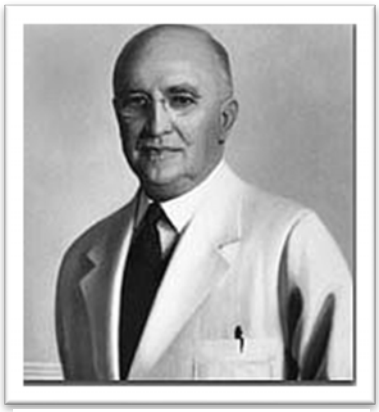
UAB Department of Nutrition Sciences: A History

The Early Years and the Division of Nutrition: Micronutrients and Folic Acid



Dr. James S. McLester

The University of Alabama at Birmingham (UAB) and the Department of Nutrition Sciences have a long heritage of excellence in nutrition, which began prior to the charter of UAB as a separate branch of the University of Alabama system, in 1969. In the 1920s to the 1950s, James S. McLester, MD, and Thomas D. Spies, MD, pioneered using the recently discovered vitamins nicotinic acid, thiamine, ascorbic acid, and folic acid for the treatment and prevention of the major deficiency diseases, pellagra, beriberi, scurvy, and the megaloblastic anemia of pregnancy. Dr. McLester, the first professor of medicine of this university and later president of the American Medical Association, did research work on pellagra at Birmingham's Hillman Hospital during the 1920s. He subsequently authored a popular textbook, *Nutrition and Diet in Health and Disease* (first published in 1927), which went through a total of seven editions with Dr. William J. Darby, a noted professor of nutrition at Vanderbilt University, as co-author in later years.

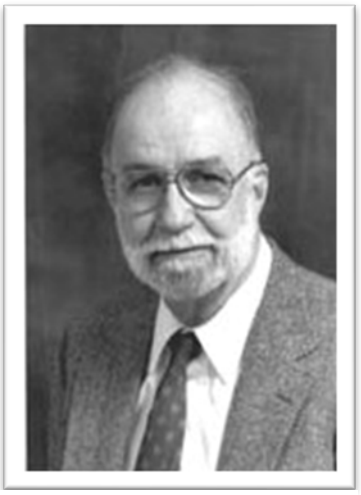
Dr. Thomas D. Spies

Dr. Spies ("Doctor Tom," as his patients called him) treated still-numerous patients with pellagra and with macrocytic anemia at Hillman Hospital and frequently traveled to Cuba and Puerto Rico to treat patients with tropical sprue who were found to respond to folic acid. An anecdote illustrating Dr. Spies' zeal for treating patients with nutritional diseases is related by Dr. Thomas H. Jukes, professor of nutrition from the University of California at Berkeley and formerly of the American Cyanamid Company, where the synthesis of folic acid was accomplished in the mid-1940s. In Dr. Jukes' words, "I took a few grams [of folic acid] with me on a trip to California in August 1945. While changing trains in Chicago, I went into a drug store and asked for a small box. I put the tube of folic acid powder in the box, addressed it to Tom Spies, and dropped it into a street-corner mailbox. As a result, an article appeared in the *Southern Medical Journal* four months later, describing the remission of nutritional macrocytic anemia following the administration of folic acid. The statute of limitations prevents legal action from being taken against me [and Spies] for this violation of the Federal Food, Drug, and Cosmetic Act."

Dr. Spies trained Walter B. Frommeyer, Jr., MD, who became chairman of the Department of Medicine in 1957, succeeding the legendary clinician Tinsley Harrison, MD. It was Dr. Frommeyer who created a division of nutrition in the Department of Medicine in 1964 and named Charles E. (Ted) Butterworth, Jr., MD, director.

