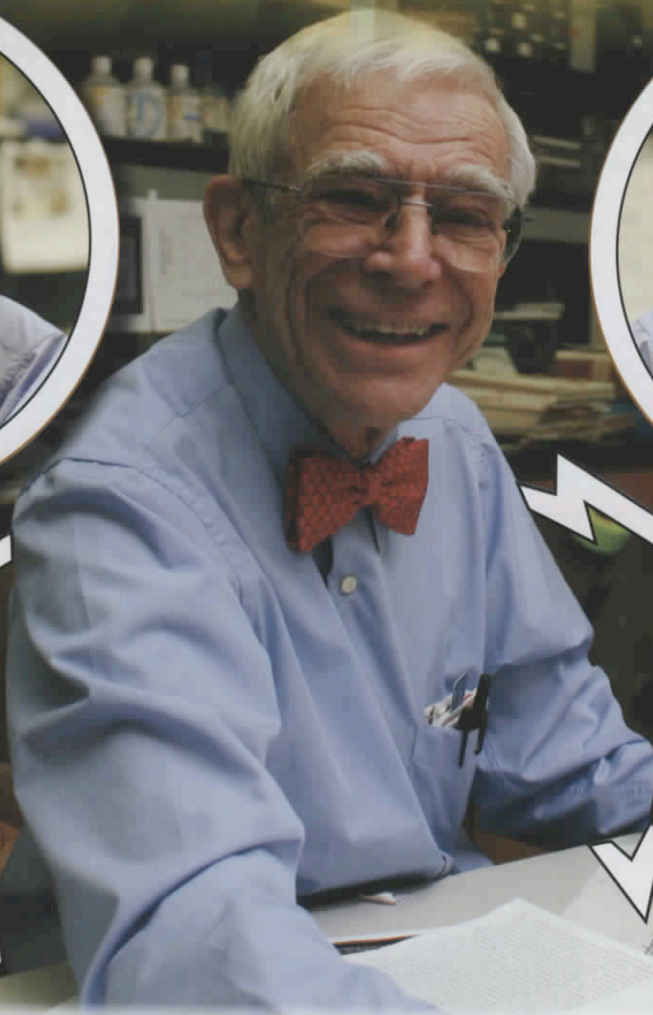
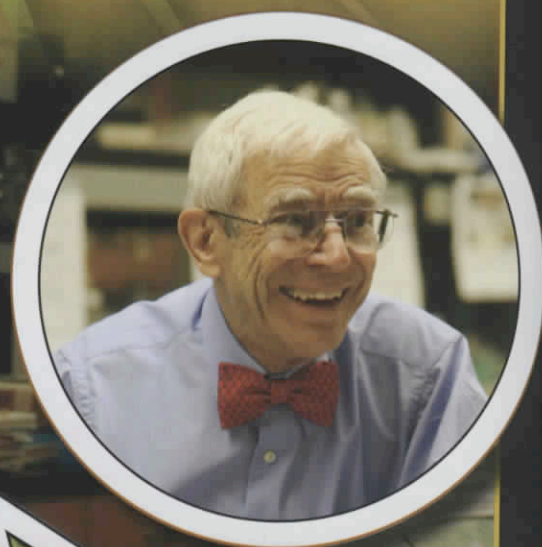


DOCTOR VAN IS

BUCK ROGERS

IN THE 21st CENTURY



A MANDATORY RETIREMENT IN 1989 WAS A MERE FORMALITY TO DR. LESTER VANMIDDLESWORTH. THE RESEARCHER, CLINICIAN, AND PROFESSOR EMERITUS OF PHYSIOLOGY, BIOPHYSICS, AND MEDICINE STILL CALLS HIS LAB AND OFFICE, ON THE FIFTH FLOOR OF THE NASH RESEARCH BUILDING ON THE CAMPUS OF THE UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER, HOME-AWAY-FROM HOME, 12 HOURS A DAY, 6 DAYS A WEEK, AND FOR A FEW HOURS AFTER CHURCH ON SUNDAYS.

BY CHANDRA HARRIS-MCCRAY

Dr. Van can get anyone excited about the small gland in the neck called the thyroid.

"Look, look, see these were the thyroids of cattle. Now, isn't this something?" he quickly asked.

The eyes of the University of Tennessee Health Science Center's researcher and professor emeritus of physiology, biophysics, and medicine, formally known as Dr. Lester VanMiddlesworth, opened wide in amazement through his thin-rimmed eyeglasses.

He stood. He could not sit still. The mere thought of the small neck organs he held in his hands 56 years ago can still make his passion for studying endocrinology bubble over.

