African Americans in Science and Medicine

HAROLD AMOS (1919–2007) was the Maude and Lillian Presley Professor of microbiology and molecular genetics (emeritus) at the Harvard Medical School, where he has served on the faculty since 1954.

His work on hexose metabolism in mammalian cells, was essential to the understanding and treatment of diseases such as diabetes and some forms of immune deficiency. Dr. Amos was a Fulbright Scholar in 1951 and received the Dr. Charles Drew World Medical Prize in 1989.

Dr. Amos was a fellow of the American Academy of Arts and Sciences and in 1991 was elected a fellow of the American Association for the Advancement of Science and a member of the Institute of Medicine. Dr. Amos was also awarded the Public Welfare medal of the National Academy of Sciences in 1995 and an honorary degree by Harvard University in 1996.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
KEITH L. BLACK (1957– ) is a renowned neurosurgeon and scientist who is the Director of the Neurosurgical Institute and holds the Ruth and Lawrence Harvey Chair in Neurosciences at Cedars-Sinai Medical Center. Dr. Black is also Chairman of the Department of Neurological Surgery at the University of California, Irvine.

At age 17 Dr. Black published his first scientific paper, which earned the Westinghouse Science Award. He completed an accelerated college program at the University of Michigan and earned both his undergraduate and medical degrees in six years. He completed his internship in general surgery and residency in neurological surgery at the University of Michigan Medical Center in Ann Arbor.

Dr. Black has pioneered research on designing ways to open the blood-brain barrier, enabling chemotherapeutic drugs to be delivered directly into the tumor.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
African Americans in Science and Medicine

BENJAMIN SOLOMON CARSON, SR. (1951– ) is director of pediatric neurosurgery as well as associate professor of neurosurgery, oncology, plastic surgery, and pediatrics at Johns Hopkins University.

He performed the first successful separation of Siamese twins joined at the back of the head. He co-developed a pediatric craniofacial surgery program, combining both neurosurgery and plastic surgery procedures, significantly decreasing the time in surgery and risk to the patient.

A graduate of Yale University and the University of Michigan Medical School, Dr. Carson has been awarded numerous honors, including eighteen honorary doctorates, and several scholarship programs have been established in his name.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
African Americans in Science and Medicine

JEWEL PLUMMER COBB (1924– ) has been the trustee professor since 1990 and, since 1991, director of the ACCESS Center at California State University in Los Angeles. She is a former member of the CDU Board of Directors.

Formerly president of California State University in Fullerton (1981–1990), Dr. Cobb has done extensive cancer research, specializing in cell biology, and was a member of the National Science Board from 1974 to 1980.

The recipient of several honorary doctorates and many awards, including the Kilby Award for lifetime achievement in 1995, Dr. Cobb was elected to membership in the Institute of Medicine in 1974.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
African Americans in Science and Medicine

W. MONTAGUE COBB (1904–1990) was a distinguished professor of anatomy best known for his research in physical anthropology, the growth and development of the African American, and aging in the adult skeleton.

He also chronicled the history of African Americans in medicine. Dr. Cobb served on the Executive Committee of the White House Conference on Health in 1965. In 1978 he received the U.S. Navy Distinguished Public Service Award and was the 1980 recipient of the Henry Gray Award, the highest honor bestowed by the American Association of Anatomists.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
HAILE T. DEBAS (1937– ), surgeon and educator, gained national recognition as a gastrointestinal investigator and has made original contributions to the physiology, biochemistry, and pathophysiology of gastrointestinal peptide hormones.

In 1987 Dr. Debas, who is keenly interested in education, was recruited to chair the department of surgery at the University of California, San Francisco. Under his leadership, the department has become one of the best academic departments of surgery in the United States. Dr. Debas was elected to membership in the Institute of Medicine in 1990.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
African Americans in Science and Medicine

CHARLES R. DREW (1904–1950), medical researcher and surgeon, was a pioneer in the preservation of blood.

Through his outstanding work on blood plasma, Dr. Drew helped save thousands of lives during World War II. The blood plasma bank he organized became the model for the system used nationwide today by the American Red Cross.

In his position as chief surgeon and chief of staff at Freedman’s Hospital in Washington, D.C., Dr. Drew trained many of today’s distinguished black surgeons.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
African Americans in Science and Medicine

RHETAUGH GRAVES DUMAS Vice Provost Emerita of the University of Michigan and Dean Emerita of the University of Michigan School of Nursing.