Dr. Butterworth was a hematologist who had conducted research on folic acid and its synthetic antagonists, aminopterin and methotrexate. He participated in early studies on the treatment of acute leukemia with aminopterin, one of the first drugs in the history of medicine to bring about remissions of a malignant disease. Dr. Spies' findings using folic acid to treat anemia of pregnancy and tropical sprue drew Dr. Butterworth to the study of folic acid prior to coming to UAB. While still in the

military, he was assigned to the U.S. Army Tropical Research Medical Laboratory in San Juan, Puerto Rico, to study tropical sprue, a disease responsible for one-sixth of all casualties sustained by the Allied forces in India and Southeast Asia during World War II. Sprue patients died from severe malnutrition but could be saved by the administration of small amounts of the essential nutrient folic acid. Once he assumed charge of the newly formed Division of Nutrition, Dr. Butterworth became interested in naturally occurring forms of folic acid, the folyl-polyglutamates. He recruited two biochemists with expertise in the pathway of microbial biosynthesis of this vitamin, Charles M. Baugh, PhD, in 1966, who later became dean of the Medical School of the University of South Alabama at Mobile, and Carlos L. Krumdieck, MD, PhD, in 1967. Drs. Krumdieck and Baugh accomplished the chemical synthesis of these molecules, which allowed the Birmingham group to conduct pioneering studies on the digestion and absorption of dietary folates. It was also discovered that the anticancer folate antagonist methotrexate was itself converted to polyglutamyl derivatives, a finding that significantly helped in understanding the pharmacology of the anti-folates. Basic studies on the biochemical role of the polyglutamyl derivatives of folic acid were greatly facilitated by the subsequent recruitment of Isao Eto, PhD, Joseph E. Baggott, PhD, and Tsunenobu Tamura, MD. The emphasis on folic acid provided, years later, a fertile ground for clinical projects conducted by Sarah L. Morgan, MD, RD, who developed a new line of research concerning the control of toxicity of antifolates used for the treatment of rheumatoid arthritis. Her studies led to the worldwide use of supplemental folic acid during the long-term, low-dose treatment of autoimmune disorders with methotrexate. Charles W. Prince, PhD, joined the department in 1987 and, together with Dr. Krumdieck, initiated studies on the role of homocysteine, an amino acid that requires folic acid for its metabolism, on the pathogenesis of presbyopia and osteoporosis.



Dr. Carlos L. Krumdieck

Dr. Charles E. Butterworth, Jr., as First Chair of the Department of Nutrition Sciences: Nutrition as Medicine (1977–1988)

Based on his experience caring for hospitalized patients who developed severe nutritional disorders, Dr. Butterworth published a seminal paper in 1974 entitled “The Skeleton in the Hospital Closet” (*Nutrition Today* 1974; 9(2):4-8). This paper shook the medical establishment and had an international impact, drawing attention to “hospital malnutrition.” It also impelled the development of nutritional support approaches that improved nutrition and clinical outcomes in hospitalized patients. The introduction of nutrition support teams, considered today to be indispensable for good patient care, can be traced to recommendations contained in this classic article. To advance research and clinical development in this area, Dr. Butterworth recruited Roland L. Weinsier, MD, DrPH, in 1975. Dr. Weinsier distinguished himself by building a nutrition clinic and a nutrition support service while also developing an outstanding first-year School of Medicine nutrition course. His work attracted national attention after

Dr. Charles E. Butterworth, Jr.

he reported two deaths from re-feeding syndrome after overzealous use of parenteral nutrition. To support research and patient care, the Division of Nutrition established a laboratory committed to the biochemical assessment of nutritional status. Innovative assays for micronutrients were established by Phillip E. Cornwell, PhD, a microbiologist interested in folic acid and pteridine chemistry, and Howerde E. Sauberlich, PhD, a prominent nutrition scientist who joined the group in 1982 and authored the book *Laboratory Tests for the Assessment of Nutritional Status*.

Dr. Howerde E. Sauberlich

In 1977, S. Richardson Hill, Jr., MD, president of UAB, established a new university-wide Department of Nutrition Sciences with Dr. Butterworth as its first chair, thus expanding the mission of the prior division in the Department of Medicine. The new undertaking, chartered as one of the Joint Health Sciences departments, was sponsored jointly by three schools, Health Professions, Medicine, and Dentistry.