"See this. Look, 10 times, 100 times, 1000 times over," he said, as he ran his right index finger back and forth over his pencil markings documenting high levels of radioactive iodine found in the thyroids of Tennessee cows and sheep.

"Look, here is another one," he said as he pulls out another yellowing scroll from a tubular cylinder. "Again, just look, 10 times, 100 times, 1000 times over."

"This is just something. It is just so exciting," he said with enthusiasm.

It was an extraordinary "something" that led to the birth of the 1963 Nuclear Test Ban Treaty when Dr. Van's observations revealed the testing of nuclear bombs in the 50s were contaminating the atmosphere and falling on the grass animals were ingesting. His discovery earned him a lifetime career grant from the National Institutes of Health.

"It turns out that anytime there was a nuclear test anywhere in the world, the thyroid glands of cows would become contaminated with radioactive iodine you could measure in the lab," Dr. Van explained.

"I'll never live to repeat that experiment—what a rare opportunity," he said, reflecting.

His mark in history, captured in a display of radioiodine data scrolls at the Smithsonian National Museum and its affiliated Atomic Testing Museum in Nevada, seemed as if it just happened yesterday as he excitedly unrolled scrolls of data.

A small, red poinsettia offered a spot of color in Dr. Van's lab which was laden with stacks

of documents, books, glass beakers, trinkets, data machines, computers, and file cabinets. What may appear disheveled to a visitor is organized

"just-so," like the bow tie and pocket protector he wears.

Dr. Van reached in a drawer and pulled out a small, vintage tin resembling an Altoids mint container.

"Look at this," he said. "I must have received hundreds of these cigarette boxes."

For 30 years, researchers worldwide, and even some farmers, sent Dr. Van over 80,000 animal thyroids from six continents.

"The first foreign sample came to me in this cigarette box from a physicist in England." It was like Christmas morning when the mail carrier delivered those packages to Dr. Van, who initially collected animal thyroids from local slaughterhouses.

Dubbed the world's most enthusiastic scientist by his colleagues in the International Thyroid Association, VanMiddlesworth's enthusiasm for pioneering discoveries began long before he became a fixture on UT's Memphis campus in 1946.

The notion of science and technology as a swashbuckling mission came to life for Dr. Van in 1930 with nuclear fission and Buck Rogers in the 25th Century on the radio.

At the age of 11, using money he earned from selling *Liberty* magazines for five cents a copy, Dr. Van bought a "nickel's worth of sulfur and charcoal and saltpeter.

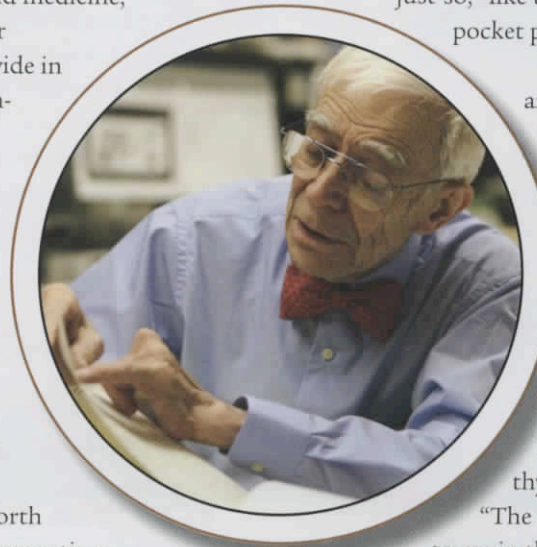
"I didn't know it was called science," he said, "I was just building and investigating."

One of his early experiments as a teenager in the basement of his Alexandria, Va., home sent him into the middle of the street flagging down medical help. The accidental explosion severed three fingers on his left hand.

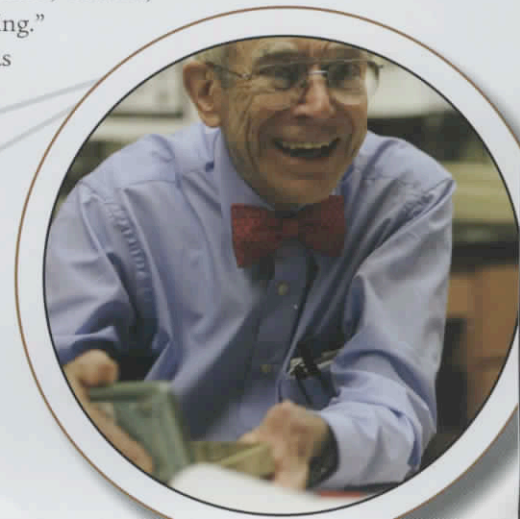
He kept stocking his lab with glass beakers and vials discarded from his high school chemistry department. Hungry to

"TEACHING—IT IS LIKE RAISING CHILDREN; YOU BECOME A PART OF THEM. IT IS REALLY THE MOST EXCITING THING YOU CAN DO."

