In his working days, Theodore Schuurmans, P.E., F.ASCE, was a traveling man who followed his lifelong calling: civil engineering. Schuurmans was born in 1933 in Grand Rapids, Michigan. His father was a bootstrap success story, and all the men in his extended family were mechanically inclined, which rubbed off on Schuurmans. “I just loved being around graders and bulldozers that were huffing and puffing and making things. I love civil engineering.”

That ardor took him around the world. As a project manager for various consultants, he worked in Saudi Arabia, Egypt, Abu Dhabi, and Pakistan, and as project manager for the CH2M HILL Companies, he worked in Egypt and Vietnam. His work varied: organize and manage all of the engineering and engineering-related departments for the Emirate of Abu Dhabi; evaluate the operation and maintenance of Pakistan’s irrigation system, as well as train the engineers to run it; start up, operate, and maintain the training for the treatment facilities in Alexandria, Egypt; and establish a strategic plan for the national highway system in Vietnam.

His most fulfilling overseas job was in Hanoi in 1996. “The people were just great,” he recalls. He still keeps in touch with his translator. After the job in Vietnam, he retired at age 63.

So satisfying was his career, and so grateful his nature, that he wants to offer similar opportunities to others. Accordingly, he has established the Schuurmans Family Endowed Scholarship. It will support Wisconsin students, as well as students at Catholic Central High School in Grand Rapids, who major in Tech’s civil and environmental engineering program. The incentive? While his career was rewarding, his education was hard-earned and he doesn’t forget that. “We didn’t have any money,” he says of his college days when he was married with children. “Now I feel good that I can help people who are in the same position I was in.” Schuurmans has included a significant provision for the scholarship in his trust and also is a longtime annual supporter of Michigan Tech.

A veteran of the Navy Seabees, as surveyor, he paid for his education with the GI Bill, summer jobs, and working on campus during the academic year.
He and his family lived in a trailer park off campus. Between hitting the books hard and eking by financially, he says he didn’t have much room for campus life. One reason: as a student, he always challenged himself. “I always took the hardest courses,” he says. But he hated chemistry, a course he believes was intended to weed out the faint of heart. He was anything but, for he routinely took 20 credits a term.

Schuurmans graduated in 1959. He began his career as an engineer for the Wisconsin Department of Transportation, the City of Green Bay, and as director of engineering for the Green Bay Metropolitan Sewerage District. After this last assignment, he went abroad. “I’ve been in most of those countries that one reads about in the paper today,” he says.

His travels gave him a broad perspective. “When you work overseas like I did,” Schuurmans says, “you become more tolerant of change”—as well as cognizant of cultural differences. In some ways, those differences are stark. “We’re a wealthy country, and we have desires and goals,” he says. “Many people in other countries have a hard time just to survive.” In other ways, the similarities are telltale. “We’re all the same,” he says. “We’re taught differently. We’re brought up differently. But generally, when people come together, the Golden Rule applies in most countries.”

He is the father of six. “I’m very proud of what my kids have accomplished and how their children are doing. It’s incredible. I’m blessed.” Schuurmans is a founding member of the Fox River Valley chapter of the Alumni Association. He is a longtime supporter of the United Way. He is a member of numerous professional engineering associations, and he has received several awards for his contributions to the field of civil engineering.

“The profession has been good to me,” he says. “My job has been fantastic—a great ride. I made mistakes in life personally and professionally. I wasn’t perfect. But I wouldn’t change anything.” He was resilient. “You stumble, you fall. Nobody pushed you. You get up and go on.”

These days he lives in Lakewood, Wisconsin, where he is the vice chair of the Town of Lakewood Plan Commission.

Michigan Tech is in select company as it strives to improve the delivery of education in science and engineering.

The Michigan Institute for Teaching Excellence Program, or MiTEP, was recently funded by a grant of $4 million from the National Science Foundation.

Michigan Tech received one of only four NSF grants nationwide to establish math and science teacher institutes that are envisioned to improve science education in the public schools.

Tech faculty in geosciences and education will work with middle-school earth science teachers to improve instruction and curricula for what is often a student’s first science class.

