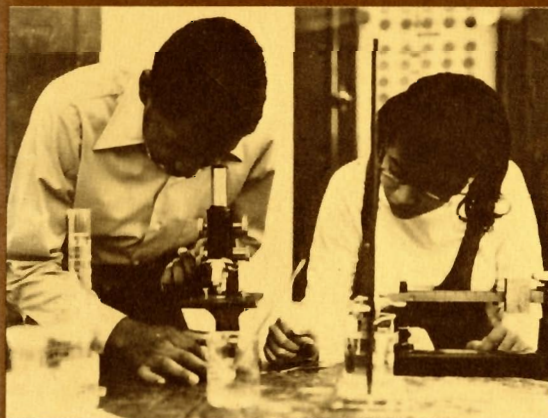


SCIENCE: MAN'S GREATEST ADVENTURE

AN EXHIBITION HONORING BLACK SCIENTISTS AND THEIR ACHIEVEMENTS





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Despite deliberate exclusion, economic controls, and unequal opportunities, black men and women have made monumental contributions to modern technology. They have participated in scientific explorations throughout the ages.

"Science: Man's Greatest Adventure" is an exhibition that deals with science as the greatest adventure of the human race. Its principal objective is to reach and communicate with young people who are the potential scientists of tomorrow.

The Anacostia Neighborhood Museum, in its continuous effort to place the black man in proper perspective, continues with its series of historical exhibitions that focus on his achievements. Part of this exhibition includes twenty-two panels with photographic mounts, silkscreened text, and illustrations.

The first two panels show students of Anacostia High School science classes. These young people and many like them in other high schools and colleges are our scientists of tomorrow. The exhibit stresses the idea that the scientists of tomorrow are in schools all over the world *today*.

Because scientific discoveries influence our everyday activity it is important for our youth to have a knowledge of the sciences. It is even more important that young black students should challenge the opportunities for scientific and technical careers.

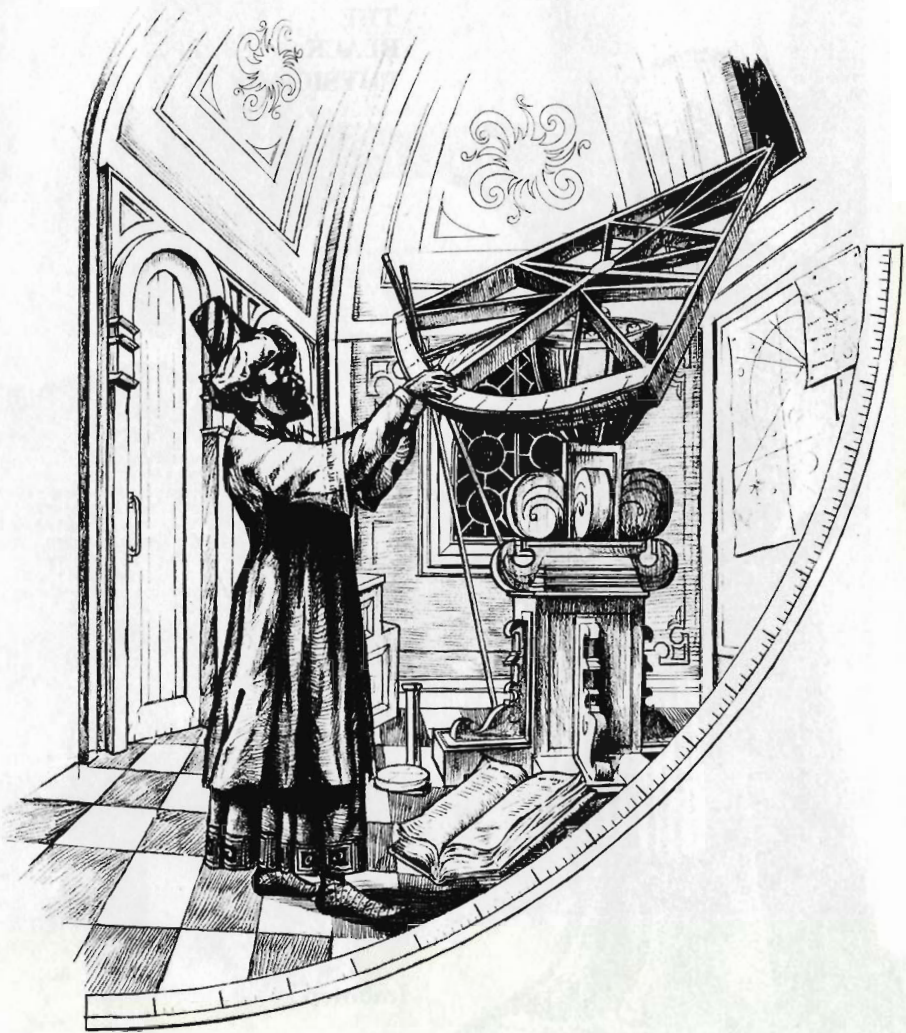
An illustrated chart defines the categories of science. Sciences divide, re-group, and overlap, so there is really no clear way to classify them. In the chart they are arranged in arbitrary groups. This panel starts with a historical comment on science relating to ancient Egypt and the Near East.

