THE UNIVERSITY OF TOLEDO

ALUMNI

WHO HAVE CHANGED

THE WORLD

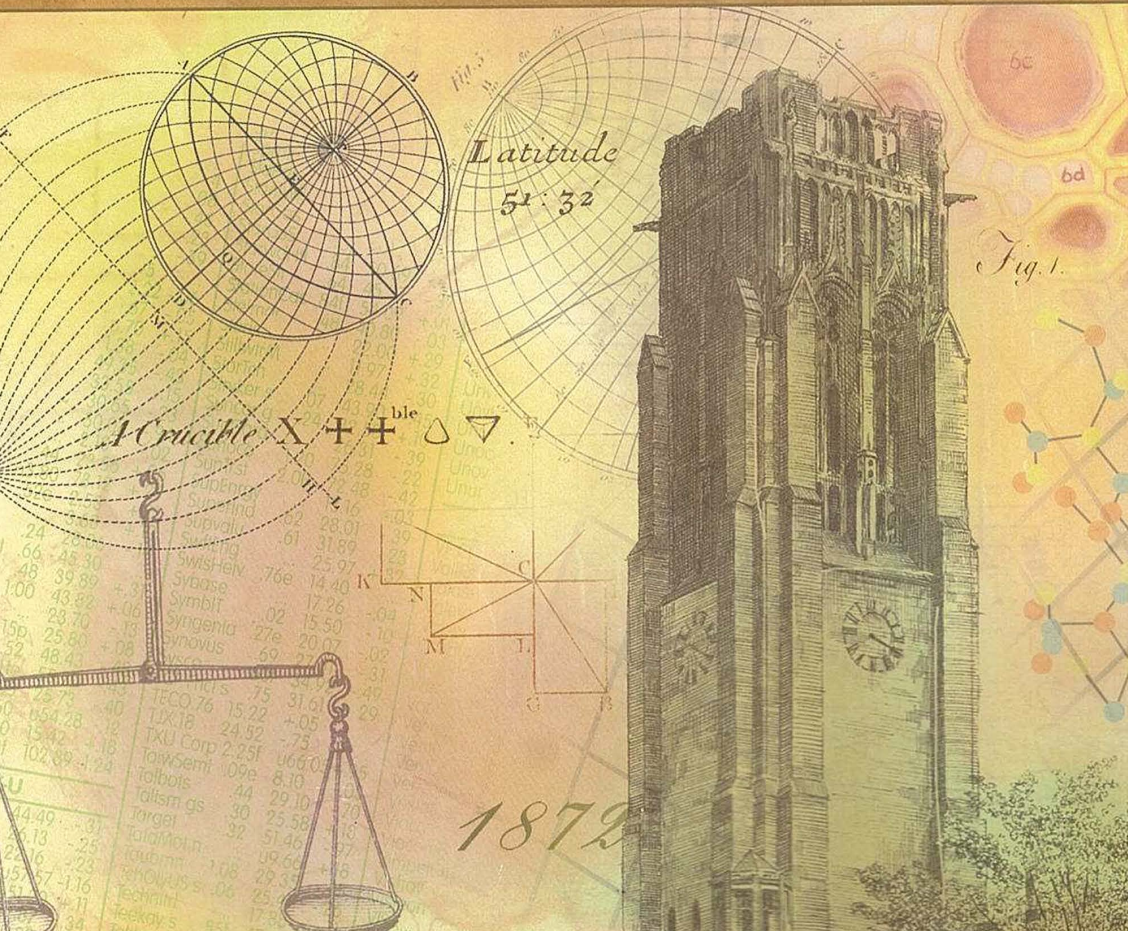

Photo courtesy of The Ann Arbor News

DR. NINA McCLELLAND:

"Public health as first priority."

If television producers were looking for an excellent "Ask Dr. Chemistry" host, one meeting with Dr. Nina McClelland (A/S '51, MS '63) and they'd likely whip out a contract for her signature. Following a long career in the field, the ebullient and sharp-witted McClelland devotes a portion of her formidable energies to making chemistry more accessible to the scientific layman. "Chemistry often gets a bum rap. The public doesn't get it," she says, noting that chemistry is far more than the sum of lab coats and Pyrex beakers.

