, Ryland Phelps, and Amy (Schwerdtfeger) Keyzer participated in a Sustainable Design Studio taught by Associate Professor Dan Faoro during the spring 2010 semester. They designed a 320,000-square-foot addition to an existing hospital in Orlando, Fla.



This illustration was part of Lawrence Tech's winning entry in the ASHRAE competition.

The students will receive their award and exhibit their project poster at the ASHRAE awards ceremony in Las Vegas in January 2011.

To minimize energy utilization, provide alternative energy supply, and maximize water conservation, the students aimed for LEED 2.2 Platinum level recognition while creating a significant work of architecture for the enjoyment and service needs of patients, staff, and visitors. They also used the proposed draft of LEED for health care and the new Standard for the Design of High-Performance Green Buildings for guidance. The hospital design was influenced by current research in evidence-based design concepts.

Professionals, educators, and members of Lawrence Tech's Center for Sustainability participated as jurors for the various project teams prior to the submission of projects to the regional and international competition. $\triangle EP$

Lawrence Tech wins grant for powerful electron microscope

The first environmental scanning electron microscope in the metro Detroit area is being acquired by Lawrence Tech with a \$769,744 grant from the National Science Foundation.

The new microscope, to be housed in the College of Engineering, will be used for both research and education at Lawrence Tech. In addition, it will be used for research projects at Wayne State University, Oakland University, the William Beaumont Research Institute, and the General Motors Research and Development Center.

The electron microscope can be used to scientifically characterize wet, oily, porous, and soft materials that are traditionally considered impossible to study using conventional microscopy techniques. This will greatly enhance a variety of research activities conducted at Lawrence Tech and its collaborating institutions in biomaterials, orthopedics, tissue engineering, construction materials, automotive components, and lithium ion batteries.

This microscope can produce very high-resolution images of a sample surface, revealing details less than a nanometer in size, which is one billionth of a meter. The maximum magnification of more than 500,000 times is about 250 times the magnification limit of the best light microscopes. This piece of equipment has a large depth of field yielding a three-dimensional image that is useful for studying surface structure.

"The environmental scanning electron microscope will strength-

en the existing materials research infrastructure at Lawrence Tech and our partnering institutions, and enhance the research and educational experiences of a large number of students at Lawrence Tech and other universities," said Assistant Professor Yawen Li, the principal investigator for the NSF grant. $\triangle EP$



Associate Dean Elin Jensen (left) of the College of Engineering and Assistant Professor Yawen Li were joined by Gary Barber of Oakland University and Xingcheng Xiao of General Motors in a successful application for funding for an environmental scanning electron microscope.



Racing on campus

On Sept. 1 Lawrence Tech hosted a "Grand Prix" racing exhibition to showcase local university teams that competed earlier this year in national racing events sponsored by SAE International. Matt Meyer, president of the SAE student chapter at Lawrence Tech, gives directions for a test run to the driver of Lawrence Tech's Formula SAE vehicle. Oakland University's Formula SAE vehicle is next in line.

Gravity-defying career of alumnus John Yaniec aided research

For an industrious fellow with feet seemingly planted firmly on the ground, John Yaniec, BSIM'81, has spent plenty of time in the sky. During a 17-year career with NASA prior to retirement in 2008, he logged more time in zero gravity than some astronauts.

Yaniec was the lead test director overseeing thousands of experiments that had to take place in a reduced or microgravity environment. Zero gravity was achieved in a KC-135 and later in a DC-9 aircraft through a series of parabolic arcs - akin to controlled "porpoising" or reaching a planned elevation and then carefully plunging the plane so personnel and experiments in the plane achieve a neutral buoyancy state - floating weightless for 18 to 25 seconds until the plane levels off. A typical research flight would consist of 40 to 60 parabolic arcs.

Yaniec often flew four test flights per week. The 37,942 reduced gravity parabolas that he flew during his career equate to over 13 days in a microgravity environment.

Microgravity experiments that he supervised for NASA, other government agencies, and the military included studies in the areas of fluid physics, combustion, material science, life science, and engineering development of future space systems.

Some of the more interesting experiments Yaniec remembers were studies of how to "burp" a radiator to get trapped air out of lines (two-phase flow), and how to perform CPR in microgravity conditions. A number of the research experiments that he oversaw are currently onboard the International Space Station.

Among the most recognizable personalities to have flown with Yaniec over the years was intrepid reporter Hugh Downs.

Based in Houston after a stint at Wright-Patterson AFB in Ohio, Yaniec said he was most proud of his work with students. As part



of what is now called the Student Flight Opportunities Program, in 1996 the program began with six Texas universities and a number of Texas high schools that developed very sophisticated scientific experiments needing a reduced gravity environment.

"I've seen the elation of researchers when their experiments went the way they had planned, and I helped them when they could not adjust to the rigors of flying the up-and-down profile of the reduced-gravity aircraft," he grinned, hinting that not all stomachs adapted without protest to "slipping the surly bonds of earth."

"My main task as test director was to assure that the experiments and the researchers were safe during flight and that the research could be conducted in a way to achieve the sought after-results,"

By logging more than 300 hours in zero gravity and microgravity tests during NASA flights, Lawrence Tech alumnus John Yaniec became very comfortable with the sensation of weightlessness that others found disconcerting.

he said. "The work was often the conclusion of three to four years of planning, research, and fabrication."

The Little Falls, NY, native's varied life and career also included four years of active service in the Air Force, employment as an Air Force civilian with assignments from Hawaii to New Jersey, and even working at the NORAD Cheyenne Mountain complex. During his total 37-year career, he attended several colleges and finished his degree work by attending evening classes at Lawrence Tech while working at Selfridge ANG Base.

"At my commencement from Lawrence Tech in 1981, I was the last graduate to walk across the stage," he recalled.

It was a walk that led to a lofty career for a down-to-earth guy!

• BJA

Tucker wins Alumni Achievement Award

Paul Tucker, Jr., is this year's recipient of the Alumni Achievement Award at Lawrence Technological University.

Tucker earned a bachelor's degree in civil engineering in 1971 from the Detroit Institute of Technology (DIT), an affiliate of Lawrence Tech that closed in 1981.

He retired in 2005 as chairman of the board and CEO of the Detroit-based Tucker, Young, Jackson, Tull, Inc., which he founded in 1984. The firm, which has satellite offices in Cleveland and Baltimore, provides full engineering services in four major practice areas: water systems, wastewater systems, infrastructure systems, and environmental management.

Tucker and his wife, Evelyn, who is also a DIT graduate, have endowed a scholarship at Lawrence Tech for engineering and architecture students, with secondary preference to life sciences students. Their \$100,000 gift is augmented with a \$50,000 match from the Community Foundation for Southeast Michigan. $\triangle EP$



Paul Tucker, Jr., delivered one of the speeches at this year's commencement exercises.

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A L U M N I N E W S

Gretchen Minnhaar distinguishes herself in art and architecture

When it comes to the twin disciplines of art and architecture, Gretchen Minnhaar, BSArE'59, AIA, is a true citizen of the world.

Born in Argentina and educated in her native country and the United States, fluent in four languages (English, Spanish, Italian, and German), Minnhaar's vivid, large-scale artwork has earned her recognition and honor across three continents.

Her skill is particularly in evidence in and around Grand Rapids, where she has been in private practice since 1991. Her artwork has been on display at a number of high-profile sites, including Grand Valley State University, Grand Rapids City Hall, Spectrum Health, Steelcase Corp., Upjohn Corp., and Herman Miller, as well as in private collections in the United States, Argentina, Spain, and the Netherlands. Her hardcover art book, titled "Gretchen Minnhaar," features 200 photos.

In 1979 she received an Alumni Achievement Award from Lawrence Tech.

Most recently, Minnhaar has played a major role in ArtPrize, an artistic competition founded by Rick DeVos and held in conjunction with the city's annual Celebration on the Grand at various sites within a three-mile radius of the city.

In the 2009 show, Minnhaar's entry covered an entire wall in the lobby of the J.W. Marriott Hotel in Grand Rapids. Based on "parkour," a form of exercise that gained popularity in France in the 1980s, it depicts people leaping from building to building. "Parkour" is built on the premise that any obstacle – physical or mental – can be overcome.

"In my work I use this philosophy by making people jump over buildings to call their attention to the great architecture of this world," Minnhaar explained. She describes her style as "a little

different," which is probably a modest understatement. Although her work didn't garner a prize, Minnhaar considers her ArtPrize exhibit a success because she was able to sell another artwork based on the same design on commission.

On her website (gretchenminnhaar.com) she states that her artistic vision "cannot be separated from my architectural training, where I 'choose the eyes to see' and to perceive a perspective so profoundly subjective and at the same time familiar to me as is the urban space."

Minnhaar created last year's 30th anniversary Celebration on the Grand poster, and she is currently designing a 65-foot-tall ArtPrize sculpture with David Lubbers, a noted local artist. Called "Grand Dance," it will sit in the middle of the Grand River and will be illuminated with changing colors.

Minnhaar first came to the

United States when her husband, Luis A. Tomatis, was training to be a cardiac surgeon at Henry Ford Hospital in Detroit. She worked in the hospital lab by day and attended classes at Lawrence Tech by night.

After graduation, the couple returned to Argentina, where she earned her master's degree in architecture, became a licensed architect, and opened her own firm. Seeking greater opportunities, they ultimately returned to the United States and settled in Grand Rapids.

"I was the only woman in my class [at Lawrence Tech]," she recalled. "In Argentina, 50 percent of all architects were women, but that was not so in the United States. It was a challenge, yes, but I think just because I had to work so hard to overcome that challenge that it has made me a little bit better in what I do."

Even today, more than 50 years later, women in the United States are a minority in the profession. Minnhaar's advice to women seeking a career in architecture is to "follow your dreams. You have to like to work and do something that you love. I don't think you can 'genderize' a career. You have to have enthusiasm and the willingness to do it. And have a good brain, of course!"



Gretchen Minnhaar's large-scale exhibit in the 2009 ArtPrize competition in Grand Rapids is inspired by "parkour," a form of exercise built on the premise that any obstacle – physical or mental – can be overcome. It covered an entire wall in the lobby of the Marriott Hotel.

Fab Lab named in honor of Fred and Marilyn Ciampa

The Fred A. and Marilyn L. Ciampa Fabrication Laboratory was officially named and dedicated at a ceremony on Sept. 30 in the Engineering Building.

Ciampa, BSME'64, has enjoyed a long and successful career in manufacturing and business development with Ford Motor Company. He and wife, Marilyn, are very active volunteers in their community and generous donors to Lawrence Tech.

In 2005, their contribution to the A. Alfred Taubman Student Services Center facilitated the construction of Tutor Row in the Zaven



Margosian Academic Achievement Center. Their gift to support the College of Engineering's fabrication laboratory was in grateful recogniEngineering
Dean Nabil Grace
(right) joined
Lawrence Tech
President Lewis
Walker in thanking Marilyn and
Fred Ciampa for
their generous
support of the
Fab Lab, which
has been named
in their honor.