Dr. Butterworth brought a diverse group of scientists with a unifying interest in nutrition under one roof. One of these was an outstanding nutrition educator, Carol B. Craig, RD, a research dietitian who had already developed a successful dietetic internship program at UAB. She was, at the time, chair of the Department of Nutrition and Dietetics in the School of Health Professions, which was incorporated into the new department as the Division of Human Nutrition and Dietetics. Ms. Craig brought with her MS-trained dietitians who, for years, taught with exemplary dedication in the dietetic internship program and later in the master's program for dietitians, including Harriett Cloud, RD, Rebecca L. Bradley, and Annie Adams Cornwell. Another member of the new department was Juan M. Navia, PhD, a senior scientist of the Dental Research Institute of the National Institutes of Health, which, at the time, had a branch on the UAB campus. Dr. Navia's outstanding career in nutrition and public and international health culminated years later in his tenure as dean of the UAB School of Public Health.

Epidemiological evidence suggestive of an interaction between oral contraceptive agents, folic acid deficiency, and endometrial and cervical cancer prompted pioneering studies by Dr. Butterworth and collaborators. This work addressing the role of nutritional factors in the prevention and pathogenesis of cancer was pursued by Gary Johaning, PhD, Dr. Krumdieck, Dr. Prince, and others who joined the department later. In 1979, the department was awarded a Clinical Nutrition Research Unit Grant supported by the National Cancer Institute that functioned for 15 years.

In the early 1980s, Drs. Butterworth and Weinsier recruited two additional young physician-nutritionists, Douglas C. Heimburger, MD, and Sarah L. Morgan, MD, RD. This team, together with the founding dietitians of the dietetic internship, laid the foundation of excellence in patient care and in nutrition training for health care professionals. The emphasis on clinical nutrition continues to this day. The efforts of these physicians and many others led to the development of training programs in nutrition for medical students, internal medicine residents, physician nutrition specialists, dietetic interns, and practitioners of obesity medicine.

In 1987, Dr. Sauberlich, together with Dr. Prince, developed the PhD program in Nutrition. Dr. Heimburger also contributed significantly to the success of the PhD program by serving as director of the NCI Cancer Prevention and Control Training Program. Dr. Prince was a co-discoverer of osteopontin, a bone matrix protein expressed in association with the development of tumor

metastasis. Work on this protein continues to be actively pursued by Dr. Pi-Ling Chang, the first PhD graduated from the Department of Nutrition Sciences at UAB under the mentorship of Dr. Prince. Dr. Chang was the first in a long line of notable PhD awardees who have been central to the ongoing progress of the department and the advancement of knowledge pertaining to nutritional diseases.

About a year prior to the founding of the department, a generous donation of one million dollars by Birmingham philanthropist Charles B. Webb, Jr., honoring the memory of his late wife, Susan Mott Webb, made possible the construction of the Webb Building for the Nutritional Sciences, the six-story building that the Department of Nutrition Sciences has occupied since 1983.

Dr. Roland L. Weinsier as Second Chair: Obesity and Clinical Nutrition (1988–1999)

Dr. Roland L. Weinsier

Dr. Weinsier succeeded Dr. Butterworth as chair of the department in 1988. He was a driving force for the development of clinical nutrition and the model of a practicing doctor who used his knowledge of nutrition for the benefit of patients. The medical students were inspired by his example and repeatedly recognized him as one of the best medical school professors at UAB. Drs. Weinsier, Heimburger, and Morgan co-edited editions of their nationally popular *Handbook of Clinical Nutrition* (1989 and1997). Dr. Weinsier also co-edited with Dr. Morgan two editions of their textbook *Fundamentals of Clinical Nutrition*. Continuing the work begun by Ms. Craig and colleagues, Dr. Morgan and dietitian educators Beth Kitchin, PhD, RD, Amanda Brown RD, MS, and Susan Miller, MS, RD, LD, achieved national recognition for their outstanding dietetic internship and MS program. Drs. Morgan and Kitchin established an innovative, comprehensive, and multidisciplinary osteoporosis clinic, combining both medical and lifestyle interventions for treatment and prevention. In 2001, Dr. Heimburger became the founding president of the American Board of Physician Nutrition Specialists, which is the national mechanism for credentialing physicians in the expert care of patients requiring nutritional support or with nutritional diseases.