—Dr. Lester VanMiddlesworth



DR. VAN HOLDS A VINTAGE CIGARETTE TIN SENT TO HIM BY A PHYSICIST WHO READ ABOUT HIS RESEARCH AND SENT HIM CATTLE THYROIDS FROM ENGLAND. FOR 30 YEARS, DR. VAN STUDIED MORE THAN 80,000 ANIMAL THYROIDS FROM SIX CONTINENTS.



SINCE 1946, DR. VAN HAS BEEN A FIXTURE ON THE MEMPHIS CAMPUS AND AN ICON AROUND THE WORLD AFTER HIS OBSERVATION AND DISCOVERY OF RADIOACTIVE IODINE IN THE THYROIDS OF ANIMALS, WHICH LED TO THE 1963 NUCLEAR TEST BAN TREATY. HIS SCROLLS OF DATA TRACKING THE EFFECTS OF FALLOUT ON GRAZING ANIMALS ARE DISPLAYED IN THE SMITHSONIAN NATIONAL MUSEUM AND ITS AFFILIATED ATOMIC TESTING MUSEUM IN NEVADA.

learn more, he attended the University of Virginia “with no intention of getting a degree, I just wanted to take all the science classes offered,” said Dr. Van, who worked nights answering the phone for a taxi company and sweeping the university’s gymnasium floor to get through college.

The University of Virginia chemistry graduate also earned master’s degrees in chemistry and physiology. While studying for his doctorate at the University of California, Berkeley, he worked for the Manhattan Project and studied the metabolism of an unidentified substance which was later recognized as plutonium.

With only a couple hundred dollars to his name, Dr. Van sent queries to see if anyone would allow him to teach physiology in exchange for his medical degree. A response came from UT, and Dr. Van began a six-year agreement that alternated between teaching and medical education. He earned his medical degree in 1951 and became a full-time UT faculty member.

Although he retired in 1989, it is hard to tell. Exuding more energy than a 21-year-old, Dr. Van opts for the Nash Research Building’s staircase instead of the elevator to get to his fifth-floor office and lab space by 7:30 a.m. most mornings. The 91-year-old recently gave up his bicycle helmet and quit putting the “pedal to the metal” for the four miles he travels from his midtown Memphis home to UT.

His 12-hour days, six days a week (with a few hours logged on Sunday after church), filled with teaching, researching, and mentoring have been harder to give up. At the nudging of his four adult children, Dr. Van is trying—instead of leaving at 8:00 p.m., he tries to leave the office by 7:00 p.m.

“What else is there?” he asked.

“Each day is an opportunity to find new things that are unexpected and unsearched, and they are always better than you ever imagined.”

“I may never leave,” he said. “I would have to take my lab with me.”

His quest for science is infectious among his colleagues and students alike.

“He is the ultimate scientist, scholar, and wise man,” said Dr. Gabor Tigyi, who is professor and chair of the department of physiology at the UT Health Science Center. “He is a treasure I must protect. As long as I am chair, he will have plenty of lab work and assignments to fulfill. I cannot think about not having him here.”

Dr. Van’s profound contributions to the university and mankind are why Tigyi feels it was long overdue to establish an endowed professorship in Dr. Van’s honor.

“AND SO, I THINK IT IS PART OF THE INTEGRATION OF ALL NATURE. IF YOU LOOK DEEP ENOUGH AT ANYTHING, YOU WILL FIND THERE IS NO SEPARATION. IT IS ALL ONE— ALL SACRED.”

“He more than deserves it. There is no other scholar that even comes close to him,” Tigyi said.