College of

tion of its continued emphasis on providing practical experience for Lawrence Tech students. ▲EP

A L U M N I N E W S

Formula Hybrid team benefits from alum's expertise

Jeremy Samborsky, BSEE'08, didn't think twice when asked by his boss at Johnson Controls-Saft (JCS) if he would be willing to help Lawrence Tech's Formula Hybrid racing team develop a lithium cell battery pack for a new racing vehicle.

"I wanted to accept this great opportunity to help give back to the University. I wanted to give them the support that they needed to be able to integrate one of our batteries into their Hybrid SAE vehicle," recalled Samborsky.

Lawrence Tech entered the national Formula Hybrid competition for the first time in 2010 and placed third in the hybrid-in-progress category for new teams and third for the best engineered hybrid systems. The event held at the New Hampshire International Speedway in May was sponsored by SAE International and the Institute of Electrical and Electronics Engineers (IEEE).

Samborsky, 25, is an applications engineer for Milwaukee-based JCS, where his job responsibilities include battery integrations. This typically means traveling to customers and educating them on how JCS batteries function, doing installations, and then testing the software and the operation of the battery in the vehicle.

Samborsky wrote a specification on the operation of the company's electronics to help the Formula Hybrid team design and integrate the JCS battery in its vehicle. JCS sent the team a 96-cell Li-lon battery, which consists of eight modules each containing 12 cells. Each module has electronics capable of taking voltage and temperature readings and sending them over the Controller Area Network (CAN).

"I created a dummy module without cells because we couldn't get them the battery in time for the start of their development," he said. "They were able to power up the module with a power supply, Lawrence Tech President Lewis Walker was on hand for sponsor appreciation day when alumnus Jeremy Samborsky of Johnson Controls-Saft stopped by to see the Formula Hybrid vehicle and the lithium cell battery pack he worked on.

which turned on the electronics so they could communicate with it. I believe they were able to use this to help develop their software and battery management system. I also visited the University to make sure that they understood how the battery functions."

Although he was unable to attend the competition in New Hampshire, Samborsky had the opportunity to see the completed vehicle during a campus visit for sponsor appreciation day in July. Formula Hybrid team leader Patrick McInally is grateful to Samborsky and JCS for their assistance and expertise.

"Jeremy helped us with any questions we had about our module and explained what they needed from us as far as programming and monitoring of the cells," McInally said. "JCS provided the cells, a monetary donation, and weekly meetings with a group of JCS employees. Jeremy regularly attended the meetings and provided support via conference calls as well as a couple of onsite visits."

Samborsky credits his education at Lawrence Tech, with its emphasis on theory and practice, for enabling him to jump right into a successful career with a leading company in the industry within weeks of receiving his diploma.

"It was the combination of course work and hands-on experience with labs and my senior project, which prepared me for the real world," he said. "As an engineer you need to be able to understand how your product functions on paper, and you also need to know how it functions in real life when it is built." \(\times CWM \)



AIA Michigan honors young architects from Lawrence Tech

Lawrence Tech alumni and faculty won recognition when the American Institute of Architects (AIA) Michigan held its annual Celebration of Architecture in May.

This year's AIA Michigan Young Architect Awards went to two Lawrence Tech graduates, Cory Lavigne, BAr'96, AIA, and Slobodan "Bob" Varga, BSAr'96, AIA.

Lavigne is design director for inFORM studio, a Northville firm with offices in Myrtle Beach, S.C., and New York City that is recognized for its environmentally sustainable approach to design. He has played key roles in three internationally recognized museum competitions in Egypt, Canada, and China.

Varga, a senior member of SmithGroup's design team, designs a wide variety of university, health, and office projects. He has taught design at Lawrence Tech and has served on multiple juries at other universities. He is in the AIA Mentoring Program.

AIA Michigan presented plaques for architectural excellence to the owners, architects, and constructors of 12 buildings, including the Herbert H. and Barbara C. Dow Center for the Visual Arts at Interlochen. Tom Nemitz, BSAr'82, AIA, is president of Cornerstone Architects Inc. of Grand Rapids, which designed the building, and John Dancer, BSAr'82, BAr'84, AIA, is vice president.

The President's Award went to Glen LeRoy, FAIA, the dean of the College of Architecture and Design at Lawrence Tech. He was honored for working with his team to fashion a curriculum that balances the traditions of design education with the "real world" challenges students face. AEP

ALUMNI NEWS

Alumni keep connected through new TechNet website

Lawrence Tech's new website, lawrencetech.net, also known as TechNet, makes it easy for alumni and friends of the University to keep up with both the alumni association and events on campus.

Once they register at lawrencetech.net and obtain a user name and password, alumni can use the website to:

- Register for alumni events on and off campus and keep up with what is happening on campus.
- Get in touch with old friends and look up fellow alumni in the alumni directory.
- Share personal notes, join discussion groups and follow the latest news on social networking sites Facebook and LinkedIn.
- Follow press releases and the online campus newspaper Tech News.
- Make and keep track of contributions to Lawrence Tech online.
- Update personal biographical information.

Alumni who indicate areas of interest at the University will be notified of the latest developments and upcoming events that apply to them.

Mary Randazzo, manager of alumni relations and alumni giving, said the Office of University Advancement staff made many improvements during the transition from the previous alumni site to lawrencetech.net.

"The information that people asked us for has been put on the site, like how to get in touch with a classmate," Randazzo said. "The website is much more friendly than it used to be."

TechNet is also designed to save a lot of time, paper, and expense. As an example, this year's Faculty and Staff Campaign will be completely online at lawrencetech.net, which will save thousands of dollars in printing and postal costs.

The lawrencetech.net website is administered by Debbie Farina in the Office of University Advancement, dfarina@ltu.edu or 248.204.2307. Randazzo can be reached at mrandazzo@ltu.edu or 248.204.2309. ▲EP

Alumni who have questions about TechNet can contact Debbie Farina of the Office of Advancement and Mary Randazzo, manager of alumni relations and alumni giving.



Henry Ford Trade School honors Veraldi

The Henry Ford Trade School Alumni Association used the occasion of its 65th anniversary celebration at the Gem Theatre and Century Club in Detroit on Sept. 17 to present Lawrence Technological University with a plaque honoring Lewis C. Veraldi, BSME'68.

Veraldi (1930–90) was also a graduate of the Henry Ford Trade School, which was founded by Henry Ford and trained several generations of young men in skills needed by the Ford Motor Co.

Veraldi advanced to vice president of product and manufacturing engineering at Ford and was best known for management innovations and leading the cross-platform team that in 1986 created the Taurus, *Motor Trend's* Car of the Year that was considered by many to be the most significant new U.S. sedan of the 1980s.

Veraldi joined Ford in 1949 after graduating from the trade school

and held a number of engineering positions before moving to Europe in 1973 to lead development of the Ford Fiesta. He returned to the United States and held top executive posts. A Lawrence Tech trustee, he also chaired two of the

University's most ambitious capital campaigns up to that time and chaired the building committee for the Don Ridler Field House.

In recognition of Veraldi's outstanding achievements, a bronze Imagecast medallion plaque was presented to Lawrence Tech President Lewis Walker by Chuck Forbes, a classmate of Veraldi at the trade school and a longtime friend. $\triangle BJA$



Lawrence Tech President Lewis Walker and Henry Ford Trade School alumnus Chuck Forbes unveil a plaque honoring Lewis Veraldi that will be displayed in the Engineering Building.

ALUMNI NEWS

Alumni inducted as AIA fellows

Three alumni who are also faculty members at Lawrence Technological University were inducted into the College of Fellows of the American Institute of Architects (AIA) in June.

C. Richard Hall, BSAr'72, BAr'73, FAIA, of Harley Ellis Devereaux in Southfield is an adjunct professor with the Department of Art and Design. Benedetto Tiseo, BSAr'78, FAIA, of Tiseo Architects Inc. in Livonia is an adjunct professor in the Department of Architecture. Daniel Winey, BSAr'74, BAr'75, FAIA, was named an affiliate professor last year.

Dean Glen LeRoy of the College of Architecture and Design is an AIA fellow, as are four other Lawrence Tech adjunct professors: Samuel Bayne; Frederick Butters, BSAr'83, BAr'84; Paul Johnson, BSAr'76; and Arthur Smith, BSAr'78, BAr'81. Professor Emeritus John Sheoris and Trustee Victor Saroki, BSAr'79, BAr'80, are also AIA fellows.

LeRoy said it isn't surprising that AIA has recognized the achievements of so many architects who play significant roles at Lawrence Tech. "Theory and practice is our motto as a university, and we pride ourselves in the range and depth of practice experience that our faculty brings to teaching," LeRoy said. "These new AIA fellows have been recognized as leaders who are practicing at the highest level in the profession."

Hall has been principal and director of Healthcare Design Services at Harley Ellis Devereaux for the past 13 years. He founded years.

Hall earned his AIA fellowship as a national leader in advancing healthcare architecture as both art and science. He has advanced evidence-based design, developing a leading practice in simulation centers and an exemplary multidisciplinary approach that influences architects and healthcare organizations across the country.

and developed a national healthcare

studio that grew from six people

practitioners. He has taught at

Lawrence Tech for more than 30

in Michigan in 1992 to almost 100

Tiseo reinvented AIA Michigan's advocacy process beginning in 1990 by creating one of the first professional practice committees in the country to combat unlicensed architectural practice activity. His efforts eventually led to the first change in Michigan licensing laws that permitted private actions to enjoin such unlicensed activity. He has held numerous leadership positions in both AIA Detroit and AIA Michigan.

Tiseo, who has been an adjunct for more than 25 years, teaches professional practice at Lawrence Tech. Through his "citizen architect" program, he has taught more than 1,200 students to be active members of their community and to be personally involved in the laws and codes that impact the built environment.

Winey is managing principal of the Pacific Northwest and Asia Region for San Francisco-based Gensler, a global architecture, design, planning, and consulting firm. He was named an AIA fellow for demonstrating how domestic and international firms can successfully navigate the globalization of design services, while also promoting sustainability internationally and supporting the education and mentorship of future generations of architects.

Winey was named an affiliate professor in 2009 because of the role he is playing in the development of Lawrence Tech's relationship with Chinese architecture firms and schools of architecture.



Lawrence Tech Adjunct Professors Benedetto Tiseo (left) and C. Richard Hall were inducted into the College of Fellows during the annual convention of the American Institute of Architects in Miami in June.

Another honor for Winey

Daniel Winey, BSAr'74, BAr'75, can add another trophy to his growing list of recent accolades, the Distinguished Architecture Alumni Award from Lawrence Tech. He accepted the award and gave a presentation on his career in October.