Dr. Weinsier recognized obesity as a nutritional disease that often led to morbidity and mortality. Clinically, he developed the EatRight diet consisting of a dietary approach emphasizing foods with high water and fiber content. In the research arena, he promoted investigation addressing abnormalities of energy metabolism and body composition involved in the development of obesity. In considering the role of inadequate physical activity in the pathogenesis of obesity, Dr. Weinsier established a productive interaction with Gary R. Hunter, PhD, a professor in the School of Education at UAB. The need to measure energy expenditure in humans, both during rest and during physical activity, led in 1991 to the construction of a room calorimeter and the recruitment in 1993 of Robert

M. Petri, an engineer who refined the design of this instrument and is still responsible for its operation. Early work on methodologies for the determination of body composition were carried out by Mohammad A. Khaled, PhD, a biophysicist who joined the department in 1984. Dr. Khaled developed non-invasive methods for body composition measurements based on nuclear magnetic resonance spectrometry and Fourrier-transform infrared spectrometry and invented a dual-frequency instrument to measure bioimpedance that is particularly useful to estimate hydration in children.

In 1993, Dr. Weinsier recruited Michael Goran, PhD, whose expertise in childhood obesity and in doubly labeled water for the free-living estimation of energy expenditure by isotope-ratio mass-spectrometry meant great improvements in the research capabilities of the department. Dr. Goran was appointed director of the Energy Metabolism Research Unit in 1994 and, in this capacity, recruited three new faculty: Timothy R. Nagy, PhD, a physiological zoologist with an interest in energy metabolism in animal models and the development of methods for the study of body composition; Barbara A. Gower, PhD, an endocrinologist with a primary interest in the interaction of hormonal factors in the pathogenesis of obesity and type 2 diabetes (later named interim chair and then of the department); and Susan M. Sell, PhD, a geneticist with an interest in the genetics of type 2 diabetes. Drs. Nagy, Gower, and Sell were responsible for establishing laboratory facilities in the areas of small animal phenotyping, hormone/substrate analysis, and genotyping, respectively.

The PhD program directed by Drs. Prince and Nagy continued to train the next generation of scientists in nutrition. Dr. Heimburger was awarded a Cancer Prevention and Control Training Program by the NCI/NIH that successfully trained pre- and postdoctoral scientists including Chandrika Piyathilake, PhD (now UAB professor emerita), Christine Ritchie, MD (holder of an endowed chair at University of California San Francisco), Jamy Ard, MD (co-director of Wake Forest Baptist Health Weight Management Center), John R. Koethe, MD (Vanderbilt University faculty), and Donald D. Hensrud, MD (medical director of the Mayo Clinic Healthy Living Program).

In 2000, Dr. Weinsier was awarded a Nutrition Obesity Research Center (NORC, initially referred to as a Clinical Nutrition Research Center) grant funded by NIDDK/NIH. The purpose of this university-wide center was to facilitate investigations into the pathogenesis of obesity and its treatment and prevention. In 2001, Dr. Weinsier helped recruit David B. Allison, PhD, a noted biostatistician with extensive research experience in obesity, to the UAB School of Public Health. Dr. Allison accepted a secondary appointment in Nutrition Sciences and the position of associate director of the NORC. In 2001, Drs. Allison and Weinsier recruited José R. Fernández, PhD, a scientist interested in the identification of ancestry-informative genetic sequences in racially admixed individuals and their association with obesity, diabetes, and related co-morbidities. Dr. Fernández was later appointed vice chair of Education.