She has also served as Deputy Director of the National Institute of Mental Health. A member of the Institute of Medicine, a charter member and former president of the American Academy of Nursing, past president of the National League for Nursing, and a fellow of the A. K. Rice Institute, she holds a B.S. in Nursing, an M.S. in Psychiatric Nursing, and a Ph.D. in Social Psychology.

She is the recipient of the President’s 21st Century Award from the National Women’s Hall of Fame.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
African Americans in Science and Medicine

VERNICE FERGUSON was a Senior Fellow in the School of Nursing at the University of Pennsylvania, holding the Fagin Family Chair in Cultural Diversity from 1993–1997.

From 1980 to 1992 she was the Assistant Chief Medical Director for Nursing Programs in the Department of Veterans Affairs. In this position she was responsible for the largest organized nursing service in the world, with more than 60,000 nursing personnel. Prior to this assignment, she was the Chief of the Nursing Department at the Clinical Center, National Institutes of Health.

She is an Honorary Fellow of the Royal College of Nursing of the United Kingdom, the second American nurse so honored. She is the recipient of eight honorary doctorates and two fellowships, one in physics, the other in alcohol studies.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
African Americans in Science and Medicine

HENRY W. FOSTER, JR., is Professor Emeritus, Obstetrics and Gynecology and former Dean at Meharry Medical College, Nashville, Tennessee. He is a former member of the Charles R. Drew University of Medicine and Science Board of Trustees.

In 1996, President Clinton appointed him Senior Advisor on Teen Pregnancy Reduction and Youth Issues, serving also as consultant to the Department of Health and Human Services and the Centers for Disease Control and Prevention.

A graduate of Morehouse College and the University of Arkansas as well as a member of the Institute of Medicine, Dr. Foster pioneered what has become a model for regionalized perinatal health care systems throughout the country.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
JAMES RAPHAEL GAVIN III (1945– ) is a senior scientific officer of the Howard Hughes Medical Institute.

Dr. Gavin, who received a Ph.D. from Emory University and an M.D. from Duke University Medical School, has pioneered research in insulin-resistant diabetes and hormone action in diabetes mellitus. Dr. Gavin is a member of the board of trustees of the Robert Wood Johnson Foundation and the board of the American Society of Law, Medicine, and Ethics.

He was awarded the Banting Medal for Distinguished Service by the American Diabetes Association in 1994, and in 1995 the E.E. Just Award by the American Society for Cell Biology. In 1996 Dr. Gavin was elected a member of the Institute of Medicine.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
African Americans in Science and Medicine

BEATRIX A. HAMBURG (1923– ) is a Visiting Scholar in the Department of Psychiatry of the Cornell University College of Medicine. She has had a long career in academic medicine.

She is a former President of the William T. Grant Foundation, which supports research on the development of children, adolescents, and youth, and has served on the faculties of the Mount Sinai School of Medicine, Harvard Medical School, and Stanford University School of Medicine. Dr. Hamburg received her A.B. from Vassar College and her M.D. from the Yale University School of Medicine. Dr. Hamburg is a fellow of the American Association for the Advancement of Science and the Royal Society of Medicine, and a member of the Institute of Medicine. She has participated in many studies sponsored by the Institute of Medicine, the National Research Council, and other organizations.

As a medical researcher, Dr. Hamburg is most noted for her studies of early adolescence, pioneering work on peer counseling, and studies of diabetic children and adolescents.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
African Americans in Science and Medicine

RUBY PURYEAR HEARN graduated from Skidmore College and then attended Yale University, where she received an M.S. and Ph.D. in biophysics.

Dr. Hearn has spent most of her professional life on the staff of The Robert Wood Johnson Foundation, the largest health care philanthropy in the United States. In her current position as senior vice president, Dr. Hearn participates in strategic program planning and as the Foundation’s liaison within the non-profit community. Dr. Hearn has had major responsibility for oversight and development of initiatives in maternal, infant, and child health; AIDS; substance abuse; and minority medical education.

Dr. Hearn is a fellow of the Yale Corporation and a member of the Institute of Medicine; the Committee on Science, Engineering, and Public Policy of the National Academy of Sciences; and the Science Board of the Food and Drug Administration.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
African Americans in Science and Medicine

JOHN L.S. HOLLOMAN, JR., is a medical administrator.

In Dr. Holloman’s extensive teaching and public health career, he has served as professor of public health and health administration at the University of North Carolina at Chapel Hill, as a consultant to the U.S. Department of Health and Human Services, and on the staff of the Subcommittee on Health of the House Committee on Ways and Means of the U.S. Congress.