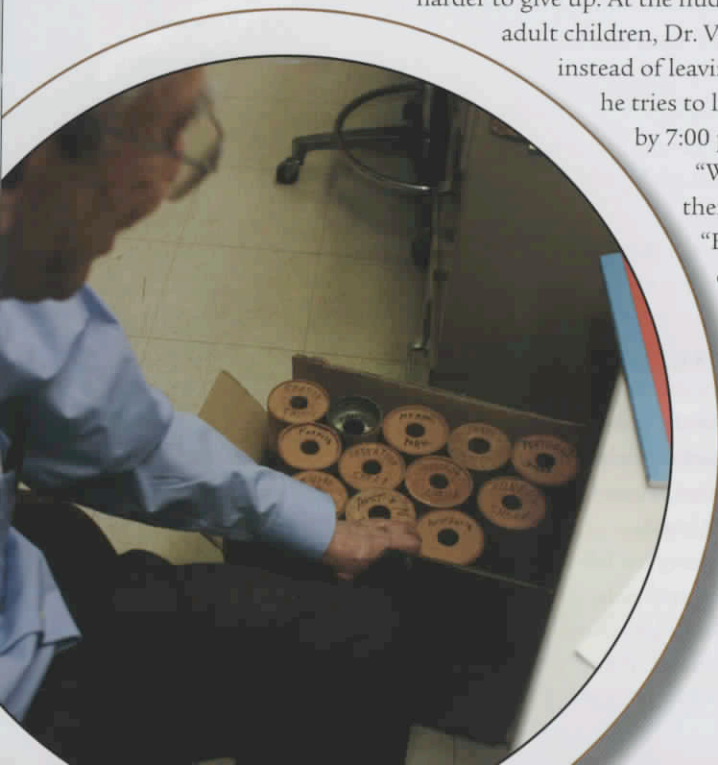
Dr. Van’s efforts have not gone unnoticed. In 1970, 1983, 1985, 1986, 1988, and 1993, he was presented with the Outstanding Teacher Award by the UT Medical Student Executive Council. In 1989, he received the UT College of Medicine’s Distinguished Alumni Award, and again in 1993, his teaching was commended when he was bestowed with the Golden Apple Award by the university’s medical students.

“Teaching—it is like raising children; you become a part of them,” he said. “It is really the most exciting thing you can do.”

Recently, Dr. Van’s teaching and research, along with medical graduate students, led him to document iodine deficiency associated with endemic goiters among the mountainous population in Haiti. “Through this continuous research process, we have learned that iodine supplements are needed,” Dr. Van explained.

“His work continues to touch the human race,” said Tigyi.

While studying rats exposed to high altitudes at the University of Virginia in 1941, the thyroid





HIS PARTNER IN LIFE AND SCIENCE, WIFE OF 62 YEARS, RUE, HAS SPENT THE LAST TWO DECADES AS DR. VAN'S LAB ASSISTANT. DURING THEIR COURTSHIP, RUE OFTEN ACCOMPANIED HIM TO HIS LAB "TO HELP FEED THE RATS." PAYING HER IN THE FORM OF KISSES, DR. VAN SAID HIS CAREER WOULD BE NOTHING WITHOUT HER.

nabbed his attention and never let go, the same way his wife, Rue, still captures his heart.

Married in Pigeon Forge, the two, after 62 years, are still in sync—her red cardigan and lipstick match his red bow tie.

"I met her a few times during Intersarsity Christian Fellowship meetings," explained Dr. Van of his encounter with the former Nellie Rue Franklin, who graduated with a nursing degree in 1948 from the UT School of Nursing in Memphis.

"Our first date, I met her at the nurses' house," Dr. Van recalled. "We were going to see...what was his name?" he turned and asked his wife. Before he could finish the question, she chimed in and finished his thought: "Joey E. Brown."

Dr. Van continued, "Yes, yes, he was quite a famous entertainer of our day.

"I told her 'Let's go up to Madison Avenue and catch the bus downtown to the show' and she said, 'No, let's just walk.' Wow! That was just so exciting that she wanted to walk with me.

"We have been walking together ever since," he said, "hand in hand, side by side."

For the last two decades, Rue has been at Dr. Van's side as his lab assistant. The former nurse employed her clinical experience and tech-savvy ways to help Dr. Van analyze and transfer research data to a computer.

"In fact, she has been working with me ever since the day she met me," Dr. Van explained.

"When she first shook my hand, I said, 'Would you like to come over to my lab and help me feed my rats?'"

Rue continued, "He was so enthusiastic about his work that I was intrigued. Yes, I would come to the lab and help him feed his rats after I first met him."

Joking, Dr. Van said, "Her paychecks are pretty expensive—I pay her in kisses."

"I couldn't do any of it without her," said Dr. Van.

"It has to be together," Rue confirmed as she listened intently to Dr. Van talk about his thyroid research, as if she were hearing it for the first time.

"My only interest was the thyroid," he said matter-of-factly. "The thyroid leads to everything, and if you take advantage of every opportunity as it comes, then serendipity will take care of you. I do believe it is all serendipitous. I believe we talk about a profession being a calling. I think our whole lives get molded in the direction we go, and it becomes a calling, so everything you do influences everything you are going to do.

"And so, I think it is part of the integration of all nature. If you look deep enough at anything, you will find there is no separation. It is all one—all sacred." **UT**

"WE HAVE BEEN WALKING TOGETHER EVER SINCE, HAND IN HAND, SIDE BY SIDE."

To contribute to the Lester VanMiddlesworth Endowed Professorship, contact Gloria Greiner-Callihan, assistant vice chancellor at the UT Health Science Center, at 901-448-6532.