She should know. Currently the president of her own consulting service whose clients have included the United Nations, the World Bank, Underwriters Laboratories and the National Science Foundation, she can lay credible claim to scientific strides that have improved the health and safety of Americans nationwide.

She began early. Armed with her University of Toledo bachelor's degree in chemistry and biology, she joined the City of Toledo in the Health Department in 1951 as a chemist and bacteriologist. It was through this job that she met Walter Snyder — former director of the Environmental Health Division — who was to play an important part in her professional path. McClelland transferred from the laboratory in health to the lab at the wastewater treatment facility. By 1963, she had earned her master's degree from UT and was chief chemist and head of industrial wastes for the city — a groundbreaking position for a woman to hold.

Nevertheless, McClelland left what she's called her "happy rut" when Snyder, who had by then founded National Sanitation Foundation (NSF), persuaded her to get her doctoral degree at the University of Michigan. Despite the demands of teaching a UT class in environmental chemistry, and a brush with death when her diverticulum ruptured, Nina finished her doctorate in 1968.

Sadly, Snyder died of leukemia before she completed her degree, but his

widow, Doris, stayed close with McClelland. And NSF was pressing her to join the company. For someone of McClelland's background, NSF's mission of improving public health through science was a good match. Snyder founded the company to fill a need in the health and environmental fields for the same kind of standards that Underwriters Laboratories had developed for the electrical and fire safety fields. NSF would, in effect, be the technical liaison between supplier and consumer, linking companies dealing in food equipment and water/wastewater products with the public they served. With universally accepted standards in place, he believed, everyone would benefit.

McClelland came on board in 1968.

As NSF's director of water research, her first project was a water-quality monitoring collaboration with the Environmental Protection Agency (EPA). "The team developed a mobile monitoring unit with instrumentation so sensitive that the van in which it was housed could be driven up to a house, connected to the hose bib on the outside and provide a read-out of the water quality in the system," she says.

A chance conversation with an NSF executive led to full immersion in negotiating union contracts, which in turn made her a strong candidate for the president's position when it became available in 1980. Along the way, she made valuable contacts in Washington, D.C., which widened both NSF's sphere of influence and her vision of the company's future. Early on, she saw a need to go global, and during her presidency NSF opened offices in Europe and Canada, and formed partnership agreements on three continents.

Ask her to name the accomplishment she prizes most, though, and she'll point to the water quality additives program, which did a great deal to untangle a situation that could have been a regulatory disaster. In the process, it performed an immeasurable service to the health and safety of anyone who's ever drunk water — a wide audience, to be sure.

Nina, by the way, believes that everyone has the ability to serve that kind of constituency in some capacity. "I'm a strong advocate for community service," she says emphatically. "It's very important for people to remember how many ways there are to give something back to their communities." Her own efforts include serving on the boards of directors for the American Chemical Society (where she has chaired the Executive Committee since 2001), the American National Standards Institute, the Green Chemistry Institute, Cleary University and Indiana University's School of Public and Environmental Affairs, to list only a few.

Much of that service was still in McClelland's future in 1985, when the federal Safe Drinking Water Act was amended so that the responsibility for monitoring water quality widened far beyond the purview of water treatment plants. With the new amendment, every step that took water from the treatment facility to the consumer was now part of the monitoring process.

The timing was far from ideal. Competing priorities and lack of funding at the EPA made implementation problematic. The beleaguered agency focused more of its attention on chemicals that were easier to detect rather than

on the ones scientists determined posed the greatest potential risk to public health.

In conversations with EPA officials, McClelland shared her strategy — a plan that was both affordable and comprehensive. A grant from the EPA had opened the door to a new alliance. NSF, along with the American Water Works Association and the Association of State Drinking Water Administrators, formed a consortium to develop and set the standards required by the act's new amendments. One was for substances added to drinking water as part of treatment, the other for products with which water comes into contact from its treatment, storage and distribution to the time it reaches the consumer's tap.