Winey has been a member of Gensler's management committee since 1993 and the board of direc-

tors for the past nine years. He is chairperson of the firm's executive committee, which is focused on developing Gensler's strategic plan, firm governance, and design excellence.

Having gained experience from opening offices in Tokyo, Shanghai, and Beijing, Winey has helped the firm develop global practices and open new offices in other countries and here in the United States.

Winey has directed high-profile Gensler projects such as the Shanghai Tower, the second-tallest building in the world at 2,073 feet scheduled for completion in 2014.

Winey also received the University's Alumni Achievement Award in 2009. ▲ EP

Dan Winey (center) was presented with the Distinguished Architecture Alumni Award by Mark Farlow and Dean Glen LeRoy of the College of Architecture and Design.

▲EP

ALUMNI NEWS

DTE Energy CEO awarded honorary degree

Anthony Earley, Jr., executive chairman of DTE Energy, received a Doctor of Business Administration honoris causa and delivered the address when Lawrence Technological University held its 78th commencement on May 16 at Cobo Arena in Detroit.

DTE Energy has more than 10,000 employees and owns Detroit Edison, an electric utility serving 2.2 million customers, and Michigan Consolidated Gas Company (MichCon), a natural gas utility serving 1.3 million customers. DTE Energy also owns several non-utility companies engaged in providing energy services to large industrial customers, the transpor-

tation and storage of fuels, energy trading, and the development of unconventional gas resources from shale and biomass.

Earley has championed DTE's explorations in new energy technologies, including its hydrogen technology park in Southfield that opened in 2004 as the first, largest, and most comprehensive facility of its type in the world. The facility has provided unique research opportunities for Lawrence Tech students.

He chairs the Edison Electric Institute (EEI), the trade association of investor utilities. In this role he is involved in the development of national policies on energy, the environment, and climate change issues. As a former chair of the Nuclear Energy Institute, he has played an active role in revitalizing the nuclear industry in the United States.

In September, DTE Energy announced that Earley was stepping down as CEO and chairman to become executive chairman. ▲EP



Anthony Earley, Jr., was presented with an honorary degree by Lawrence Tech Trustee Howard Padgham (left), President Lewis Walker, and Provost Maria Vaz at the commencement exercises in May.

Class of 1960 joins the Jubilee Society

Lawrence Tech's Jubilee Society honors alumni of Lawrence Tech and the Detroit Institute of Technology who graduated 50 or more years ago. The class of 1960 was inducted into the exclusive group at the annual Jubilee Society Brunch held on campus in April. Lawrence Tech Associate Vice President Dennis Howie (at the podium), President Lewis Walker (second from left) and Alumni Association President Steve Gadzinski, BSEE'76 (at

right), joined the new Jubilee members (left to right) Walter Crosby, BSEE'60; John Harper, BSME'60; Edwin Britz, AMT'60; Sal Giacomazza, BSIM'60; Maurice Katzman, BSME'56, BSEE'60; Mary Spindler, BSIM'60; John Avey, BSIM'60; Joe Maiuri, BSME'60; Dan Craw, BSIM'60; Robert Boorn, BSME'60; and Elliott Plante, BSIE'60.





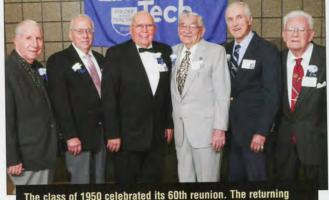
BSME'41, were on hand to

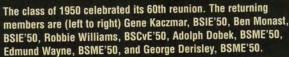
The oldest returning alum-

nus was Edward Lesniak of

the class of 1939.

celebrate their 69th reunion.







The three members of the class of 1955 who returned to celebrate their 55th reunion were (left to right) Henry Horldt, BSIE'55, William Hunley, BSEE'55, and Frank Chikos, BSME'55.

Alumni Notes

Alumni Notes includes news gathered from alumni, their families and friends, corporate news releases, and Michigan newspapers. Due to space limitations in this issue, the editors were not able to print all the submissions we have received. We will publish those submissions and others in the next issue to be published in April 2011. Use the form in this section to share news about you!

1933-59



Vincent Kaye, BEE'35, celebrated his 102nd birthday on Sept. 24, 2010. Vincent, who lives in Bloomfield Hills, says he

enjoys reading the newspaper and his Lawrence Tech alumni magazine, and is looking forward to attending next year's reunion breakfast.

David R. Wilson, BSME'57, retired from his position as chairman of the board of Spartan Motors Inc. in Charlotte, effective at the company's 2010 annual meeting. David had been a member of the board since 1996 and chairman since 2002. He received Lawrence Tech's Alumni Achievement Award in 2009.

1960-79



Donald J. McKinley, BSArE'61, was named field representative for the Northwest Christian Community

Foundation, serving Oregon and southwest Washington state. In this role, he will implement a marketing strategy to broaden the foundation's audience.

Andy Prokopow, BSME'61, is treasurer of the Ventura County, CA, Environmental Coalition. He is a retired general engineer after a 34-year career with the Naval Air Systems Command.

Kenneth G. Killian, BSAr'67, is vice president of Cannon Design, an international architectural engineering and planning firm headquartered in Grand Island, NY. He specializes in construction administration and has been with the firm for 20 years.

C. Richard Hall, BSAr'72, BAr'73, FAIA, ACHA, EDAC, LEED GA, was elevated to the College of Fellows of the American Institute of Architects. He is a principal and director of healthcare design services at Harley Ellis Devereaux in Southfield.

George Schneider, Jr., ACMT'73, is the author of "Cutting Tool Applications," a handbook of machine tool materials, principles, and designs. He is professor emeritus of engineering technology at Lawrence Tech and former chairman of the Detroit Chapter of the Society of Manufacturing Engineers.

Conrad P. Schwartz, BSCE'73, was sworn in as the newest member of the Livonia City Council in May for a term expiring Dec. 31, 2011. Conrad is retired from General Motors after working in the automaker's property management division.

William A. Moylan, BSCE'74, PhD, PMP, FESD, received a Distinguished Service Award at the Engineering Society of Detroit's 2010 annual dinner. Bill is a professor at Eastern Michigan University.

Thomas M. Zech, BSIM'74, was named chief financial officer at Marshall Edwards Inc., a San Diego-based oncology company focused on the clinical development of novel anticancer therapeutics.



Dan Hursin, BSAr'75, BAr'76, was named an associate at Dallasbased Corgan, one of the largest architectural and interior

design firms in the United States. His work on a renovation project in the baggage area at Dallas Love field helped the firm earn an Architectural Interiors Award from *Metalmag* in 2008.

Ray L. Melvin, BSCE'77, was hired as project superintendent at Lansing-based Clark Construction, which maintains a Southeast Michigan office in Southfield. Ray, who lives in Canton, is a 38-year veteran of the construction industry.

James Perkins, BSAr'77, has assembled a major collection of artifacts and memorabilia related to the Michigan State Capitol Building in Lansing. Among his many activities, he organized a restaging of President Theodore Roosevelt's visit to the capitol, a century to the day after his trip to Lansing. The REO automobile was driven by a great-great grandson of R.E. Olds, who performed the same duty for the president 100 years earlier.

Benedetto Tiseo, BSAr'78, president of Livonia-based Tiseo Architects Inc., was elevated by the American Institute of Architects to its College of Fellows. Ben also teaches architecture at Lawrence Tech.

James L. Overholt, BSPh'79, was named to the newly created position of senior research scientist in the field of robotics for the Warren-based U.S. Army Tank Automotive Research, Development and Engineering Center.

1980-89

Daniel L. Kozakiewicz, BSCE'80, president of Three Rivers Corp. in Midland, was elected president of the Lake Huron Area Council of Boy Scouts of America for 2009–10. He was also inducted into the Junior Achievement of Central Michigan Business Hall of Fame.



Mark A. Farlow, BSAr'81, BAr'82, MAr'09, was installed as president of the Rotary Club of Birmingham. He

is a principal with Victor Saroki & Associates Architects in Birmingham and has taught in the architecture program at Lawrence Tech.

George J. Hartman, BSAr'82, was a candidate in the Republican primary for Wayne County commissioner representing the 10th district. He has owned George G. Hartman Architects PC for more than 18 years.

Thomas G. Nemitz, BSAr'82, founder of Cornerstone Architects in Grand Rapids, won two state awards in a sixmonth period. His firm's design for the Herbert H. and Barbara C. Dow Center for Visual Arts at Interlochen won an Honor Award from the American Institute of Architects in Michigan, and its design for Clear Water Place in Grand Rapids earned the Governor's Award for Historic Preservation.

Michael R. Riley, BSEE'84, joined Elcometer Inc. in Rochester Hills as sales manager for the United States and Canada, with responsibility for sales, marketing, and a stronger sales presence by the company and its expanded product lineup.



Scott Priest, BSME'85, joined Herkules Equipment Corp. in Walled Lake as senior account manager. The firm

manufactures material handling lifting systems and paint gun washers.

James K. Clapper, BSCE'86, was promoted to vice president of Precast Sales for Spancrete, based in Waukesha, WI. Jim has more than 25 years of concrete sales experience, including six years with Spancrete.

James J. Crawley, BSIM'87, was named global vice president of Business Development-Automotive for SBE Inc., an advanced technology film capacitor manufacturer based in Farmington Hills.

Joseph E. Stockoski, BSEE'88, representing Kalamazoo Valley Habitat for Humanity as its Volunteer of the Year, was among 30 volunteers from across the state honored at the annual Habitat for Humanity of Michigan banquet in Lansing.

Kurt K. Krier, BSEE'89, is vice president, Exhaust Emissions Solutions at Dow Automotive Systems. He is responsible for the development and implementation of global strategy and profitability for the emissions business.

1990-99

Richard S. Spicko, BSMCS'91, is the owner of Zuma Coffee House in Birmingham. The former software engineer works behind the scenes handling purchasing, accounting, and marketing strategy at the coffee shop and café. His career transition was featured in *Crain's Detroit Business*.

Matthew G. Coates, BSAr'95, is the owner of Coates Design Architects of Bainbridge Island, WA. His firm became the first designer to receive the LEED Platinum certification for a residential project in Washington State, outside the city of Seattle.



Paul R. Wills, BSAr'96, MAr'98, AIA, LEED AP, was named an affiliated entity member at Plante Moran CRESA in

Southfield. His practice focuses on providing strategic planning and program management services to the K-12 and governmental sectors.

Paul Di Giorgio, BSAr'97, was named vice president of architecture and product development for Jagoe Homes in Kentucky. He will work with the firm's architecture and design team to implement new product lines and improve engineering in all new Jagoe homes.

Kent S. Siegel, BSEE'97, was appointed chief financial officer and senior vice president at Zion Oil & Gas Inc. in Dallas. He was formerly president and chief operating officer of Kent S. Siegel, P.C. in West Bloomfield Township.

Scott C. Catallo, BSAr'98, MAr'02, was appointed to the Westland Brownfield Redevelopment Authority for a three-year term. Scott is a licensed architect and most recently worked with Norr Architects, Partners in Architecture, and AZD Associates.