His posts have included the presidency of the New York City Health and Hospital Corporation and of the National Medical Association as well as the national chairmanship of the Medical Committee for Human Rights. Dr. Holloman is medical director of the W. F. Ryan Community Health Center in New York City.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
DONALD R. HOPKINS (1941– ), a recognized authority on domestic and international health, is a leader in the global eradication of smallpox.

He has chaired and served on numerous international committees on health research, immunization, and epidemiology. An educator of health professionals, Dr. Hopkins long has been associated with the Harvard School of Public Health and Morehouse School of Medicine.

He received the Medal of Excellence from the Centers for Disease Control and was elected to the Institute of Medicine in 1987.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
PERCY L. JULIAN (1899–1975) was a research chemist whose trail-blazing research in uses for soybeans resulted in the development of a multiplicity of new products, the most important of which are low-cost drugs and hormones.

He devised an inexpensive cortisone, used in the treatment of arthritis, from soybean sterols. His research led to the manufacture in quantity of the hormones testosterone and progesterone. Among his many "firsts" in the field of steroids was his synthesis of the drug physostigmine, used to treat glaucoma.

Dr. Julian was a member of the National Academy of Sciences.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
African Americans in Science and Medicine

ERNEST E. JUST (1883–1941) was a marine biologist.

In 1909 Dr. Just began his research on the embryological resources of marine animals at the Marine Biological Laboratory at Woods Hole, Massachusetts. His study of the process of fertilization in marine invertebrates and of the fundamental role of the cell surface in the development of organisms made him a leading authority on marine biology.

A professor of zoology, Dr. Just wrote extensively in his field. Two outstanding works are *Basic Methods for Experiments on Eggs of Marine Animals* and *The Biology of the Cell Surface*, both published in 1939.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
African Americans in Science and Medicine

RISA LAVIZZO-MOUREY is the President and Chief Executive Officer of the Robert Wood Johnson Foundation.

Prior to coming to the Foundation, she was the Sylvan Eisman Professor of Medicine and Health Care Systems at the University of Pennsylvania, as well as Director of the Institute on Aging, Chief of the Division of Geriatric Medicine, and Associate Chief of Staff for Geriatrics and Extended Care for the Philadelphia Veterans Administration Medical Center. Dr. Lavizzo-Mourey earned her medical degree at Harvard Medical School, followed by a Masters in Business Administration at the University of Pennsylvania's Wharton School.

After completing her residency in internal medicine at Brigham and Women's Hospital in Boston, Massachusetts, she was a Robert Wood Johnson Clinical Scholar at the University of Pennsylvania, where she also received her geriatrics training.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
African Americans in Science and Medicine

LaSALLE D. LEFFALL, JR. (1930– ), is professor and chairman of the Department of Surgery at Howard University.

A noted surgeon and oncologist, he has served as president of several national organizations, including the American Cancer Society, the Society of Surgical Oncology, and the Society of Surgical Chairmen. His other positions of national prominence include membership on the National Cancer Advisory Board and the American Board of Surgery. In 1983 Dr. Leffall became secretary of the American College of Surgeons.

Among his numerous honors are the Presidential Award from the D.C. Chapter, American College of Surgeons; the James Ewing Medal of the Society of Surgical Oncology; the Charles R. Drew Medal, Drew Postgraduate Medical School; and four honorary degrees. In 1973, Dr. Leffall was elected to membership in the Institute of Medicine.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
AUDREY FORBES MANLEY retired as Spelman College’s first alumna president after a long career in private and public service.

Manley received a BA from Spelman, an M.D. from Meharry Medical College, a Masters in Public Health from Johns Hopkins University, and completed her training in pediatrics at Cook County Children’s Hospital. Manley has served on the faculties of Howard University, Emory University, University of Chicago, and the University of California. In 1976, she joined the U.S. Public Health Service (USPHS) and was later appointed as the first African American woman Principle Deputy Assistant Secretary for Health with oversight of eight agencies including the Centers for Disease Control, the National Institutes of Health, and the Food and Drug Administration.

While at USPHS, Manley also directed the sickle cell anemia and other genetic disease programs. She went on to serve as Deputy U.S. Surgeon General and later as acting U.S. Surgeon General before becoming president of Spelman College. Manley was elected to the Institute of Medicine in 1977.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
African Americans in Science and Medicine

SAMUEL M. NABRIT (1905– ) is a biologist with a long and distinguished career in science education.