Dr. Weinsier stepped down as chair due to illness in 1999 but continued to contribute to the department's success until his death, in 2002. From 1999 until mid-2003, when W. Timothy Garvey, MD, assumed the position as chair, first Dr. Prince and then Michael C. Brooks, EdD, served as interim chair.

Dr. W. Timothy Garvey as Third Chair: Diabetes, Cardiometabolic Disease, and New Education Programs (2003–2018)

Dr. W. Timothy Garvey

Dr. Garvey was named the Charles Butterworth Endowed Chair in May 2003. He was recruited from the Medical University of South Carolina where he had served as the division director of Endocrinology. As an endocrinologist, Dr. Garvey investigated the metabolic, molecular, and genetic aspects of the pathogenesis of insulin resistance, type 2 diabetes, and obesity. His studies ranged from the very basic cellular and molecular biology of cell and animal models to metabolic investigations of human subjects on metabolic wards and of free-living populations with unique genetic backgrounds.

Thus, Dr. Garvey brought an interest in translational diabetes research and generated a broader interest in metabolic research in the department to include diabetes and cardiometabolic disease. His tenure was associated with a 2.5–3-fold increase in research funding, a marked increase in educational activities, and the evolution of the clinical mission in obesity medicine. To facilitate clinical research and patient care programs, Dr. Garvey renovated the second floor of the Webb Building to include exam and procedure rooms and established the Webb Clinical and Research Facility. Another milestone in research development was the award of an NIDDK/NIH Diabetes Research Center (DRC) to UAB in 2008 with Dr. Garvey as PI. The center was designed to facilitate research in diabetes as well as cardiometabolic disease including cardiovascular disease risk and helped establish a vibrant diabetes research community at UAB. The department now sponsored two NIH-funded research centers (the NORC and the DRC) that had a marked impact on research campus-wide.

Dr. Garvey oversaw research expansion that was directly attributable to the research productivity of existing faculty and new recruitments. He appointed Dr. Allison as the permanent director of the NORC to succeed Dr. Weinsier. Dr. Allison greatly contributed to research productivity in the department through his leadership in the NORC, research collaborations, and his dedication to training, including directorship of NIH training programs for predoctoral students and postdoctoral fellows. Early basic research appointments included Yuchang Fu, PhD, who studied the molecular biology of foam cell formation in atherosclerosis; Maria DeLuca, PhD, who was interested in the genetics of metabolism and life-span in drosophila; and Qinglin Yang, PhD, who studied myocardial metabolism using genetically manipulated mice. Later appointments included Courtney M. Peterson, PhD, who studied the impact of timed-feeding on metabolism and dietary interventions in diabetes leading to diabetes remission.

Faculty members who came from our postdoctoral training program include Daniel L. Smith Jr., PhD, now director of the NORC Animal Models Core; Douglas Moellering, PhD, founding director of the Biobehavioral Nutrition and Wellness undergraduate major; Amy M. Goss, PhD, who focuses on body composition and nutritional interventions for non-alcoholic fatty liver disease; and Paula Chandler-Laney, PhD, director of the PhD program.

A key appointment in the area of nutrition and cancer prevention was Wendy Demark-Wahnefried, PhD, RD, who held the department's Webb Chair in Nutrition Sciences until her retirement in 2024. She was recruited from MD Anderson Cancer Center with the help of the UAB Comprehensive Cancer

Center to be associate director of Cancer Prevention and Control. She continues to be a national leader in lifestyle interventions promoting cancer survivorship and has received the American Cancer Society's highest honor with the designation of ACS Clinical Research Professor. Drs. Garvey and Demark-Wahnefried recruited two additional investigators in the area of cancer prevention and control, Laura Q. Rogers, MD, interested in exercise regimens that extend cancer survivorship, and Lyse A. Norian, PhD, who studied interaction involving nutrition, obesity, and immune responses to solid tumors.