2000-10

Jackie Buchanan, MSIS'00, was named chief executive officer of Genisys Credit Union in Auburn Hills. Jackie has worked at three credit unions in the last 24 years and has experience in virtually every area of the business.

Amanda Katt-Cassidy, BSAr'00, MAr'03, LEED AP, CDT, SMSI, was named an associate at Soil and Materials Engineers Inc. in Plymouth.

Jacob Jabkiewicz, BSAr'01, recently organized the Ann Arbor Architectural Tour. The hour-long tours encourage local residents to slow down and enjoy the architecture of the downtown area that is often overlooked.

Jeffrey M. Roman, BSCvE'01, PE, LEED AP, BD+C, received the 2010 John W. Gregorits Management Study Fellowship from the National Society of Professional Engineers to pursue an Executive MBA from the University of Florida.

Steven Webber, BSAr'01, BSIA'01, MAr'06, joined the faculty of Eastern Michigan University as an assistant professor in the School of Engineering Technology. He was previously with Hobbs + Black Architects in Ann Arbor.

Matt Desjardins, MCvE'02, PE, was named a shareholder at Soil and Materials Engineers Inc. in Plymouth.

Adam A. Dailide, BSAr'03, MAr'06, accepted the position of chair of the School of Drafting and Design at ITT Technical Institute.

Jeffrey Atto, BSPh'04, joined the staff of NewComputerBuyer.com, a website of Southfield-based Purchase Consulting LLC. While in school, Jeffrey worked in the Veraldi Instructional Technology Computer Lab at Lawrence Tech.

Hnendel A. Maximore, BSAr'06, BFAI'06, created the original rendering for the Waterford Veterans Memorial in Waterford Township. The memorial features a five-sided main tower representing the five branches of the military.

Sergio Bertucci, BSAr'08, MAr'09, a builder and architect in Windsor, Ontario, recently devoted a year of his life to developing a downtown canal/marina plan, including detailed models, for the city of Windsor.

Brandon LaCourciere, BSAr'08, joined Hobbs + Black Architects in Ann Arbor as BIM Development Manager. He will lead the firm's Ann Arbor, Lansing, and Scottsdale, AZ, offices in the integration of Revit as well as BIM project development.

Jenna Horrigan, BSAr'09, joined Kingscott Associates Inc. in Kalamazoo, where she had been working as an architectural intern.

Thomas B. Glennan, MSTPC'10, is owner and manager of Technical Writing Solutions LLC in Rochester Hills. His new career after 40 years with General Motors was featured in an article in *Crain's Detroit Business*.

Matthew S. Luckey, BSAr'10, married Sarah Bethany Bentz. They live in Farmington Hills.

Nakia Simon, MBA'10, planning engineer, Regulatory Affairs, for Chrysler Group LLC, was honored with the 2009 John Connor Environmental Award during the SAE International's 2010 Government/Industry Meeting in Washington, D.C.

News For Alumni Notes

Use the space below to tell us about you or your fellow Lawrence Tech or DIT alums. Mail it to the Office of Alumni Relations, fax to 248.204.2207, or email alumni@ltu.edu. You may also submit Alumni Notes on-line at www.lawrencetech.net. Tell us about honors, promotions, marriages, appointments, and other activities.
New Address?

Name		
Street		
City State ZIP		
Home Phone ()	
Email		

Use the email address above or mail to: Office of Alumni Relations Lawrence Technological University 21000 West Ten Mile Road, Southfield, MI 48075-1058

In Memoriam

Information for this section is gathered from family and friends of the deceased, and from newspaper accounts. When providing an obituary, please furnish as much information as possible, including the date of death and any Lawrence Tech- or DIT-connected survivors and their graduation dates. If sending a newspaper clipping, please include the date and name of the paper.

Leno J. Lolli, BME'39, of Deming, NM, Jan. 4, 1994. Mr. Lolli was an executive in the service department at Michigan Consolidated Gas Co. until his retirement in 1970.

Mitchell S. Ostrowski, BCLE'43, of Shelby Township, March 24, 2010. Mr. Ostrowski was a retired engineer at Ford Motor Co.

Kenneth M. Reas, BSME'43, of St. Augustine, FL, Aug. 21, 2010. Mr. Reas was formerly the lead engineer at Imperial Manufacturing in Clemson, SC. He was survived by two daughters.

Bruce A. Sawyer, BSEE'43, of Santa Rosa, CA, July 12, 2010. Mr. Sawyer was the co-founder, inventor, and supervising engineer at Xynetics Inc. He was survived by his wife, Gladys, a son, and a daughter.

A. Keith Carpenter, BSME'49, of Rochester Hills, Feb. 13, 2010. Mr. Carpenter was a retired development engineer at General Motors. He was survived his wife, Vera, two sons, and a daughter.

Paul E. Toth, BSChE'49, of Allen Park, Feb. 27, 2010. A Ford Motor Co. retiree, Mr. Toth was survived by two sons and a daughter.

Donald C. Fedrigon, Sr., BSChE'50, of Elk Rapids, March 5, 2010. Mr. Fedrigon worked at Parke-Davis in Detroit before moving to Elk Rapids, where he owned and operated Chain-O-Lakes Marine for several years. He was survived by his wife, Marge, a son, and a daughter.

Irving J. Gerlich, BSME'50, of West Bloomfield, Jan. 24, 2010. A General Motors Corp. retiree, Mr. Gerlich was survived by his wife, Charlotte, and three sons.

Harry L. Hayter, BSME'50, of Burtchville Township, Aug. 11, 2010. Mr. Hayter was formerly an advanced research development engineer for airborne assault vehicles at the U.S. Army Tank Automotive Command (TACOM) in Warren. He was survived by his wife, Velma, three sons, and a daughter.

John E. Stewart, BSEE'50, of Southfield, Aug. 21, 2010. He was survived by his wife, Marj, four sons, and two stepsons.

John S. Goniea, BSArE'51, of Trenton, March 26, 2010. A retired consulting architect, Mr. Goniea was survived by his wife, Joan, two children, and five stepchildren.

George M. Limburg, BSME'51, of Harrison Township, March 15, 2010. Mr. Limburg was survived by his wife, Barbara, three sons, two daughters, and six stepdaughters.

James G. Thero, BSEE'51, of Traverse City, April 28, 2010. Mr. Thero was a retired electrical engineer at the U.S. Army Tank Automotive Command (TACOM) in Warren. He was survived by his wife, Mary Ellen, three sons, a daughter, and an adopted daughter.

Jack E. Schramm, BSIE'52, of Detroit, Feb. 24, 2010. Mr. Schramm worked for 40 years at the City of Detroit Department of Street Railways. When he retired, he was named department historian by then-Mayor Dennis Archer. Mr. Schramm also authored many books and articles on public transportation. He was survived by a son.

Edwin Shymanski, BSCvE'52, of Livonia, July 16, 2010. Mr. Shymanski worked at Great Lakes Steel for 14 years and was director of Great Lakes fabricators for four years. He started his own engineering firm and worked until a few months before his death. He is survived by his wife, Gail, two sons, and a daughter. **Bruce O. Stapleton**, BSME'52, of Dearborn, June 20, 2010. A Ford Motor Co. retiree, Mr. Stapleton was survived by his wife, Vera, three sons, and two daughters.

John P. Adams, ABCT'53, of Hattiesburg, MS, April 10, 2010. A retired architect at General Motors, Mr. Adams was survived by his wife, Ann, three sons, two daughters, a stepson, and a stepdaughter.

Harry Sokolowski, BSCvE'55, of Wyandotte, Jan. 19, 2010. Mr. Sokolowski was survived by his wife, Mary, and a daughter.

William J. Walter, BSIM'55, of Clay Township, June 25, 2010. A retired plant manager at Detroit Gasket, Mr. Walter was survived by his wife, Jayann, a son, and a daughter.

Kenneth T. Bratt, BSEE'56, of Clarkston, July 5, 2010. Mr. Bratt was involved in the diamond tool business until his retirement. He was survived by his wife, Elizabeth Joyce, two sons, and three daughters.

John S. Freismuth, BSME'57, of Cheshire, CT, March 18, 2010. Mr. Freismuth was a retired mechanical engineer at Veam-Litton Co. in Watertown, CT. He was survived by his wife, Catherine, a son, and three daughters.

George Gravila, BSIE'57, of Farmington Hills, May 2, 2010. Mr. Gravila worked for 30 years as an engineer and then a buyer at Ford Motor Co. He was survived by his wife, Victoria, and two daughters.

Lester S. Bowden, AMT'58, of Lake Worth, FL, July 31, 2010. Mr. Bowden owned the Les Bowden & Association Insurance Agency. A Marine Corps veteran, Mr. Bowden was present on Mt. Suribachi the day the flag was raised on Iwo Jima during World War II. He was survived by his wife, Jane, and a daughter.

Nicholas DeMarco, BSCvE'58, of Mesa, AZ, Aug. 3, 2010. Mr. DeMarco was a retired construction manager for Metcalf & Eddy, working on major projects in the United States, Canada, and Puerto Rico. During World War II, he flew 39 missions in Europe as a bombardier with the Royal Canadian Air Force and was awarded the Distinguished Flying Cross for bravery. He was survived by his wife, June, a son, and a daughter.

Jack F. Jensen, BSME'58, of Novi, March 20, 2009. He was survived by two sons and two daughters.

Marvin W. Kalina, BSME'58, of Livonia, A Ford retiree, Mr. Kalina, was survived by his wife, Ruth Ann, two sons, and a daughter.

Gerald G. Peck, BSME'58, BSIE'59, of Huntington Woods, Feb. 16, 2010. A retired engineer at General Motors, Mr. Peck was survived by three sons.

William L. Shollenberger, BSME'58, of Manitou Beach, April 23, 2010. Mr. Shollenberger was a pipeline engineer for Michigan Consolidated Gas Co. and later a production supervisor at Ford Motor Co. Before leaving Ford for Chrysler, he was assistant superintendent of Thunderbird production. Mr. Shollenberger was survived by his wife, Kathleen, a son, a daughter, two stepsons, and a stepdaughter.

Gerald W. Stoscup, ARACT'58, of Northville, Nov. 6, 2004.

Donald Den Braven, ARACT'59, of Brighton, March 31, 2010. Mr. Den Braven was employed by Ventcom Corp. for many years. He was survived by his wife, Shirley, three sons, and two daughters.

Walter Kizyma, BSIE'59, of Macomb Township, June 19, 2009. Mr. Kizyma was a retired facilities project manager for NBD Bancorp. He was survived by his wife, Lidia.