Earth science is about how the earth works, and it includes the history of earth and the understanding of weather, climate, earthquakes, volcanoes, floods, mountains, minerals, oceans, and atmosphere. Geology Professor Bill Rose is the lead researcher on the project. He says, “It is increasingly vital for all citizens to understand the limits of sustainable life on earth through earth science because the current generation in school will face critical decisions that require a more well-informed public.”

Declining interest in STEM (science, technology, engineering, and mathematics) courses has led to an effort by educators to spark an interest at an early age. Strong teaching of earth science is aimed at inspiring students with the increasing relevance of science and math.

One element of this program, then, is to improve curriculum through instructional modules, assessments, and professional development offerings for teachers, who will have the advantages of both direct involvement and distance-learning programs.

Public school earth science teachers involved in the program will receive credit towards a master’s degree while they learn to improve instruction. University researchers will guide the teachers’ efforts with expertise and knowledge from various disciplines. Grand Rapids public schools will be a focal point of the program, with the greatest number of teachers involved.

The project, begun in January, follows a long tradition at Tech of high-quality programs for teacher improvement. “It’s the natural development of things many of us have been doing on campus for years,” explains Jacqueline Huntoon, dean of the Michigan Tech Graduate School. “It’s a credit to all those in teacher education at Tech to be selected for the award.”

Tech faculty will be collaborating with earth scientists from Grand Valley State University, the American Geological Institute, the National Park Service, and the Grand Rapids Area Pre-College Engineering Program. An external evaluation team from the Colorado School of Mines will oversee data collection and analysis.

“If this effort works,” Rose concludes, “it could be a template for improvement in STEM education throughout the whole country because we think the educational problems in Michigan are quite typical for the country.”

Faculty members working with Huntoon and Rose include Bradley Baltensperger and Kedmon Hungwe, of the Department of Cognitive and Learning Sciences, and Christopher Wojick, of the Department of Civil and Environmental Engineering. Chris Anderson, special assistant to the president, also has contributed to the program.
Generic drug savings

Dear Savvy Senior,
Are generic medications as effective as brand-name drugs, and if so, why are they so much cheaper? Also, how can I find out which medicines are available in generic form?

—Brand-Name Buyer

Dear Buyer,
Generic drugs are generally as effective and safe as their brand-name counterparts because they’re virtually the same—except for the price of course. Here’s what you should know.

Copied drugs
Approved by the US Food and Drug Administration (FDA), generic drugs contain the same active ingredients, dosage, and quality as their brand-name counterparts. The only differences between them are the name (generic drugs are usually called by their chemical names), shape and color of the drug (US trademark laws don’t allow generics to look exactly like the brand-name drugs), and price (which is between 30 percent and 90 percent less).

Cost difference
The reason generic drugs are so much cheaper is because their manufacturers don’t have the hefty start-up costs that the original creators of the drug do. When a pharmaceutical company creates a new drug, it spends millions of dollars on the research, development, and clinical-testing phase. Then, if it gets FDA approval, it has to turn around and spend even more money to market the drug. The total cost can rise into the hundreds of millions by the time the drug is in the hands of consumers.

In an effort to recoup their investment, the brand-name drug makers charge a premium price, and they are given a twenty-year patent protection. After those twenty years are up, however, other companies can apply to the FDA to sell generic versions. But because generic manufacturers don’t have the same research, development, and marketing costs, they can sell their product much cheaper. Also, once generic drugs are approved, there’s greater competition, which keeps the price down. Today, more than half of all prescriptions are filled with generic drugs, and according to the Congressional Budget Office, generic drugs save US consumers an estimated $10 billion per year.

Find generics
Since not all brand-name drugs have generic alternatives, the easiest way to find them is to ask your doctor or pharmacist, or check the FDA online drug catalog at www.accessdata.fda.gov/scripts/cder/drugsatfda. Better yet, visit www.rxaminer.com, a great website that lets you easily search for brand-name drugs and their generic alternatives, if they exist. If they don’t, it provides other low-cost alternative medicine options, if available.