Dr. Nabrit currently directs the National Fellowships Fund of the Council of Southern Universities, which supports approximately 560 African Americans earning doctoral degrees that will lead to careers in higher education. As an educator, Dr. Nabrit served Atlanta University for 23 years as a professor of biology and dean, and he was the second president of Texas Southern University in Houston.

Dr. Nabrit has also served as president of the National Institute of Science (1945) and as a member of the National Science Board (1956) and the Atomic Energy Commission (1966). Dr. Nabrit is a founding member of the National Academy of Sciences’ Institute of Medicine.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
African Americans in Science and Medicine

VIVIAN W. PINN is the first full-time Director of the Office of Research on Women’s Health at the National Institutes of Health (NIH), an appointment she has held since 1991.

In 1994, she was also named Associate Director for Research on Women’s Health (NIH). She came to the NIH from Howard University College of Medicine where she had been Professor and Chair of the Department of Pathology since 1982. In this position, she became the third woman to chair an academic department of Pathology in the U.S. She had previously held appointments at Tufts University and Harvard Medical School.

She earned her B.A. from Wellesley College and received her M.D. from the University of Virginia School of Medicine. She also served as the 88th President of the National Medical Association (and second woman president) during 1989-1990.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
African Americans in Science and Medicine

DAVID SATCHER served as the 16th Surgeon General of the United States from 1998 to 2002, and as Assistant Secretary for Health from 1998 to January 2001, the second person in history to serve in both capacities simultaneously.

During his tenure, he released major reports on mental health, suicide prevention, oral health, smoking, and youth violence, and he championed efforts to eliminate racial and ethnic disparities in health. From 1993 to 1998, he was Director of the Centers for Disease Control and Prevention, and Administrator for the Toxic Substances and Disease Registry.

Dr. Satcher is the former Chairman for the Department of Family Medicine and served as Acting Dean of Charles R. Drew University of Medicine and Science.

From 1982 to 1993, he was President of Meharry Medical College in Nashville. He is a graduate of Morehouse College and received his M.D. and Ph.D. from Case Western Reserve University.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
HERBERT C. SCURLOCK (1875–1952) was a biochemist who pioneered the application of radiation therapy for the treatment of cancer and the use of x-ray to diagnose dental problems.

He was a professor of physiological chemistry. Dr. Scurlock’s *Textbook on Quantitative Chemical Analysis*, published in 1915, is available as a reference at the Library of Congress.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
MITCHELL W. SPELLMAN (1919–2013) is director of International Exchange Programs at Harvard Medical International and dean (emeritus) for International Projects, dean (emeritus) for Medical Services, and professor of surgery (emeritus) at Harvard Medical School.

He has served as founding dean and executive dean of the Charles R. Drew Postgraduate Medical School and as professor of surgery and assistant dean at the University of California at Los Angeles School of Medicine. He has received honorary doctoral degrees from three universities and numerous awards, including the Dillard University Distinguished Alumnus Award, the William A. Sinkler Award of the National Medical Association, and a creative award from the Charles R. Drew Medical School Foundation.

A member of the Institute of Medicine, Dr. Spellman has chaired IOM’s Program Committee and served as a member of the Governing Council.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
African Americans in Science and Medicine

**LOUIS W. SULLIVAN** (1933– ) is a medical researcher, educator, and adviser to the federal government.

From 1989 to 1992 he served as secretary of the U.S. Department of Health and Human Services. He was founding dean and director of the medical education program at Morehouse College and first dean of the Morehouse School of Medicine. Dr. Sullivan has served as director of hematology, the field of his major research work, at Boston University City Hospital and was project director of the Boston Sickle Cell Center.

He has received numerous honors and awards and has been recognized with a mastership in the American College of Physicians. He has been a member of the Institute of Medicine since 1975.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
VIVIEN THOMAS (1910–1985) graduated with honors from Pearl High School but was unable to complete his medical education after his savings were lost in the Great Depression. He joined Vanderbilt University’s medical school as a surgical assistant, working for Dr. Alfred Blalock. In 1941, Thomas moved with Blalock to Johns Hopkins University. While working with Blalock on high-blood pressure, traumatic shock, and cardiac research, Thomas collaborated with Blalock and others in the invention of several surgical devices and techniques.

One invention, a spring device, illustrated that shock was linked to a loss of fluid and blood volume. Thomas collaborated with Blalock and Dr. Helen Taussig to create a technique that delivered more oxygen to the blood and relieved constriction caused by a heart defect. The technique, anastomosis of the subclavian artery to the pulmonary artery, was used in many Tetralogy of Fallot (blue-baby syndrome) operations with great success. Thomas also performed many pre- and post-operation procedures and advised during surgeries.