Jack F. Neilson, ABCT'59, of Westland, Aug. 26, 2010. Mr. Neilson was survived by his wife, Virginia, and a son. Lucian J. Wampuszyc, BSArE'59, of St. Clair Shores, Dec. 30, 2009. Mr. Wampuszyc preceded in death his wife, Irene, by two weeks. He was survived by two sons and a daughter. (Editor's note: In the Spring/Summer 2010 issue, the information regarding the death of Mr. Wampuszyc's wife and his survivors was incorrect.)

Russell A. Grout, BSIE'61, of Barrington, RI, Feb. 26, 2006. He was survived by his wife, Priscilla.

James A. Abraham, BSIM'62, of Lake Orion, Feb. 24, 2010. He was survived by his wife, Lynn, and a son.

Gordon S. Kelly, BSEE'62, of Plymouth, Aug. 21, 2010. Mr. Kelly retired in 1988 after 44 years as an electrical engineer for Detroit Edison Co. He was survived by his wife, Gloria, and two sons.

Charles A. Smith, BSEE'62, of Clawson, May 31, 2010. A retired Chrysler Corp. employee, Mr. Smith was survived by four daughters.

Vaun O. Walton, AMT'62, of White Lake, Aug. 28, 2008.

Jesse L. Wertanen, BSME'62, of Novi, Jan. 10, 2009. Mr. Wertanen worked for Howard & Sirocco as a mechanical engineer. He was survived by his wife, Lenore.

George L. Ellery, BSEE'63, of Detroit, Feb. 29, 2008. Mr. Ellery was a Ford Motor Co. retiree.

William R. Swift, BSIE'63, of Schaumburg, IL, Feb. 24, 2007.

Harold E. Bargar, BSME'64, of Omaha, NE, March 24, 2010. Mr. Bargar was survived by his wife, Florence, a son, and a daughter.

Arthur C. Gross, AIST'64, of Plymouth, June 17, 2010. A retired product engineer for General Motors, Mr. Gross was survived by his wife, Ellen, a son, and two daughters.

Guilford R. Taylor, Jr., AEEtT'66, of Columbus, OH, Sept. 19, 2001.

Kenneth J. Johnston, BSEE'67, of Maryland Heights, MO, June 5, 2009. He was survived by his wife, Theresa.

Gerald K. Marowski, Jr., BSEE'67, of Canton, Feb. 27, 2010. A DTE Energy employee, Mr. Marowski was survived by his wife, Helen, two sons, and a daughter.

William C. Abbe, BSAr'68, of Novi, June 16, 2010. Mr. Abbe owned WCA Design Build in Kalamazoo for 25 years before moving to the Detroit area to work for the SmithGroup, where he was the stadium architect in the field for Ford Field in Detroit. He was survived by his wife, Mary Jo, and a son.

Ralph A. Brandi III, BSIM'68, of Middletown, NJ, Dec. 7, 2009. Mr. Brandi owned Brandi Consulting LLC. He was survived by his wife, Diane, and three children.

Kernie L. King, AMT'68, of Howell, April 18, 2010. Mr. King was a mechanical engineer at Parker Brothers (later ExCello Corp.) in Howell.

Thomas D. Whittemore, BSIM'68, of Bingham Farms, Nov. 28, 2009. An accountant with Thomas Consulting Services, Mr. Whittemore was also a talented artist and world traveler with his wife, Christine. He was also survived by a son and two stepdaughters.

Harley L. Kapanka, AMT'69, of Rochester, March 15, 2010. A TRW Inc. retiree, Mr. Kapanka was survived by two sons.

Paul J. McKeough, BSME'69, of Northville, June 21, 2010. Mr. McKeough was survived by his wife, Kay, and a daughter. Arne K. Berg, AEEtT'70, of Fenton, Feb. 5, 2010. He was survived by his wife, Carol.

MEMORIA

Hugh R. Sicken, AEEtT'70, of Clinton Township, Dec. 16, 2008. He was survived by his wife, Patricia, and a daughter.

Michael T. Wierzbicki, BSIM'70, of Estero, FL, Aug. 25, 2009. Mr. Wierzbicki was survived by his wife, Barbara.

Ronald C. Reeves, BSME'71, of Mansfield, MA, Nov. 17, 2009. Mr. Reeves worked for Factory Mutual Engineering Corp. He was survived by his wife, Diana.

Michael P. Skerchak, BSME'72, of Rochester Hills, Jan. 10, 2007. Mr. Skerchak was a General Motors employee.

William J. Sulak, BSME'72, of Pottsville, AR, Feb. 19, 2010. He was survived by his wife, Brenda.

Adolf R. Dubiel, BSIM'73, of Detroit, March 16, 2010. He was survived by his wife, Lucyna, two sons, and a daughter.

Walter A. Marks, AMT'73, of Cedar City, UT, Jan. 26, 2010. He was survived by his wife, Lorraine.

William A. Sheill, BSIM'73, of White Lake, March 2, 2010. A retiree from Coastal Pipeline, Mr. Sheill was survived by his wife, Joye, two sons, and two daughters.

Neil H. Spence, BSME'73, of Westerville, OH, July 11, 2008. Mr. Spence was survived by his wife, Fusako. John C. Boehm, BSIM'74, of Leonard, Dec. 11, 2009. Mr. Boehm was survived by his wife, Linda, a son, and a daughter.

William A. Keely, BSEE'74, of Portage, April 27, 2009. Mr. Keely was survived by his wife, Maggie.

Dennis A. Michalak, AEEtT'74, of Wheaton, IL, Sept. 23, 2009. He was survived by his wife, Geraldine.

Robert Segesta, BSEE'74, of Cypress, CA, July 12, 2009.

Herman L. White, AEEtT'75, BSIM'78, of Jonesboro, GA, June 10, 2010.

William A. Winter, BSMa'76, of Metamora, June 12, 2010. Mr. Winter worked for Borg Warner for more than 30 years, most recently in Auburn Hills. He was survived by his wife, Marge, a son, and a daughter.

Charles M. Reik III, BSAr'77, of Garden City, Dec. 19, 2009, He was survived by his wife, Mary, and three daughters.

Michael A. Morris, BSME'82, of Brighton, Nov. 17, 2009. Mr. Morris was president of Advance Spline and Engineering. He was survived by his wife, Debby, and two children.

Ginger K. Rubin-Dossetto, BSBA'82, of Livonia, June 2, 2010. She was survived by her husband, Edward, and two sons.

Lawrence Rutkowski, BSME'82, of Sterling Heights, Nov. 11, 2009. Mr. Rutkowski was employed at the U.S. Army Tank Automotive Command (TACOM) in Warren.

MARK YOUR 2011 GALENDARS!

Tampa Bay Lightning vs. Detroit Red Wings, Feb. 17 in Tampa, FL Easter Bunny Brunch, April 10 on campus

For event updates, please visit the alumni website, TechNet, at www.lawrencetech.net.
Alumni outreach events are planned throughout the country in 2011. An alumni networking gathering is planned for early in the year in the Dearborn area, and a special event is in the works for May at the Michigan International Speedway in Brooklyn.

Use TechNet often to keep up with the latest announcements!

N MEMORIAM

Robert A. Cooley, BSBA'83, of Roscommon, Oct. 4, 2008. He was survived by his wife, Betty.

Thomas J. Johnson, BSME'83, of Leonard, July 22, 2010. Mr. Johnson was a retired development engineer for General Motors. He was survived by his wife. Roseanne, and two sons.

Michelle L. McDonough, BSMCS'84, of Fort Collins, CO, July 6, 2010. Mrs. McDonough was a project manager and application development supervisor for the City of Fort Collins. In 2007, she was recognized as one of the first group of "World Class People" by the city. She was survived by her husband, Bill, BSMa'83, a son, and a daughter.

Mark L. Leonard, BSEE'85, of Belleville, March 4, 2010. Mr. Leonard was a senior product engineer at Eaton Corp. He was survived by his wife, Rene, and a daughter. Michael Badaczewski, AEEtT'88, of Highland, May 8, 2010. He was survived by his companion, Adriana.

Kevin J. Babinski, BSME'98, of Collinsville, VA, July 20, 2010. Mr. Babinski was a manufacturing engineer for Invista in Virginia. He was survived by his wife, Sarah, and a son.

David P. Glynn, Jr., BSBA'91, of New Baltimore, April 5, 2009.

Wardell J. Jones, MEMS'01, of Edwardsville, IL, March 25, 2008.

DIT IN MEMORIAM

Earl G. Goetsch, BSME'41, of Farmington Hills, Nov. 17, 2008. Mr. Goetsch was survived by his wife, Shirley, a son, and a daughter.

Bernard W. Anderson, BSBA'43, of Royal Oak, Sept. 29, 2009. Mr. Anderson was survived by a son and two daughters.

Robert Cartwright, BSBA'43, of West Chester, PA, formerly of Wixom, Sept. 6, 2002. Mr. Cartwright was survived by two sons and a daughter.

Graham G. Barton, BSME'53, of Charlevoix, Aug. 23, 2009. Mr. Barton was a retired senior vice president of engineering and manufacturing for Michigan Oven Co. in Detroit. He was survived by his wife, Elizabeth, and two sons. Richard G. Hill, BEE'59, of Manistee, May 18, 2010. Mr. Hill worked as an electrical engineer for several companies in the Detroit area and Alpena before moving to Manistee where he and his wife bought and managed the Lakeshore Motel. In addition to his wife, Dianne, survivors include five children.

THE LAWRENCE TECH FAMILY

Don Julian Gonzalez, faculty member

Don Julian Gonzalez, a former Lawrence Tech faculty member, died June 6, 2010, in Sebring, FL. He was 88.

Mr. Gonzalez worked for over 42 years for the American Air Filter Co. of Louisville, KY, before retiring in 1984. He also worked for D.G. Associates in Troy. A life member and fellow of the American Society of Heating, Refrigerating, and Air-Conditioning, he was awarded the Refrigeration and Air Conditioning Engineers Distinguished Service Award in 1980 and the Leadership Award from the Industrial Ventilation Conference in 1986.

He was survived by his wife, Edith, and three daughters.

Gladys Leithauser, English instructor

Gladys Leithauser, a former English instructor at Lawrence Tech and a co-author of several children's books, died Aug. 29, 2010, at age 85.

After working at the Detroit Institute for Cancer Research and raising a family in Pleasant Ridge, Mrs. Leithauser earned a doctorate in English literature from Wayne State University in 1977.

From 1978–93, she was an English instructor at the University of Michigan-Dearborn. She also taught at Lawrence Tech and the Detroit College of Business.

In addition to the children's books she co-authored with local writer Lois Breitmeyer, Mrs. Leithauser also co-edited "The World of Science: An Anthology for Writers," published in 1986.

Mrs. Leithauser was survived by her husband, Arthur Higbee, and four sons.

Edward M. Mielock, senior lecturer



Edward M. Mielock, a longtime civil engineer for the Wayne County Road Commission and former Lawrence Tech employee, died on May 26, 2010. The Bloomfield Hills resident was 83.

