

Famous and Lesser Known Members of the University of Michigan Medical School Who Have Made a Difference: A Historical View

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University of Michigan Taubman Health Sciences Library

Keith L. Black, M.D. (1957-)

Dr. Keith Black is an American neurosurgeon born in Auburn, Alabama who published his first scientific paper at age 17, earning the Westinghouse Science Award. At the University of Michigan, Black earned both his undergraduate and medical degrees in six years as well as completed an internship in general surgery and residency in neurological surgery. Black is a pioneer researcher in the blood brain barrier and brain tumors. His research interests include gene arrays to develop molecular profiles of tumors, use of optical technology to map the brain, and the use of microwave energy to non-invasively destroy brain tumors. Currently, Black is Chairman and Professor, Department of Neurosurgery and Director of the Maxine Dunitz Neurosurgical Institute at the Cedars-Sinai Medical Center.¹



Milestones

1981 Graduates from University of Michigan Medical School

1987 Completes residency and fellowship at University of Michigan Medical School & becomes Head of the Comprehensive Brain Tumor Program at the UCLA Medical Center

1997 Director of the Division of Neurosurgery at Cedars-Sinai Medical Center

1997 **Founds the Maxine Dunitz Neurosurgical Institute at Cedars-Sinai**

2007 **Opens the Cochran Brain Tumor Center at Cedars Sinai**

Antonia C. Novello, M.D., M.P.H. (1944-)

Dr. Antonia Novello is recognized as the first woman and first Hispanic to be appointed the Surgeon General of the United States. Born in Puerto Rico, she earned her undergraduate and medical degrees at the University of Puerto Rico. Traveling to the United States, she completed her pediatric internship and residency at the University of Michigan in addition to subspecialty training in pediatric nephrology at UM and Georgetown University. Novello entered the Public Health Service in 1978 and served as the 14th Surgeon General of the United States from 1990-1993. In 2009, after serving seven years as the 13th New York State Health Commissioner and managing the September 11th disaster, the New York Inspector General brought up charges against Novello with one count of defrauding the government, three counts of filing a false instrument and sixteen counts of theft of government services. Novello pleaded guilty to one felony charge with all other charges being dropped.²



Milestones

1970 Begins her studies at the University of Michigan as a pediatric intern and resident

1990 **Becomes first woman and first Hispanic Surgeon General of the United States**

1999 Appointed the 13th New York State Health Commissioner, a position she held until 2006

2009 Pleads guilty to one felony count of filing a false instrument in a case by the New York Inspector General

Benjamin S. Carson, Sr., M.D. (1951-)

Born in Detroit and emerging from an impoverished childhood, Dr. Benjamin Carson is now one of the most renowned neurosurgeons of our time. He attended Yale University with a degree in Psychology and continued his education at the University of Michigan Medical School. One of his most recognized triumphs is the first successful separation of Siamese twins joined at the back of the head in addition to further advancements in pediatric neurosurgery, oncology, and plastic surgery. Carson has received over 50 honorary degrees and awards, including the Presidential Medal of Freedom in 2008. Currently, he is the Director, Division of Pediatric Neurosurgery at the Johns Hopkins Medical Institutions and president and co-founder of the Carson Scholars Fund for young people.³



Milestones

1977 Graduates from University of Michigan Medical School

1987 **First separation of craniopagus (Siamese) twins joined at the back of the head**

1997 First successful placement of an intrauterine shunt for a hydrocephalic twin in South Africa

2008 Receives the Presidential Medal of Freedom from President George W. Bush

James V. Neel, M.D., Ph.D. (1915-2000)

Dr. James Neel is lauded as the father of modern human genetics and one of the first people to articulate the importance of human genetics in diagnosis and treatment of disease. Neel completed his M.D. and Ph.D. at the University of Rochester, New York. He accepted a position at the University of Michigan Medical School in 1946, where he worked for 39 years. Neel became a professor in the Department of Internal Medicine and the Department of Human Genetics and served as Chairman of the Department of Human Genetics from 1956 to 1981. Neel served on numerous committees from a local to global level and received many accolades for his work. His research covered numerous topics, including sickle cell anemia, affects of atomic radiation, consanguineous marriage, and the "thrifty gene" hypothesis.⁴



Milestones

1946 Begins studies of the effects of radiation exposure in survivors of the atomic bomb in Japan

1946 Joins the University of Michigan as assistant geneticist in the Laboratory of Vertebrate Biology

1948 Helps establish the American Society of Human Genetics and writes the first paper for the American Journal of Human Genetics

1952 **Establishes the University of Michigan Heredity Clinic, the groundwork for the Department of Human Genetics, founded in 1956 and the first such department in the nation**

Victor C. Vaughan, M.D. (1851-1929)