Later, as Supervisor of the Johns Hopkins Surgical Research Laboratories, he taught a generation of surgeons and laboratory technicians. After receiving an honorary doctorate, Thomas was appointed to the medical school faculty.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
REED V. TUCKSON (1951– ) has dedicated his career to improving the health and well-being of residents of urban communities, particularly minorities and children.

Dr. Tuckson, is currently the group vice president for professional standards at the American Medical Association. He is also a past president of Charles R. Drew University of Medicine and Science, one of only four historically black medical schools west of the Mississippi. Dr. Tuckson has also served as a senior vice president of the March of Dimes Birth Defects Foundation and as the commissioner of public health of the District of Columbia.

Dr. Tuckson is a member of the Institute of Medicine and has served on advisory committees and boards associated with the Institute of Medicine, the National Black Leadership Institute on Cancer, and other organizations. Awards received by Dr. Tuckson include the Gene Frey award for community service from the Whitman-Walker Clinic in Washington, D.C.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
African Americans in Science and Medicine

CHARLES HENRY TURNER (1867–1923) was a biologist, neurologist, psychologist, and chemist who made an international reputation as a researcher in animal behavior, concentrating on bees and ants.

In 1907 Dr. Turner was a delegate to the Seventh International Zoological Congress and in 1912 he became one of the few African Americans elected to membership in the Academy of Sciences of St. Louis. Dr. Turner served on the faculty of the University of Cincinnati and was head of the science department at Clark University, Atlanta, Georgia.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
African Americans in Science and Medicine

**JACK E. WHITE** (1921–1988), who was director of the Howard University Cancer Research Center and chairman of the Department of Oncology at Howard University’s College of Medicine, made outstanding contributions to cancer research.

He was a recipient of an award from the American Cancer Society for Outstanding Service to the Cause of Cancer Control. Dr. White was a member of the Institute of Medicine and the American Association for Cancer Research.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
African Americans in Science and Medicine

DANIEL HALE WILLIAMS (1858–1931) was the first person in the world to operate successfully on the human heart. He performed that feat in 1893 at Provident Hospital in Chicago and went on to perform other history-making operations.

In 1891 he founded Provident Hospital, first hospital and training school for African American nurses and interns in the United States. Appointed by President Grover Cleveland to head Freedman’s Hospital in Washington, D.C., Dr. Williams established a nursing school there for African Americans.

His papers were printed in their entirety in the Annals of Surgery and in abridged forms in the Chicago Medical Recorder and the Illinois Medical Journal.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
DONALD E. WILSON became Dean of the University of Maryland School of Medicine in September 1991. In May 1999, he was named Vice President for Medical Affairs of the University of Maryland, Baltimore.

At the State University of New York Health Science Center in Brooklyn he was professor and chairman of the Department of Medicine, and Physician-in-Chief at the University Hospital. He completed his undergraduate education at Harvard and received his medical degree from Tufts University. He is a member of the Institute of Medicine of the National Academies and is a co-founder of the Association for Academic Minority Physicians, established in 1986. He is also a Master of the American College of Physicians; an honor bestowed on less than 0.4 percent of its members.

He is chairman of the Maryland Health Care Commission and chair of the Association of American Medical Colleges.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
African Americans in Science and Medicine

CARTER G. WOODSON (1875–1950), known as the Father of Negro History, set for himself the goal of providing a scientific and historical account of people of African ancestry.

Born to former slaves, he educated himself as a youth and went on to earn a Ph.D. from Harvard University in 1912. Among his highly influential writings are *The Education of the Negro Prior to 1861* and *The Negro in Our History*. Although his six-volume *Encyclopedia Africana* remained unfinished at the time of his death, his works are the foundation for countless other writers on African American history. One of Dr. Woodson’s achievements was the organization in 1926 of the first Negro History Week, which has evolved over the years to become what is currently known as African American History Month.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top
M. WHARTON YOUNG (1903–1986) was a neuroanatomist whose primary research was in the fields of baldness and deafness and who also did research on the anatomical basis of glaucoma.

A Fulbright scholar, professor, and visiting lecturer, he served as chairman of the Ninth International Congress of Anatomists in Leningrad, Russia, in 1970. Dr. Young received the U.S. Department of Defense’s Pentagon Award for his research on the mechanics of blast injuries.

Source: National Academy of Sciences
Website: http://www.nas.edu/aahm/portrait.html#top