2009 generics
Every year, a number of brand-name drugs lose their protective patent and go generic. Among those to watch for in 2009 include the migraine drug Imitrex (sumatriptan), ADHD drug Adderall XR (amphetamine), antiseizure drugs Topamax (topiramate) and Lamictal (lamotrigine), allergy drug Clarinex (desloratadine), the herpes antiviral drug Valtrex (valacyclovir), GERD drugs Prevacid (lansoprazole) and Aciphex (rabeprazole), and enlarged prostate drug Flomax (tamsulosin).

Shopping tips
Many chains like Wal-Mart, Target, Costco, Kmart, CVS, Walgreens, and Safeway offer great deals on many generic drugs. Wal-Mart, for example, charges only $4 for a thirty-day supply and $10 for a ninety-day supply with no eligibility restrictions. You also can find great generic deals online at sites like Rx Outreach (www.rxoutreach.com; 800-769-3880) and Xubex Pharmaceutical (www.xubex.com; 866-699-8239).

Savvy Senior is written by Jim Miller, a regular contributor to the NBC Today Show and author of The Savvy Senior. The articles are offered as a helpful and informative service to our friends and may not always reflect this organization’s official position on some topics. Jim invites you to send your senior questions to: Savvy Senior, PO Box 5443, Norman, OK 73070.
Michigan Tech’s McNair Society

Named after Fred McNair, president of the University from 1899 until 1924, the McNair Society honors alumni and friends who leave a legacy for Michigan Tech by providing for a planned gift or bequest through their estates. We welcome the following new members to the McNair Society:

Anonymous ‘42
William P. Bodett ’75
George ’63 and Sandra Goodrich
William ’47 and Jo Helen Goudey
Linda Kemnitz and Sabrina Goldman
Rodney ’55 and Teresa Mattson
Michael ’93 and Melissa ’95 McGeehan
Gaynor L. Nash ’74
Theodore Schuurmans Jr. ’59
Nancy Byers Sprague ’87 and Dianne Sprague
Mary Lee and Roger ’44 (dec) Storves
W. Alan ’61 and Emilyann Van Der Sluys

Michigan Tech is grateful for their foresight and generosity. Please notify our Office of Gift Planning if you have provided for the future of the University through your estate and have not previously informed us. We would be pleased to recognize you, too, as a member of the McNair Society.

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Make a Difference with a Lasting Legacy

Creating an endowment fund is one of the finest and most far-reaching things anyone can do for Michigan Tech. More and more donors, like Theodore Schuurmans, want their commitment to the mission and ideals of Michigan Tech to carry forward for generations to come.

Endowment funds are kept separate from the operational funds of the University, and they are invested for long-term stability and growth. Our policies prohibit us from spending the principal. Only the earnings, or a portion of the earnings, are used each year to support the specified purposes of the endowment.

Endowments can be created to provide annual support for faculty positions, scholarships for undergraduates, or fellowships for graduate students. They also can be used to create special programs or to help underwrite the maintenance of a building or lab. A written agreement is kept on file and its terms are carefully followed.

An endowment can bear your name as the donor who established it, or the name of someone else you wish to honor. It can be a family member, such as a parent, or a faculty member who influenced your life.

You can create an endowment with a lump sum gift or contribute to it over time. You also can establish an endowment with a bequest or the remainder of a life-income gift like a charitable gift annuity or a charitable remainder trust. Some start a fund with a modest amount and arrange for additional funding through estate assets. In any case, you can make a significant difference tomorrow by doing something today.

Endowment funds make Michigan Tech a stronger, more viable organization. They provide the University with a baseline of support and enable its leaders to plan ahead with greater confidence. Endowments also inspire others to become involved in supporting Michigan Tech’s worthy mission of preparing students to create the future.

Learn more about ways to create an endowment.

Order a copy of our free brochure, Creative Legacies Through Endowments, Memorials and Scholarships.

- Return the enclosed card,
- call our Office of Gift Planning at 906-487-3325, or
- send an email to giftplan@mtu.edu.