In ancient West Africa, as elsewhere, the technician came first, then the reasoning and the scientific theory. In Africa, tanners and metalworkers recognized differences among many classes of compounds and chemical changes, and they were aware of various reactions and results of compounds.

Today it is often forgotten that much of the Moorish culture was African culture and that black scholars, merchants, and technicians worked in Europe during the Middle Ages and the Renaissance. The university at Timbuktu was among West Africa's most famous cultural centers. The Negro or Moorish theme in European painting is evidence of the presence of black men of note in Europe.

Modern science is generally considered to have started with astronomers who questioned the ancient belief that the sun, the planets, and the stars revolve around the earth. The astronomer's struggle to establish the sun-centered view helped to break down barriers between craftsmen and scholars.

There is no color line in man's search for knowledge. A philosophical revolution began in the 16th century, and black men were active in that revolution. It is a fact that many have been excluded from the records of the western development of technology.



The Astronomer There is no color line in man's search for knowledge. There have been outstanding black scholars from the beginning of time.

**THE
BLACK
PHYSICIAN**



Imhotep

One of the most famous and respected black men of all time was Imhotep. Immortalized as a patron of art and learning, he was grand vizier, architect, chief ritualist, and sage and scribe to King Loser in the third century B. C. He was one of the few mortals to be regarded after death as a god [of medicine]. Imhotep pioneered many techniques that led to ancient Egypt's monumental civilization.



IMHOTEP

One of the most famous and respected black men of all time was Imhotep—vizier, architect, chief ritualist, sage, and scribe to King Zoser in the 3rd century B.C. Immortalized as a patron of art and learning—including medicine, architecture, astronomy, and other sciences—he was one of the few mortals to be regarded after his death as a god [of medicine]. He is also credited with developing Egyptian culture, establishing schools of medicine, and defining therapeutic principles; and he pioneered many techniques that led to ancient Egypt's monumental civilization.



EARLY MEDICINE

Ancient African doctors depended much upon their patients' abilities and mind-over-body attitudes. But the early physicians also knew many practical remedies. The "Papyrus Paper" lists more than 700 remedies prescribed by Egyptian physicians 3500 years ago. This medical record was discovered in Thebes and edited (in 1874) by Georg Ebers, a German Egyptologist.

THE WITCH DOCTOR: From Magic to Science

The ancient Africans held their physicians and witch doctors in high esteem, much as modern people regard their men of medicine. The ancient African doctors' abilities to heal have revealed much about medical science.



THE BLACK PHYSICIAN

MEDICINE & PSYCHOLOGY

The African witch doctor was a natural psychologist. His practice was based on these conditions:

- The psychological aspect of the patient's belief that the doctor and his treatment would produce a cure.
- The theory that the body alone could overcome at least three-fourths of the diseases without medication or treatment.
- The doctor's knowledge of effective remedies.



EARLY REMEDIES

The doctors of Africa had remedies for some diseases long before the Europeans did. Witch doctors knew how to use poisons, massages, and such pain-reducing drugs as opium and coca.



H. A. Poindexter
(1901-)



H. A. Poindexter was graduated with honors from Lincoln University and received his medical training at Dartmouth and Howard Universities. During his undergraduate years, he was an All-American football and track star.

Dr. Poindexter traveled about 800,000 miles throughout the world in various positions with the Public Health Service. Teacher, administrator, and authority on tropical medicine, Dr. Poindexter served as a consultant to AID after his retirement in 1965. He was professor of both preventive medicine and public health at Howard University. In 1963, he became Vice President of Project Operations for AHEAD Foundation (American Health Education for African Development).



OUTSTANDING ACHIEVEMENTS IN MEDICINE



Dr. David Hale Williams
(1858-1931)



Dr. Williams established the country's first interracial hospital in 1891. It was there that he performed, in 1893, an operation thought to be impossible: he opened the chest of the patient, a wounded street fighter, and repaired the wound. In 1894 Williams reorganized Freedmen's Hospital of Howard University; he created the first nursing school there. In 1913, Dr. Williams was elected a fellow of the American College of Surgeons.