In the clinical mission, Dr. Garvey recruited Jamy Ard, MD, who stayed on at UAB following postdoctoral training in the program run by Dr. Heimburger. Dr. Ard played a leading role in developing clinical programs applying Dr. Weinsier's EatRight diet and other therapies in treating patients with obesity. Patients were seen in the Webb Clinical and Research Facility, which provided an excellent venue for training physicians in nutrition and obesity medicine. Graduates include Drs. Jessica Bartfield (now at Loyola University in Chicago), Scott Butsch (Harvard University and the Cleveland Clinic), Andres Julian Munoz (private practice and Columbia, SC, VA Medical Center), Taraneh Soleymani (private practice), and Sunil Daniel (private practice). To establish a multidisciplinary approach to obesity care, Dr. Garvey conceptualized and helped implement UAB Weight Loss Medicine at Highlands Hospital involving Nutrition Sciences, Endocrinology, and Bariatric Surgery. Dr. Soleymani and Dr. Amy Warriner of Endocrinology served as co-medical directors of the clinic prior to Dr. Soleymani leaving for private practice late in Dr. Garvey's tenure as chair.

Based on his experience running clinical trials involving new obesity medications in the Webb Facility, Dr. Garvey became interested in models of obesity care and emerged as a national leader in obesity medicine. He advocated for a complications-centric model for care of patients with obesity. This treatment algorithm emphasizes the use of weight-loss therapy to treat or prevent obesity-related complications as the primary goal of treatment, as opposed to reductions in BMI per se. Dr. Garvey was a leading contributor to and author of the American Association of Clinical Endocrinologists (AACE) Position Statement designating obesity as a disease in 2012, lead author on the evidence-based AACE clinical practice guidelines for obesity management, and co-author of the new medical diagnostic term for obesity – Adiposity-Based Chronic Disease. Further, Dr. Garvey developed Cardiometabolic Disease Staging (CMDS) that allows clinicians to quantitatively assign risk for type 2 diabetes and cardiovascular disease mortality when deciding upon the treatment modality and intensity of weight-loss therapy for their patients, within the context of a complications-centric medical approach.

As vice chair of education Dr. Fernández made great strides in advancing the department's education mission. In 2013, the department added a minor in Nutrition Sciences for undergraduate students under the direction of Dr. Kitchin and, in 2014, launched online master's courses with the help of Brenda Bertrand, PhD, RDN. Drs. Garvey and Fernández recruited Dr. Bertrand from East Carolina University, where she had demonstrated expertise in educational leadership, and she then spearheaded the advancement of the MS program offerings to align with the needs of the growing profession. This resulted in the development of five MS in Nutrition Sciences tracks, including the Clinical Track/Dietetic Internship (an ACEND-accredited Dietetic Internship), the Clinical Track/Prior Learning Option, the Lifestyle Management and Disease Prevention Track, the Research Track, and the Dietitian Education Program (an ACEND Coordinated Program in Dietetics). Carleton Rivers, MS, RDN, was recruited as Clinical Track/Dietetic Internship Program director following the retirement of former program director Susan Miller, MS, RDN, LD. Shortly thereafter, Claudia Follette, MS, RDN, was brought in to launch the Dietitian Education Program, and two years after that, Tara Harman,

MS, RDN, joined the faculty to support the growing graduate education programs. Laura Rutledge, MA, RDN and Drs. Moellering, DeLuca, Chandler-Laney, and Chang, among others, contributed to the program curriculum development and teaching. As of 2018, for the first time in the department's history, UAB students who earned a baccalaureate degree were able to continue to the graduate degree program and become registered dietitian nutritionists (RDNs). Thus, this phase of the department's history was characterized by a noteworthy expansion in nutrition education for undergraduate and graduate students, in addition to nutrition professionals, as a result of the efforts of Dr. Fernández and other faculty.