He joined the faculty for associate studies in 1956 and taught mathematics for many years. He became assistant to the dean for associate studies in 1989. When the University reorganized its academic programs in 1989, he became a senior lec-

turer and an advisor for construction engineering technology in the College of Engineering.

Mr. Mielock served in the U.S. Army during World War II and was a U.S. Navy resident during the Korean conflict. Survivors include his wife, Katie, five daughters, and four sons.

Carl Varadian, humanities professor

Carl Varadian, a professor of humanities at Lawrence Tech for more than 22 years, died on June 5, 2010. He was 79.

A U.S. Army veteran from the Korean conflict, Mr. Varadian was a loan officer for the U.S. Department of Housing and Urban Development prior to his retirement. He also served as the city manager for Lyons, IL, and the assistant city manager for Elmhurst, IL.

Mr. Varadian lived in Bradenton, FL, at the time of his death. Survivors include his wife, Ida, and two sons, including David, BSBA'92.

Report to Investors | | | | ESIII | S



FROM THE PRESIDENT

umerous accomplishments at Lawrence Technological
University over this past year point to the value and distinctiveness of the University's programs and the progress being made in attaining the campus community's collective vision: to be a pre-eminent private university producing leaders with an entrepreneurial spirit and global view.

Even in this difficult economy, over 80 percent of the Class of 2010 had secured jobs in their field by the time they attended Commencement.

As another encouraging indicator, a new *Bloomberg Businessweek* survey of universities across the nation ranks Lawrence Tech first in the metropolitan Detroit area and in the top 30 percent nationally for the earning power generated by its bachelor's degrees. That same survey ranked Lawrence Tech 17th in earning power among the nation's many prestigious private technological colleges and universities.

Strong job prospects. A degree with great earning potential. *High value!* The University's time-proven "theory and practice" instructional methodology, business-savvy faculty who first and foremost are good teachers, and our unique leadership curriculum advance our enduring focus of helping students succeed.



That Lawrence Tech does have good teachers was amplified when the Carnegie Foundation for the Advancement of Teaching and the Council for Advancement and Support of Education named Andrew Gerhart, associate professor of mechanical engineering, the 2010 Michigan Professor of the Year. Dr. Gerhart was selected from among more than 300 top professors in the United States in the annual competition that is the only national program

to recognize excellence in undergraduate teaching and mentoring. As you can imagine, the entire Lawrence Tech community is so very proud of Andy and all that he has accomplished since joining the faculty in 2002.

As reported by Provost
Maria Vaz and elsewhere in
this issue of the Lawrence
Tech Magazine, the faculty
and staff have attracted more
research monies and grant support than ever before. Their
successes not only advance

President Lewis Walker welcomes freshman Jacob Brasinski of Trenton and his parents to the Lawrence Tech community during moving-in day in August. With more and more activities to generate student interest in campus life, the University's two dormitories are filled to capacity.



President Walker (right) greets
William Ford, Jr., executive chairman
of the Ford Motor Co. at the Detroit
Economic Club (DEC). Ford is DEC
chairman, and Walker is a director.
Lawrence Tech has served as the
video chronicler of DEC presentations
for nearly 25 years, a public service
that broadens the Club's outreach and
visibility. In the background is Adm.
Mike Mullen, chairman of the Joint
Chiefs of Staff, who spoke to the DEC
in August.



President Walker presents a framed Detroit Free Press article to retail developer extraordinaire A. Alfred Taubman, HD'85, a former Lawrence Tech student who taught a special graduate course at Lawrence Tech this fall in real estate development. (See cover story, page 1.) scholarly inquiry, they help the University to upgrade instructional and research facilities and at the same time provide the types of real-world, handson applied research experiences that help our graduates "hit the ground running," providing immediate value to their employers.

Progress in our forthcoming capital campaign, now in its "quiet phase," continues to be impressive. Over \$49 million in donations and pledges has already been received with the goal of improving Lawrence

Tech's engineering, architecture, and science capabilities, increasing the endowment, and adding more scholarship support.

Nonetheless, what some have dubbed the "Great Recession" continues to impact our students, their families, and our operations. To help Michigan's many displaced workers still struggling to begin or continue their college studies, we diverted an additional \$1.5 million in August to aid another 200 students by expanding Lawrence Tech's "Recovery Starts Here" grant program that covers half of tuition. Now serving over 650 students, the proactive "Recovery Starts Here" initiatives that were launched 2008 were the first in Michigan and they remain among the most comprehensive in the country.

As a further indication of the economic trials and difficulties in this region in which so many of our students reside and commute, the number of revenue-producing students for the fall 2010 semester declined nearly seven percent. This has meant that like many Michigan businesses, organizations, and

institutions, we have had to adjust budgets and make difficult and unpopular choices. To sustain the University's shortand long-term fiscal stability, our leadership team, faculty, and staff continue to eliminate nonessential spending, and defer certain purchases. We continued an across-theboard salary and general hiring freeze and suspension of the University's contribution to the TIAA-CREF pension plan, and for 2011 will eliminate the free employee health care plan. I am grateful that Lawrence Tech's faculty and staff have come together in meeting these challenges and for their continued devotion to students and commitment to academic excellence.

This fall every undergraduate student who enrolled at Lawrence Tech received a new laptop or tablet computer loaded with software with a retail value that in many cases approaches \$15,000. The 2,600 new computers distributed included Lenovo laptops for most architecture students and Fujitsu Lifebook tablets for engineering, management, and arts and sciences students.

In May, new life sciences laboratories were dedicated in the Science Building at a special reception for the campus community. The improvements are part of a multiphase renovation of science facilities in the building. Dr. Walker and Provost Maria Vaz cut the ribbon, joined by Dean of Arts and Sciences Hsiao-Ping Moore (right), university architect Joseph Veryser, and others.



Students in transportation design, imaging, and media communication received MacBook Pros.

While some other colleges and universities provide personal computers loaded with word processing software, Lawrence Tech's program, now in its ninth year, remains unique in Michigan and rare nationally because it supplies a custom-configured, high-end computer with all the advanced, industry-recommended software that students need for their courses. The convenience of having their own computer instead of being limited to using a computer in a lab, and being able to seamlessly interact with faculty and fellow students who have the same software, does so much to enhance learning and provides students with skills that match industry expectations.

Many other advancements of this past year are reported in this and previous issues of your Lawrence Tech Magazine: the continued growth and expansion of the Leadership Program for undergrads, recognition by the Kern Family Foundation that our entrepreneurial program's growth leads the 22 colleges and universities who receive Kern support, and designation by the State of Michigan that Lawrence Tech is a bestpractice institution for at-risk students.

Three persistent, unwavering qualities have characterized Lawrence Tech in the past and carry us forward. These qualities, so subtly interwoven

into our history as to make them invisible in our day-today activities, are

- The University's unshakable commitment to students and learning;
- Our ability through the years to adapt as occasions have demanded – or in other words, our institutional agility; and
- The resolute persistence by our leadership team and the entire Lawrence Tech community to advance this university to the next level of excellence – continuous improvement.

Since Lawrence Tech's founding in 1932, there has been an expansion and ongoing improvement of the University's curricula and facilities as we strive to enhance the intellectual development of our students. It is at the heart of everything we do. Today, with over 100 programs and degrees from the associate through doctoral level, Lawrence Tech is a compre-

hensive university providing students with extraordinary growth and development opportunities.

During my 16 years here I have witnessed this expansion firsthand. However, I must tell you that it is the people of Lawrence Tech – the faculty, staff, alumni, donors, and, most importantly, the students – who truly make Lawrence Tech a premier institution of higher learning – a pre-eminent university.

An unfettered yearning for excellence is manifest in audacious goals, goals that continue to be achieved. We are fortunate to have a dedicated faculty and staff who work tirelessly to insure that students participate in learning experiences that are second to none, and I am deeply proud of the work that these men and women have accomplished.

Your support remains key as we continue to provide students challenging experiences in the classroom, studio, and laboratory; enriching on-campus activities; and the supportive services critical to their educational success. Thank you so much.

Lewis N. Walker President and CEO

Lawrence Technological University's Vision: To be a pre-eminent private university producing leaders with an entrepreneurial spirit and global view

Values: Theory and Practice – Teamwork and Trust – Character and Integrity

Mission: To develop leaders through innovative and agile programs embracing theory and practice

Cause: The intellectual development and transformation of our students into critical thinkers, leaders, and lifelong learners.



Provost Maria Vaz and President Lewis Walker personally welcomed each member of the freshman class to Lawrence Tech during the annual convocation ceremony. They were joined by this year's Convocation keynote speaker, Warren Brown (right), a nationally prominent entrepreneur and owner of upscale bakery and restaurant operations in Washington, DC.

BOARD OF TRUSTEES

CLASS OF 2013



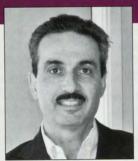
Lauren L. Bowler Former Vehicle Line Executive, Midsize/Large Cars Int'l, Adams Opel AG, General Motors Corp.



Howard B. Padgham Former Vice President, Advanced Manufacturing Engineering Power Train, Chrysler Group LLC



Mark Roualet
President, General
Dynamics Land Systems;
Vice President, General
Dynamics Corp.



Victor A. Saroki, BSAr'79, BAr'80 President, Victor Saroki & Associates Architects, PC

CLASS OF 2012



Joseph E. Champagne Former Chairman, Board of Directors, Ross Controls; Former President, Oakland University



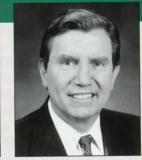
Raymond R. Khan, BSEE'70 Former Senior Vice President, CIO, Blue Cross/Blue Shield of Michigan



Marcy Klevorn
Director, Global Information
Technology Operations,
Ford Motor Co.



Barbara SamardzichVice President, Power Train
Operations, Ford Motor Co.



David B. Wohleen Former Vice Chairman, Delphi Corp.

CLASS OF 2011



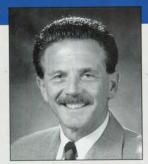
Mathew DeMars, BSME'78 Chief Operating Officer, The Vehicle Production Group LLC



Douglas E. EbertFormer Chief Operating
Officer, Cranbrook
Educational Community



John E. Elliott, II, BSBA'80 Chairman, AMI Holding Corporation, Inc.



Larry D. Lyons
Former Vice President,
Car and Minivan Product
Team, Chrysler Group LLC

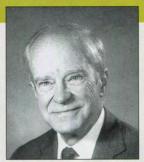


John G. Petty, BSME'65 Former Director, Fox Vehicle Program, General Dynamics Corp.

ADVISORY MEMBERS OF THE CORPORATION



Richard H. Cummings Former Senior Vice Chairman, NBD Bank and NBD Bancorp, Inc.



Edward Donley, BME'43 Former Chairman, Air Products and Chemicals, Inc.



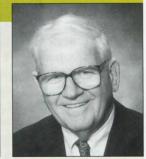
Esther G. Edwards Chairman and CEO. Motown Historical Museum, Inc.