Dr. Charles Richard Drew
(1904-50)



Charles Richard Drew, born in Washington, D.C., attended Dunbar High School, Amherst College, McGill University, and College of Physicians and Surgeons, Columbia University. Dr. Drew discovered ways of preserving blood plasma for emergencies. He organized the first blood bank in England and in 1942 set up blood banks for wounded American servicemen. Dr. Drew was chief surgeon, and chief of staff, and medical director at Freedmen's Hospital in Washington.



There are twenty-two graphic panels in this exhibit—twelve square panels (4 by 4 feet) and ten rectangular panels (4 by 6 feet). Four of the rectangles are horizontal and six are vertical.

PIONEERS OF SCIENCE

Percy L. Julian, Chemist
(1898-)

Dr. Julian—who was educated at DePauw University, Harvard, and the University of Vienna—directed soybean research at Glidden Co. before establishing Julian Laboratories, where he specialized in producing sterols from soybean oil. (In 1961 his company merged with Smith, Kline, and French Pharmaceutical Co.) Scientist, businessman, and teacher, Dr. Julian is credited with making cortisone available at a reasonable cost.



George Washington Carver
(1864-1943)

A native of Diamond Grove, Mo., George Washington Carver joined the faculty of Tuskegee Institute in 1896. There he made studies of soil conservation and crop diversification. Using native produce, he developed more than 300 products from the sweet potato and more than 300 from the peanut. In 1916 he was named a Fellow of the Royal Academy of England and in 1923 he received the Spingarn Medal. He was awarded the Roosevelt Medal in 1939 for distinguished service to science.



Ernest E. Just, Biologist
(1883-1941)

Investigator of egg fertilization and cell structure, Dr. Just received the Spingarn Medal for outstanding contributions in biology.

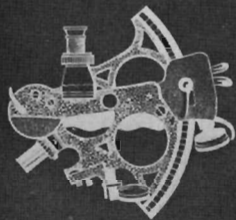
The Charleston native was graduated *magna cum laude* from Dartmouth College. He was associate editor of the journal, *Physiological Zoology* [Chicago], *The Biological Bulletin* [Woods Hole, Mass.], and the *Journal of Morphology* [Philadelphia], and vice president of the American Society of Zoologists.





Gustavus Vassa
(1745-1801)

Gustavus Vassa, or Oloudah Equiano, was a world traveler. A native of Benin, Nigeria (Guinea coast), he was an attendant on an expedition in quest of the North Pole in 1798, and went on another in 1773 to find a northwest passage to India.



Dr. Herbert M. Frisby

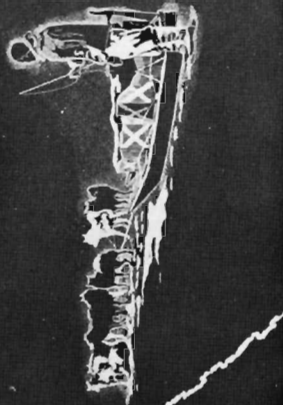
Frisk was by the Air Force on a special mission in August 1959 to place a monument at the North Pole to honor Matthew Henson. Dr. Frisby (far left) included his boyhood dream of becoming the second Black American to go to the North Pole. He has completed 22 missions to the Arctic and Polar regions.

IN QUEST OF THE NORTH POLE

"THE FIRST MAN TO STAND ON TOP
OF THE WORLD"

Matthew Alexander Henson
(1866-1955)

Matthew Henson was only 13 when he became cabin boy on a ship sailing to China. He loved exploration and adventure. Years later, he met Robert E. Peary and accompanied him on his Arctic expeditions. On the last voyage, when they were almost at the North Pole, on Apr. 6, 1909, Peary could go no farther. Henson continued to assure that the U.S. would be the first to reach the North Pole. Peary survived 45 minutes later.



“Science: Man’s Greatest Adventure” highlights the black physician in colonial America. The blacks brought with them from Africa their knowledge of medicine. In colonial America, both black and white doctors put much faith in the control of disease through charms and magic. There were many medicine men and “conjure” women.

Early physicians are mentioned. Students are encouraged to do research and more study of these early doctors and other scientists mentioned in the exhibition.

Lucas Santomee was perhaps the first black physician in America. James Derham was a slave doctor. Dr. James McCune Smith was a graduate of the University of Glasgow (Scotland) in 1837. Dr. David J. Peck, in 1847, and Dr. Rebecca Lee, in 1864, earned medical degrees from American colleges. The exhibit mentions Dr. Daniel Hale Williams, Dr. Charles Richard Drew, George Washington Carver, Ernest E. Just, and Percy L. Julian.

Scientists of many contemporary fields are mentioned to motivate and encourage science students to further pursue their studies with confidence and optimism. On these panels are mentioned men in positions of research pharmacology, chemistry, physiology, electron microscopy.