Dr. James O. Hill as Fourth Chair: Lifestyle Wellness and Undergraduate Major (2018–2022)

James O. Hill, PhD, succeeded Dr. Garvey as chair on November 15, 2018. Dr. Hill was recruited from the University of Colorado, where he had established an international reputation for his research on exercise and obesity. Previously director of the Colorado NORC, he was appointed director of the UAB NORC, a role in which he continued to serve after retiring as chair.

Dr. James O. Hill

Dr. Hill recruited Drew Sayer, PhD, whose focus is exercise and nutrition interventions and clinical trial design, and Holly Wyatt, MD, a nationally respected clinical expert in obesity medicine, from the University of Colorado. Together, they have done research to develop a comprehensive Lifestyle Wellness assessment for use in lifestyle-based wellness interventions and programs.

Dr. Hill was a co-founder of the National Weight Control Registry (NWCR), a registry of individuals who have been successful in long-term weight loss. He also co-founded the International Weight Control Registry (IWCR) to continue to identify barriers to obesity treatment and factors that impact success in different populations.

Dr. Hill was an investigator in the Diabetes Prevention Program (DPP) and a site PI for the Action for Health in Diabetes (Look AHEAD) study. Under his and co-principal investigator Dr. Gower's leadership, UAB joined the NIH Common Fund's Nutrition for Precision Health, powered by the All of Us Research Program (NPH), the largest precision nutrition effort of its kind, which aims to engage a diverse group of participants to learn more about how individuals respond differently to food. NPH is studying how a range of factors, including genes, lifestyle, health history, the gut microbiome (the community of microorganisms that live in the human gastrointestinal tract) and social determinants of health (the conditions in which people live, work and age that affect health), influence a person's response to diet.

Dr. Hill has authored two weight management books, *The Step Diet Book* and *The State of Slim*, with Dr. Wyatt. He has also developed several behavioral weight loss programs to treat obesity and helped found the non-profit program America On the Move to promote a small-changes approach to weight management.

Dr. Hill has been continuously funded by NIH since 1981. He was elected to the National Institute of Medicine in 2018 and is a past president of The Obesity Society and The American Society for Nutrition.

During Dr. Hill's tenure, the department added an undergraduate major, Biobehavioral Nutrition and Wellness. Dr. Hill retired as chair at the end of 2022.

Dr. Barbara A. Gower as Fifth Chair: Webb Renovations and Food as Medicine (2024–present)

Dr. Gower, who joined the department in 1994 under Dr. Weinsier, served as interim chair of the department following Dr. Hill's retirement and accepted the permanent role in January 2024. Dr. Gower served previously as vice chair for research in the department and continues to serve as director of the Metabolism Core for the NORC and the Institutional Research Core Program and of the Center for Clinical and Translational Science and the Human Physiology Core for the DRC.

Dr. Barbara A. Gower

Dr. Gower's research focus is on the interplay between diet, endocrinology, and metabolism and their relation to chronic metabolic disease, with expertise in evaluation of body composition, body fat distribution, insulin sensitivity, and beta-cell function. Her ongoing funded research includes "Nutrition for Precision Health," a multisite consortium study designed to understand individual differences in response to diet, and "Predictors of Youth-Onset Type 2 Diabetes" (the DISCOVERY study), which is designed to identify factors that predict conversion to type 2 diabetes among at-risk youth.

The department has advanced in multiple areas under Dr. Gower's leadership, including the addition of a Metabolic Health Clinic that translates into clinical care research findings regarding diet therapy for the treatment and prevention of chronic disease. In 2025, extensive renovations to the Webb Building were completed, including a new façade and foyer, a whole-room indirect calorimetry suite, state-of-the-art classrooms, spaces for studying and socializing, and new metabolic and teaching kitchens. Also in 2025, the undergraduate major was renamed Nutrition Sciences to align with the department's goals and be competitive among other undergraduate nutrition programs.

Authors: Carlos L. Krumdieck, MD, PhD, W. Timothy Garvey, MD, and Rebecca Lipscomb, MA.
10/2025