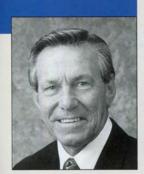
William D. Innes, BSME'53, Julius L.Pallone Former Executive Vice President, Ford Motor Co.



President, J.L. Pallone Associates



Kurt O. Tech, BSME'48 Management Consultant; Former President, The Cross Company



Lloyd E. Reuss Chairman of the Board, Lawrence Technological University; Former President, General Motors Corp.



Ex officio Lewis N. Walker President and CEO. Lawrence Technological University

FROM THE PROVOST



Maria Vaz

orking together, the Lawrence Technological University community accomplished much during the 2009-10 academic year. The nation's economic struggles, which generally have been worse here in Michigan than in other states, have brought difficulty and uncertainty to many Lawrence Tech families. We are therefore particularly proud of how the University has responded to these challenges, and we remain steadfast in efforts to help our region develop strategies that aid the economic recovery.

Lawrence Tech's "Recovery Starts Here" initiatives, championed by President Walker, have brought national acclaim to the University. More importantly, the recipients of the over 450 new recovery grants provided by Lawrence Tech this past year included our own students, alumni, and many others who have been displaced due to the economic downturn. This fall, Dr. Walker expanded the program to 200 additional students. In

addition, short- and long-term payment plans were extended to many students who lost their employee tuition reimbursement benefits.

At the same time, we continue to work closely with the region's employers to identify the skills they seek as they hire new employees in emerging fields. Lawrence Tech has developed 35 new "fast track" certificate programs to transition professionals to new opportunities in the defense industry, media and film industry, battery technology, biomedical engineering, and bioinformatics, among others.

This fall, Lawrence Tech scheduled visits from two accreditation teams: the Higher Learning Commission of the North Central Association of Colleges and Schools (HLC-NCA), and ABET, Inc., formerly the Accreditation Board for Engineering and Technology.

It has been 10 years since HLC-NCA had last reaccredited the University (the maximum term). The overall result of the team's evaluation this year is that Lawrence Tech will again receive the maximum 10 year reaccreditation. In addition, when the Higher Learning Commission's board convenes in spring 2011, the team is expected to recommend the approval of a new Doctor of Engineering degree with various concentrations as well as a new Doctor of Philosophy (PhD) in

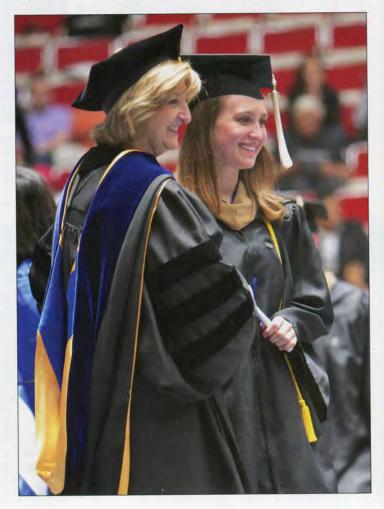
Provost Maria Vaz, the University's chief academic officer, oversees over 100 degree and certificate programs. Over 1,000 graduates comprised the Class of 2010 and all who attended Commencement in May received a handshake from her or President Walker.

the Colleges of Management and Engineering. We are very proud of the high standards and professional achievements of Lawrence Tech's faculty that contribute greatly to Lawrence Tech's overall reputation.

The ABET team visited to consider the reaccreditation of four undergraduate programs in engineering and the accreditation of two new programs: biomedical engineering and engineering technology. The team recommended reaccreditation of the four programs and we are working with the team to achieve accreditation for the new programs by the June 2011 meeting of the ABET board, at which time we will receive final notification.

We plan to continue to build a campus environment that broadens professional and personal goals and helps our students to lead and contribute to society as learned citizens. Among other major highlights of the year:

■ Naming the A. Leon
Linton Department of Mechanical Engineering: Memphis, Tenn.-based alumnus and entrepreneur A. Leon Linton,
BSME'62, donated \$2.5 million to name and endow the
Department of Mechanical Engineering. Founder and CEO of
Southern Systems Inc. which
designs, builds, and installs
custom conveyor systems for
manufacturing and distribution



facilities, Mr. Linton said that he is confident that Lawrence Tech will continue to thrive by maintaining its theory and practice approach to education, which he finds as valuable today as it was when he graduated. His gift is helping the Department fund laboratory equipment, facilities, and other needs that enhance the student educational experience.

■ Leadership Program Rollout Continues: With the start of the fall semester, the rollout of the Leadership Program to students in all four years of their undergraduate experience was completed, exposing students to leadership concepts and opportunities to practice these concepts. Rare among the nation's baccalaureate colleges and universities, Lawrence Tech's Leadership Program gives students a value-added differentiator, regardless of their individual major and chosen career field. In an ever more competitive job market, the Leadership Program provides yet another way for Lawrence Tech graduates to distinguish themselves.

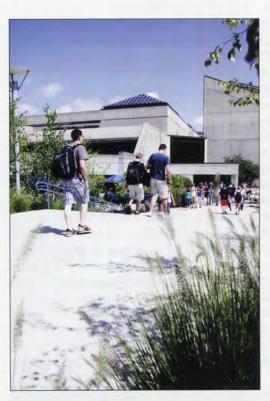
■ New Academic Programs:
In addition to the certificate programs described above, exciting new degree programs in emerging economic sectors launched during the past year include a Master of Arts in Environmental Graphics, Master of Science in Industrial Engineering, Master of Urban Design, Bachelor of Science in Audio Engineering, Bachelor

of Science in Industrial Design, and a Bachelor of Fine Arts in Game Art. These programs were developed with counsel from industry representatives and are at the forefront of new and growing career fields.

■ Quest for Success: Quest, the new College of Arts and Sciences co-curricular experiential learning program, involves students in a unique learning experience to explore their passions and future careers under the guidance of faculty and outside mentors. Students choose their projects in the areas of arts, leadership, or research. More than 40 students were involved in 27 Quest projects this past year.

■ A New Dining Experience: On June 1, ARAMARK became Lawrence Tech's new food service provider. Over the summer, many enhancements to the cafeteria took place. Chefs now provide a fresh, broad, and changing menu of specialties. Additionally, an Einstein Bros. Bagels was constructed in the atrium of the **Buell Management Building** and a Provisions on Demand (P.O.D.) located in the lobby of the University Technology and Learning Center. Our exciting new partnership with ARAMARK includes student scholarships, renovations, new equipment, and service learning opportunities for students.

■ Kern Grant Boosts Entrepreneurism: The Waukesha, Wisconsin-based Kern Family Foundation's five-year, \$1.2 million grant, announced last year, is doing much to further integrate entrepreneurial edu-



Lawrence Tech financial aid was increased by some 14 percent for the 2010-11 academic year, recognizing the importance of financial assistance in attracting and retaining good students, and helping displaced workers affected by the economic downturn.

cation into curricula offered by the College of Engineering. The grant is being used to transform Lawrence Tech's undergraduate student experience and encourage development of the entrepreneurial mindset, an approach to idea generation and problem solving in an enterprising way that benefits organizations large and small.

■ New Laptop Computers:

The rollout of impressive new personal computers for students is detailed elsewhere in this Magazine. A committee of faculty members and the Student Technology Advisory Group (STAG), as well as Student Government representatives tested 12 different machines and provided recommendations. All candidates considered had advanced processors and more RAM. Our aim is to continue to pro-

vide outstanding state-of-theart technology that enhances student learning.

■ Tuition and Fees, Financial Aid, Increase: Even as Bloomberg Businessweek reported the strong return on investment for Lawrence Tech's tuition, the entire Lawrence Tech community continues to work diligently to assure that a student's tuition investment remains an incredible value. The cost of attending Lawrence Tech is among the lowest of Michigan's private colleges and universities, and also among the lowest of America's great technological universities. We continue to increase the size and number of scholarships that are so necessary for attracting and retaining good students.

Changes in the structure of tuition and fees approved by Lawrence Tech's Board of Trustees included an 8 percent increase in tuition and fees for summer and fall 2010, and an increase of 14 percent in the financial aid budget. The Provost Grants were increased by 30 percent last year and by 50 percent this year. We are also awarding more scholarships and grants to graduate students to help those who lost tuition reimbursement from their employers. Lawrence Tech representatives testified aggressively to the Michigan House of Representatives on behalf of students to keep the Michigan Tuition Grant stable for this year. We are pleased

to be a part of a coalition that was successful in retaining the Michigan Tuition Grant for undergraduates.

At the foundation of all we strive for is enhancing and improving opportunities for student success by providing additional and ever better learning opportunities and greater access to new technologies. Your support is greatly appreciated.

Maria Vaz Maria J. Vaz Provost



Dennis King of Harley Ellis Devereaux stopped by the campus in June to give Provost Maria Vaz an advance copy of the architecture and engineering firm's publication, NEXT. Vaz was one of 15 industry leaders interviewed about growth opportunities after the Great Recession.

Among the grants awarded during 2009-10 to Lawrence Tech faculty:

National Science Foundation:

- \$769,000 for Environmental Scanning Electron Microscope (SEM): Principal Investigator (PI): Yawen Li, biomedical engineering. This SEM will be the only one in the metro Detroit area. Faculty at Oakland University, Wayne State University, and Beaumont Hospital will collaborate in its use.
- \$1.34 million for major research lab improvements in the Science Building for life sciences. Pl: Hsiao-Ping Moore, Co-Pls: Shannon Timmons, Matt Cole, Jeff Morrissette, and Julie Zwiesler-Vollick. In addition, many other Lawrence Tech faculty and facility experts worked on this proposal to renovate and create the life sciences research laboratories.
- \$300,000 for bridge research. PI: Nabil Grace, civil engineering.
- \$110,534 for DAPCEP P.U.R.S.E (Promoting Underrepresented Girls in Research, Science, and Engineering.) Co-PI for Lawrence Tech: LaVetta Appleby.

Tank Automotive Development and Research Center (TARDEC):

- \$1.48 million for fire, smoke, and toxicity research. Allows acquisition of additional equipment and employment of students to perform experiments.
 - PI: Nabil Grace, Co-PIs: Keith Kowalkowski and Christopher Eamon, civil engineering.
- \$29,810 to Robofest to support teams and deliver robotics professional development workshops to high school teachers in the metro Detroit area who lead student teams. Pl: CJ Chung, math/computer science.

Michigan Department of Energy, Labor, and Economic Growth:

• \$150,000 for the King-Chavez-Parks (KCP) Initiative – Students in Technology Achieving Results (STAR), and Select Student Support Services (4S) programs. Pl: Hsiao-Ping Moore, Co-Pl: Kevin Finn.

Michigan Department of Education:

• \$199,750 for Improving Teacher Quality. Project Director: Anthony Sky, Natural Sciences

Oakland County Michigan Works (U.S. Department of Labor):

• \$390,000 to fund the tuition of the Graduate Certificate in Manufacturing Systems for the Defense Industry. Lisa Kujawa, Kevin Finn, and Mark Brucki.