The new standards established the types and maximum allowable levels of contaminants which would be expected to produce no significant adverse health effects when ingested, and applied to treatment chemicals, paints, coatings, pumps, piping and plumbing fixtures. The results were safer drinking water and NSF's new largest revenue program.

McClelland, though, has always been definite about the order of importance: "Public health as first priority, the company bottom line as second." She remains equally emphatic about crediting her staff at NSF for the company's financial and growth successes.

She retired from NSF in 1995 but maintains an impressive consultation schedule, and has more than 100 books, papers and presentations to her credit. In 2003, she received an honorary doctor of science degree from The University of Toledo.

Still humming with curiosity and energy when she talks about the future of chemistry and all science, she finds nanotechnology particularly fascinating, saying in a recent interview, "Things are getting smaller, better and cheaper, and chemistry is leading the way."

And cooperation, as she well knows, will be the best road on that way: "You won't see the hard-edged divisions between various sciences. Chemistry is being transformed." McClelland, who is also an adjunct professor of chemistry at The University of Toledo, plans on staying in the action for some time to come, saying, "If I slow down now, I'm afraid it would signal some sort of ending, and I'm not ready for that."

Portions of this biography excerpted from *Learning Curves in Business* by Jeff Mortimer; copyright 2000, Momentum Books. Used with permission.

Part 2: Hard Work and Warm Empathy

In October 1929, a man in Columbus, Ohio, was so disappointed when his wife gave birth to a girl that he threatened to leave her if she didn't give the baby up for adoption.

So the woman took her newborn daughter and moved back in with her parents in Toledo as the stock market crashed and the Great Depression sank the country into a decade of despair.

Dr. Nina McClelland, chairwoman of the board of directors of the

American Chemical Society (ACS), the world's largest scientific society, was that baby.

Now she looks back on a satisfying career as an accomplished scientist, former CEO of the National Sanitation Foundation (now NSF International) in Ann Arbor, Michigan, frequent board member and world traveler.

"Everyone has their own definition of retirement," said McClelland, who admits her schedule is so full she's not quite sure if she knows what the word means.

McClelland is a no-nonsense woman whose quick sense of humor and deep attachment to people keep her from appearing standoffish. She works hard, plays hard, even sleeps hard. And if a problem does awaken her in the middle of the night, she gets out of bed and takes care of it.

In fact, getting up at 3 a.m. is fairly typical for McClelland. As chairwoman of the ACS board, she travels often to Washington, preferring the 6:30 a.m. shuttle so she can be home in time to say good night to her dachshunds, Reili and Corky.

It's not unusual for a week's travel to include Philadelphia, Washington and Chicago, and 20-hour days are not uncommon for her.

"She's phenomenal; she just does everything beautifully," said Stan Israel, fellow member of the American Chemical Society and dean of science at Southwest Texas State University. "The woman is just absolutely untiring and has time for everything. She goes at 110 percent all the time."

Israel called McClelland a fantastic manager and scientist who's been a tremendous chairwoman of the board of the 163,000-member organization, making sure everyone is heard.

"Her style is such that it encompasses everybody," Israel said. "It's very people-oriented, very empathic-oriented. She understands people and what they're going through. She feels, and that comes across. When she asks you about your spouse or your children, it's honest. She really cares about the answer."

McClelland's aunt, Fern Mervos, admires McClelland's energy and perseverance. "Every job she takes on, I wonder if she's going to give out on this one," Mervos said.

Close friend Shorty Witting met McClelland in Toledo 40 years ago when both worked at the health department there. "She's a go-getter," said Witting, a frequent house guest at McClelland's comfortable home on the golf course in Stonebridge just south of Ann Arbor. "Her schedule is terrific. How she keeps it, I don't know. She always calls to find out how we are, but first it's always, 'How are the pups?'"

McClelland credits both her aunt and her mother for encountering many barriers and overcoming them.

"But what has meant the most to me is how much and how well they cared for their families," she said. "When people talk about the importance of families, it is not abstract conversation to me. I can relate perfectly."

McClelland's definition of chemistry is simple.