Today black scientists are found in several fields—as experts in steel technology, chemists, physicists, food researchers and nutrition experts, metallurgists, and computer scientists in the nation’s space program.

The background color of the panels are pale yellow, green, brown and black. Text and illustrations are in pale blue and white on the black panels and brown on the pale yellow panels.

Technologists of the past include Solomon G. Brown of Anacostia, D. C., who assisted Samuel B. Morse in putting the new magnetic telegraph system into operation and Benjamin Banneker, a well-known black man of science.

Despite the difficulties in proving all that black people had accomplished, in 1913 Henry E. Baker found that about a thousand patents had been awarded to blacks in the fifty years following emancipation. Prior to that, black men were not generally considered citizens and therefore could not obtain patents. Many black inventors concealed their identities, gave their ideas to others, or forfeited the credit to slave owners.

The fact that black scientists and innovators in the twentieth century have had to overcome hostility, scorn, and severe challenges in presenting their ideas only heightens their achievements. Perhaps one of the great adventures of science is scientific exploration. The exhibit suggests the study of early black explorers. There were black seamen long before Columbus set sail, and black merchants were in many ports. Moorish seamen and ships ruled the Mediterranean for more than seven centuries.

Matthew Henson was only thirteen years old when he became cabin boy on a ship sailing to China. He was on Perry's expedition to the North Pole and became the first man to stand on top of the world.

There are many black Americans holding important scientific positions in air-space exploration and working on teams involved in the moon projects. There are black moon-project physicians, bioscientists, inventors, space-research biochemists, aircraft technologists, tracking engineers, and many other space-vehicle engineers.

Through science, man has learned to dominate the earth and withstand its enemies and competitors. He has constructed muscles and brains more powerful than his own.



BORNU CULTURE

SELECTED BIBLIOGRAPHY

- 510
B46
Bellotti, Felici. *Fabulous Congo*. Translated by Mervyn Savill. London: Andrew Dakers Ltd. No date.
- Bergamini, David. *Mathematics*. Life Science Library. New York: Time Inc., 1963.
- Bovill, E. W. *The Golden Trade of the Moors*. London: Oxford University Press, 1968.
- Casson, Lionel. *Ancient Egypt*. New York: Time Inc., 1965.
- Clarke, Arthur C. *Man and Science*. Life Science Library. New York: Time Inc., 1964.
- 966
C 94a
Curtin, Philip D., editor. *Africa Remembered*. Madison: University of Wisconsin Press, 1968.
- Davidson, Basil. *African Kingdoms*. New York: Time-Life Books, 1966.
- Dennis, R. Ethel. *The Black People of America*. New Haven, Connecticut: Readers Press, Inc., 1970.
- Ebony Magazine*. Various issues, 1962-1970.
- 925
H 325
Hayden, Robert C. *Seven Black American Scientists*. Reading, Massachusetts: Addison-Wesley Publishing Co., 1970.
- 973
H 87p
Hughes, Langston, and Milton Meltzer. *A Pictorial History of the Negro in America*. New York: Crown Publishers, Inc., 1963.
- Karp, Walter. *The Smithsonian Institution*. Washington, D. C.: Smithsonian Institution in association with the editors of American Heritage Magazine, 1965.
- 973
K 152
Katz, William Loren. *Eyewitness: The Negro in American History*. New York: Pitman Publishing Corporation, 1967.
- Locke, Alain, editor. *The Negro in Art*. Washington, D. C.: Associates in Negro Folk Education, Inc., 1940.
- Modell, Walter, and Alfred Lansing. *Drugs*. Life Science Library. New York: Time Inc., 1967.
- 301.451
I n 8
Morais, Herbert M. *The History of the Negro in Medicine*. New York: Publishers Co., Inc., 1967.
- Parrinder, Geoffrey. *African Mythology*. London: The Hamlyn Publishing Group Ltd., 1967.
- Reps, John W. *Monumental Washington*. Princeton, New Jersey: Princeton University Press, 1967.
- Robinson, Wilma. *Historical Negro Biographies*. New York: Publishers Co., Inc., 1967.
- Sagan, Carl, and Jonathan Leonard Norton. *Planets*. Life Science Library. New York: Time Inc., 1965.
- 916
Sh 6
Shinnie, Margaret. *Ancient African Kingdoms*. London: Edward Arnold Ltd., 1965.
- Stever, H. Guyford, and James J. Haggerty. *Flight*. Life Science Library. New York: Time Inc., 1965.
- Wesley, Charles H. *In Freedom's Footsteps*. New York: Publishers Co., Inc., 1969.
- . *The Quest for Equality*. New York: Publishers Co., Inc., 1969.



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