Coleman Foundation:

\$15,000 Coleman Fellows Program. Director of Project: Don Reimer. Fellows: James Stevens, College of Architecture and Design; and Susan Levine and Ghassan Azar, College of Arts and Sciences.

Ford Motor Company Fund:

• \$50,000 College Community Challenge (2010-11) program - Southwest Detroit: the region's first carbon-neutral community. PI: Constance Bodurow, architecture.

FROM THE VICE PRESIDENT OF UNIVERSITY ADVANCEMENT



Stephen Brown

The past year represented a challenge to Lawrence Technological University's fund-raising efforts, mirroring a national slowdown in contributions to charitable causes throughout the country. Giving USA, the respected journal that provides an annual assessment of fund-raising trends, reported that estimated charitable giving in the U.S. declined by 3.6 percent over the previous year. Giving to education experienced a similar rate of decline on top of a decline in the previous year.

Lawrence Tech was not immune from this trend. We have seen reductions in pledges, the amounts of pledges, and cash gifts along with reduced annual giving. However, we are very encouraged by the willingness of alumni to continue to donate in some fashion toward their alma mater. Our development team, through research, has identified another 1,700 prospects for major gifts that auger well for the forthcoming "Proud Heritage, Bold Future" campaign. Our face-to-face contacts with donor prospects increased by 31 percent over the previous year, and we have

seven, seven-figure funding requests outstanding which we are optimistic will become reality in the not-too-distant future.

Importantly, (and this is a statistic that matters a great deal when soliciting support from foundations) our faculty and staff, despite their personal sacrifices, continued to passionately contribute toward the University's Faculty and Staff Campaign. Over the past three years, our own campus "family" has contributed about three quarters of a million dollars to the campaign, a remarkable accomplishment given the economic climate. We thank them for their continued support.

Due to the cooperation between faculty and our business development team, we have, to date, also secured \$13.2 million in government and corporate grants toward the capital campaign. In the new fiscal year beginning July 1, 2010, we have already secured \$3.1 million with another \$4 million "in the pipeline" for the balance of the year. Importantly, peer-reviewed grants are higher than they have ever been in the University's his-

tory, reflecting active applied research initiatives.

As a result of all these efforts, we have reached a total of over \$49 million toward our 10-year goal of \$75 to \$100 million, a remarkable number considering the economy over the past several years. Assuming that one of the current major asks becomes reality shortly, we will go public with our campaign as the next significant gift will take us well over the 50 percent mark.

All in all, we remain realistically optimistic that we will achieve our campaign goal earlier than originally planned. We continue to benchmark our status, goals, controls, research, and other measurements against such peer institutions as Rose-Hulman, Rensselaer Polytechnic Institute, and Illinois Institute of Technology.

Over the past year, visitors to campus have included members of Congress from both sides of the aisle: John Dingell, Gary Peters, Mark Schauer, Dennis Moore (chairman of the Financial Services Committee), Candice Miller, and Sander Levin (chairman of the House Ways and Means

Committee). Also visiting were Governor Jennifer Granholm, U.S. Senator Carl Levin, Michigan gubernatorial candidates Mike Cox and Michael Bouchard, Oakland County Executive L. Brooks Patterson, Wayne County Executive Robert Ficano, and Chair of the Macomb County Board Paul Gieleghem. Additionally, many other government leaders and industry executives have visited to learn of the creative work that students and faculty are doing in alternative energy, sustainability, and in finding new uses for innovative materials.

In the area of marketing and public affairs, we continue to see some extraordinary results. Over the past fiscal year, as a result of some great stories, our media coverage has increased more than 10 percent over the prior year, surpassing that as our best year on record. In August of this year, we received some powerful news from Bloomberg Businessweek regarding the return on tuition investment experienced by our undergraduates, which we quickly promoted in a radio advertising



Steve Brown, vice president of university advancement, interviews David Wilson, BSME'57, as part of a videotape that will highlight donors such as Wilson and his wife, JoAnne, who have established an endowed scholarship.

campaign. Combined with a second radio spot in support of President Walker's expansion of the "Recovery Starts Here" program, we saw an incremental 42 students register for the fall. While this did not offset the overall enrollment decline, both radio spots reinforced the value of a Lawrence Tech education and, along with coverage in print, digital, and social media, helped us build on Lawrence Tech's solid reputation as a pre-eminent private university producing leaders with an entrepreneurial spirit and global view.

Despite the necessary budget reductions that have taken place across the University, we have strived to maintain our advertising budget, which is a must to help minimize enrollment attrition. Even though our budgets have been flat, we see our share of voice in the southeast Michigan market (our primary area for student growth) declining as competitors continue to spend aggressively. With the hiring of the Art & Science Group, we look forward to fine-tuning our messages and being more aggressive outstate and out-of-state with recruitment initiatives as the southeast Michigan market demographics for new students continue to decline.

Aggressive efforts by the Office of the Provost and our faculty to initiate new programs and certificates in areas of economic growth will help the University offset soft enrollment in the more traditional programs.

When one of the mega gifts becomes reality, we will have the initial funding available to begin the construction of a new state-of-the-art engineering facility, which should help enrollment in that college, particularly in the traditional mechanical, electrical, and civil engineering programs.

Lawrence Tech has many positive attributes in our favor that have been outlined in the President's and Provost's reports. It is up to us, in University Advancement, to work with alumni, foundations, corporations, and other donors to grow Lawrence Tech's endowment to help achieve the vision of pre-eminence and manage the "swings and roundabouts" that occur as tuition revenue ebbs and flows.

We are confident that the goals of our campaign and the growth in endowment will occur, and that Lawrence Tech will be poised to achieve its rightful place as the best private university in the State of Michigan.

Stephen E. Brown Vice President University Advancement



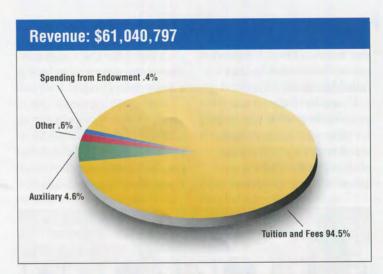
The Class of 2010 was one of the largest in Lawrence Tech's history, and thanks to the generosity of alumni and other donors, its members entered the competitive global economy equipped with an education well grounded in theory and practice. By the time of Commencement in May, some 80 percent of graduates had found jobs in their field.

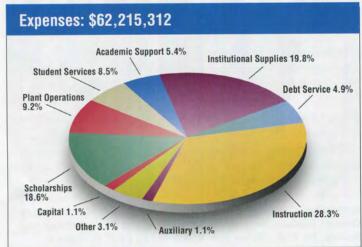


Lawrence Tech's Dustin Hurrish (center) sends the ball upfield during a soccer game in September, while teammates Kurt Morris (R) and Sean Pederson go on the attack. Men's soccer and women's volleyball are the vanguard of a return to varsity athletics. (See story on page 16.)



Thanks to the generous support of friends and alumni of Lawrence Tech, the new Class of 2014, photographed here during fall orientation activities, is provided with some of the best computers, academic facilities, and faculty in the nation.





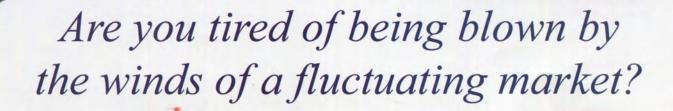
Financial results for fiscal year ending June 30, 2010



Although Lawrence Tech continues to draw most students from Michigan, students hail from 29 states and 40 nations. Even in the current economic downturn, some 80 percent of graduates had jobs in their field at Commencement. Bloomberg Businessweek reports that Lawrence Tech's return on undergraduate tuition investment is highest in the metro Detroit area.



These newly minted Lawrence
Tech graduates from the College of
Architecture and Design shared a
sense of accomplishment during the
Commencement ceremonies held at
Cobo Arena in Detroit in May.



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Lawrence Technological University Marketing and Public Affairs Office 21000 West Ten Mile Road Southfield, MI 48075-1058

THE BACK PAGE

Gerhart honored as Michigan Professor of the Year

Andrew Gerhart, associate professor of mechanical engineering, has been named the 2010 Michigan Professor of the Year by the Carnegie Foundation for the Advancement of Teaching and the Council for Advancement and Support of Education (CASE).

He was selected from hundreds of professors in the annual competition that is the only national program to recognize excellence in undergraduate teaching and mentoring.

Gerhart, who has taught at Lawrence Tech since 2002, earned his PhD in mechanical engineering from the University of New Mexico. A remarkably active teacher and researcher, he has been nationally recognized for papers and presentations about improving the educational process, and has written undergraduate text-book problems and web-based tutorials for national publishers.

He coordinates 12 courses in the College of Engineering and has developed eight new courses. He established a new minor in Aeronautical Engineering and two certificate programs in Energy and Environmental Management and Aeronautical Engineering. Thermodynamics, fluid mechanics, and aeronautics are among the subjects he teaches.

He is the faculty advisor for the SAE Aero Design team that has twice finished in the top ten in the national competition sponsored by SAE International. He also chairs Lawrence Tech's Leadership Curriculum and Implementation Committee.

Earlier this year, Gerhart received Lawrence Tech's Henry B. and Barbara J. Horldt Excellence in Teaching Award. In June, he won the Engineering Society of Detroit Outstanding Council Leadership Award from the Young Engineers Council.

In 2005, Gerhart served as faculty advisor for a 56-day,

At the ceremony in Washington, DC, where he was named Michigan Professor of the Year, Andrew Gerhart met John Lippincott (right), president of the Council for Advancement and Support of, Education.





Andrew Gerhart engages his students in a discussion about the attributes of different gate valves during a thermo science lab.

500-mile canoe expedition from Detroit to Pittsburgh that commemorated the 250th anniversary of the French and Indian War. "It has been a thrill to see where the impact of that project has led those students today: obtaining advanced degrees, serving as industry leaders, and well-respected professionals," he said.

Matthew Greer, BSME'09, GCertEEM'09, a former student now with Lockheed Martin Aeronautics who wrote to support Gerhart's nomination as professor of the year, said, "Dr. Gerhart's class was not about getting the correct answer, but rather, comprehending why you were using a certain formula or model to come to a conclusion. In industry, this is an invaluable skill to have already mastered, because one must be able to understand and apply the tools at hand to solve problems effectively and efficiently."

Gerhart has said that a professor should be approachable, personable, and accessible. "It is important to gain the trust of the student, because I set expectations high, but reachable. I have found that if students trust that the expectations are reachable, they will rise to the challenge that they are given," he said.

He stresses the importance of giving students regular feedback on their progress. He urges professors to elicit feedback from students and to attend conferences, teaching seminars, and workshops that focus on improving student learning. "It is not a professor's job to just teach, but to facilitate student learning," he said. $\triangle EP$