"It's the enabling science," she said. "Virtually everything we enjoy today can be traced to chemistry. We can change a polymer into a shirt ... an acid into a life-saving medicine. It's chemistry that turns a happy person into one in the throes of depression — and now chemistry is providing the means of changing him back."

Sometimes on Halloween, she holds out a basket of candy and asks kids who come to her door, "You want some chemistry?" while explaining that a chocolate bar contains 300 chemical compounds.

McClelland looks back with fondness on her 30-year career with NSF International, which provides scientific and technical expertise in health and environmental sciences to government, consumers and industry.

"When I was there, it was my baby," she said. "Now it has new leadership, it has new people, it has new direction. I don't want to be viewed as somebody who's interfering with that. It has a great mission and does it very well. We took it international. I loved the job and I still love the company."

That company was founded by Walter Snyder, who was McClelland's mentor when she came to the University of Michigan to complete her PhD. It was his wife, Doris, with whom she made her home for 30 years after he died.

"I always said, 'He left me his company. And he left me his family,'" she said.

McClelland said she never married because the man she loved was lost in the Korean War, and she never met anyone else like him.

But she's too busy with the present to lament the past. She enjoys going to Capitol Hill to promote federal funding for research initiatives. In 2002, she traveled to Russia with a few other scientists to develop a partnership between the United States and Russia in polymer chemistry. It's not her field, but she was asked to go because she's so experienced in policy-related issues.

McClelland shows no signs of letting up any time soon.

"I tried every rocker in town," she said with a grin. "I couldn't find one that felt good."

This article by Jo Collins Mathis first appeared in the May 27, 2002, edition of The Ann Arbor News. Used with permission.

Nina's message:

Dear God...

Please make me the kind of person my dog thinks I am!

"My dog." Until last year it was "my dogs" — Reili and Corky — two faithful, doting companions. Both miniature red dachshunds, they were blood relatives — aunt and niece. Both were the core of my family. Now, it is just Corky. "Dear God" is the message on a plaque given to me by my mother. It was and is appropriate! I have always wanted to be that kind of person.

When I was very young, I set the priorities for my life:

1. God;
2. family;
3. other, including profession and community service.

I believe that, in that order, they are related directly to any contributions I may have made in my lifetime. I have been so richly blessed, but I have done nothing alone. If there are those who see successes they would attribute to me, they should see many other faces in the picture. I owe so much to so many — yes, to my staff at NSF International, but also to so many more!

I had the greatest Mom ever. She was a single mom from the time I was about a year old, and I was an only child. What does that tell you? She used to like to say, "What's mine is yours and what's yours is mine also." In fact, the opposite was true. She worked and gave me all she had. I lost her in 1997, but her spirit is with me still, every moment.

My Mom's younger sister, Fern, was and is my "other Mom." When I was young, Fern and The University of Toledo were synonymous. For 20 years, she was Fern Welker, professor of mathematics. She was clearly the magnet that brought me to this university.

My extended family includes "Shorty" (Lavone) Witting, a dear friend and housemate for my mother and me until I left to move to Ann Arbor. Shorty is perhaps the finest, best, most giving person I have met.

With these few, there are the rest of my loving, always supportive family: my grandmother and grandfather; Fern's husband, Nick Mervos, and their children and grandchildren; and Mom's older sister and family — my trusted friends and respected global colleagues in industry, academia and government. It is these wonderful people who dominate any pictures of my "successes," and I welcome the chance to thank each of them in this very special way.

At times, I believe, we should all pause for a glimpse in our own rear-view mirrors, be thankful for what we have today and pray for a future filled with peace and hope.

I would be remiss if I didn't tell you, too, how much it means to me to have the opportunity to return to The University of Toledo as a member of the adjunct faculty in the department of chemistry. This is a privilege and I truly like what I see: my school as a Center of Excellence in education, research and community outreach; an administration second to none; a world-class faculty; and classes of eager-to-learn students — they are our legacy.

Dear God, may I grow to be the kind of person my dog thinks I am, may I be worthy of the gifts I've been given, and may I always be grateful for the family and friends who have made my life what it is ... and what it can still be.