Dr. Victor Vaughan worked in many capacities during his medical career. He contributed to biochemistry, hygiene, public health, and medical education reform, including through his best known role as Dean of the University of Michigan Medical School from 1891 to 1920. However, Vaughan's story is not all glory. He was a strong supporter of eugenics and as a member of the Michigan State Board of Health, was influential in the passage of legislation approving compulsory sterilizations. Vaughan felt that sterilization would benefit its victims and create a more humane society. The law applied to "mentally defective or insane" people under the care of public institutions. Only one sterilization occurred before the law was found unconstitutional by the Michigan State Supreme Court.⁵



Milestones

1889 Develops one of the first systematic courses on bacteriology and term theory for medical students

1891 Becomes Dean of the University of Michigan's Medical School, where he is Dean until 1920

1913 **Instrumental in working to have the state legislators pass a compulsory sterilization law in 1913**

1914 Begins a term as president of the American Medical Association

1915 Helps to found the National Board of Medical Examiners

2010 2005 2000 1995 1990 1985 1980 1970 1960 1950 1910 1900 1890

Jacob 'Jack' Kevorkian, M.D. (1928-2011)

Jack Kevorkian aka 'Dr. Death' is infamously known as a fervent advocate of doctor-assisted suicide for terminally ill patients. Born in Pontiac, Kevorkian attended the University of Michigan Medical School, studying to be a pathologist, and served as an Army medical officer during the Korean War. In his early career at UM hospital and later Pontiac General Hospital, Kevorkian displayed an obsession with death and dying, studying patient's eyes to determine the exact moment of death, and publishing radical ideas on the testing & use of euthanasia for inmates and terminally-ill patients. 1990 marked his first public assisted suicide of Janet Adkins, an elderly woman with Alzheimer's and awakened the local community, state authorities, and the nation. In 1998, CBS's *60 Minutes* broadcast the lethal injection of Thomas Youk, a sufferer of Lou Gehrig's disease. Immediately following, Kevorkian was arrested, charged with second-degree murder, tried, and sentenced to 10–25 years in prison. He was released in 2007 after only serving eight years of his sentence for good behavior.⁶



Milestones

1952 Graduates from University of Michigan Medical School

1990 **First public assisted suicide of Janet Adkins, an elderly woman diagnosed with Alzheimer's**

1998 CBS's *60 Minutes* broadcasts the lethal injection of Thomas Youk

2007 Released from prison for good behavior after only eight years of his sentence for second-degree murder

Francis S. Collins, M.D., Ph.D. (1950-)

Dr. Francis Collins is a leading physician-geneticist renowned for his discoveries of various disease genes. After a three-year fellowship at Yale University in Human Genetics, Collins joined the University of Michigan departments of Internal Medicine and Human Genetics in 1984. In his research, Collins developed a new method for identifying genes, coined 'positional cloning,' in which scientists can identify disease genes without knowing in advance what the functional abnormality underlying the disease might be. He is most famous for identifying the gene responsible for cystic fibrosis, but has also discovered genes linked to Huntington's disease, neurofibromatosis, and the M4 type of adult acute leukemia. In his career, Collins has served as the Director of the National Center for Human Genome Research, received the 2007 Presidential Medal of Freedom and the 2009 National Medal of Science and is now the Director of the National Institutes of Health.⁷



Milestones

1989 **Identifies gene for cystic fibrosis**

1993 Becomes Director of the National Center for Genome Research

1994 Founds the National Human Genome Research Institute Division of Intramural Research

2000 Announcement of the Human Genome Project's a working draft of the human genome sequence

2009 Becomes Director of the National Institutes of Health

Alexa Canady-Davis, M.D. (1950-)

Dr. Alexa Canady-Davis, born in Lansing, is the first African American woman to become a neurosurgeon in the United States. Training as a resident in neurosurgery at the University of Minnesota and completing a fellowship in pediatric surgery at Children's Hospital of Philadelphia, Canady-Davis became an expert in cranio-facial abnormalities, hydrocephalus, tumors of the brain, and congenital spine abnormalities. She has served as Chief of Neurosurgery at Children's Hospital of Michigan and Professor of Neurosurgery at Wayne State University and received numerous awards including Woman of the Year by the American Women's Medical Association in 1993, as well as being inducted into the Michigan Women's Hall of Fame.⁸



Milestones

1975 Graduates cum laude from the University of Michigan Medical School

1976 **Becomes the first African American woman neurosurgeon in the United States**

1987 Chief of Neurosurgery at Children's Hospital of Michigan

1997 Professor of Neurosurgery at Wayne State University School of Medicine

Jonas E. Salk, M.D. (1914-1995)

Dr. Jonas Salk, the son of Russian-Jewish immigrants, was the first in his family to attend college. At the City College of New York, he developed an interest in medicine. His first work with viruses began with research into the influenza virus. In 1947, Salk began his work at the University of Pittsburgh Medical School in collaboration with the National Foundation for Infantile Paralysis to find a vaccine for polio. He worked for eight years on the project and in 1955, he announced his success; an announcement that was made here at the University of Michigan. Salk chose not to patent his vaccine so that it could be distributed as widely as possible. After this work, Salk went on to found the Jonas Salk Institute for Biological Studies in 1963. He continued to research viruses, working on a vaccine against AIDS until his death at age 80 in 1995.⁹



Milestones

1942 Research Fellowship at the University of Michigan

1947 Works with the National Foundation for Infantile Paralysis (Polio) to develop a vaccine

1953 Thomas Francis, Jr. begins field trials of his former protégé Jonas Salk's polio vaccine.

1955 **On April 12, Thomas Francis, Jr. and Jonas Salk at the University of Michigan's Rackham Auditorium announced that the Salk Vaccine was "safe, effective, and potent" against polio.**

Herman W. Mudgett (1861?-1896)

Herman Mudgett, also known as Dr. Henry Howard Holmes, is considered to be America's first known serial killer. Mudgett was expelled from the University of Michigan Medical School in 1884 for stealing corpses. Many details of Mudgett's life are uncertain, including the exact number of his victims, as Mudgett frequently modified his story. In 1893, he built and opened a hotel in Chicago for the World's Fair. This hotel was the site of many of his murders and housed soundproof rooms, a stretching rack, and doors that opened only from the outside. He sold several of his victims' skeletons and organs to medical schools. He was arrested in 1894, found guilty of murder, and executed by hanging in 1896.¹⁰



Milestones

1884 Expelled from the University of Michigan Medical School

1893 **Builds and opens a hotel in Chicago for the 1893 World's Fair. This hotel was the location of many of his murders.**

2003 Erik Larson publishes *Devil in the White City: Murder, Magic and Madness at the Fair that Changed America*, a novel exploring Mudgett's murders and the planning of the 1893 World's Fair.

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² ANTONIA C. NOVELLO: The Chinese American Scholars and Professionals Association. "Antonia Novello, MD: Keynote Speaker." <http://www.casapaf.org/conferences/2010/BIDS/AntoniaNovello-p1.pdf>. New York Daily News. "Former state Health Commissioner Antonia Novello pleads guilty to felony." http://articles.nydailynews.com/2009-06-26/news/17324862_1_plea-deal-governor-pataki-shopping-trip.
³ BENJAMIN S. CARSON: Carson Scholars Fund. "General Information." <http://carson scholars.org/content/dr-ben-carson-general-information>; Benjamin S. Carson, Sr., M.D. Curriculum Vitae. http://www.hopkinsmedicine.org/benjamin_carson.pdf; Ben Carson, M.D. "St. Louis Speaker's Series." <http://www.maryville.edu/even8600.htm>.
⁴ JAMES V. NEEL: John P. McGovern Historical Collections and Research Center. "The Papers of James V. Neel." http://mcgovern.library.umich.edu/collectmanuscript/Neel/Neel_intro.htm; University of Michigan Medical School. "James V. Neel, U/M Professor and Father of Modern Human Genetics." <http://www.bis-birthdefects.org/stater/Neel3.htm>; University of Michigan Department of Human Genetics. "About Us: Timeline." <http://sandbox.hg.med.umich.edu/about.php#timeline>.

⁵ VICTOR C. VAUGHAN: Markel, Howard. "The Cover." <http://jama.ama-assn.org/content/283/7/848.full.pdf>; Kaelber, Lutz. "Michigan." <http://www.uvm.edu/~kkaelber/eugenics/MIMM.html>.
⁶ JACK KEVORKIAN: Biography. "Jack Kevorkian." <http://www.biography.com/articles/Jack-Kevorkian-9384141>; Criminal Brief Blog. "Jack Kevorkian." <http://criminalbrief.com/?p=7857>.
⁷ FRANCIS S. COLLINS: National Center of Human Genome Research Institute. "Francis S. Collins." <http://www.genome.gov/1001018>; Northwestern University, Feinberg School of Medicine. "Francis Collins Lecture." http://www.feinberg.northwestern.edu/news/past-years/2010/2010/April/nh-video/NH-Director_at_Northwestern_video.html.
⁸ ALEXA CANADY-DAVIS: The HistoryMakers. "Dr. Alexa Canady-Davis Biography." <http://hurize.com/greek/images/Sorority/African%20American/Delta%20Sigma%20Theta%20Initiate%20Sigma%20Theta.html>.
⁹ JONAS E. SALK: Academy of Achievement. "Jonas Salk, M.D." <http://www.achievement.org/doc/page/salbio-1>; Famous Scientists. "Jonas Salk." <http://www.famous-scientists.net/jonas-salk.htm>.
¹⁰ HERMAN W. MUDGETT: "H. H. Holmes." http://en.wikipedia.org/wiki/H._H._Holmes; Spindler, Cara. "Mr. Herman Mudgett, aka H. H. Holmes." <http://michigan today.umich.edu/Sam/01/m11599.html>; Evans, Diane. "The Serial Killer, the Murder Castle, and the World's Fair." <http://www.suite101.com/content/the-serial-killer-the-murder-castle-and-the-worlds-fair-a296616>.

